SR 826/ Palmetto Expressway Improvements

From NW 74th Street to NW 103rd Street
FPID # 447165-1-52-01
441830-1-52-01 / 441831-1-52-01

CONCEPTUAL DRAINAGE REPORT

Prepared for:

Florida Department of Transportation

District Six

Prepared by:

HDR Engineering, Inc.

15450 New Barn Road Suite # 304

Miami Lakes, Florida

January 2021

[*page blank for two-sided printing*]

TABLE OF CONTENTS

1.0 INTRODUCTION 1

2.0 EXISTING CONDITIONS 3

2.1 Existing Drainage 3
2.2 Soils 5
2.3 Existing Land Use 5
2.4 Floodplains and Floodways 5
2.5 Flooding History 5

3.0 PROPOSED CONDITIONS 6

3.1 Proposed Drainage 6

4.0 DESIGN CRITERIA AND PARAMETERS 9

4.1 General 9
4.2 Stormwater Quality Criteria 9
4.3 Stormwater Quantity Criteria 10
4.4 Variable Tailwater Conditions 11
4.5 Stormwater Management System Design Criteria 12
4.6 Permitting Requirements 14

5.0 HYDROLOGIC / HYDRAULIC MODELING METHOD AND CRITERIA 15

5.1 General 15
5.2 Hydrologic Modeling 15

6.0 ICPR SUMMARY OF RESULTS 16

7.0 ROADWAY BASE CLEARANCE 16

8.0 OFFSITE IMPACTS ANALYSIS 17

9.0 SPREAD CALCULATIONS 17

10.0 OPTIONAL CULVERT MATERIAL 17

11.0 RECOMMENDATIONS AND CONCLUSIONS 18

12.0 REFERENCES 18

LIST OF FIGURES

Figure 1.1 – Location Map (SR 826/Palmetto Expressway 447165-1-52-01)..... 2

Figure 1.2 – Location Map (SR 826 Frontage Road 441830-1-52-01)..... 2

Figure 1.3 – Location Map (SR 826 Frontage Road 441831-1-52-01)..... 3

LIST OF APPENDICES

Appendix A – Drainage Map

Appendix B – Federal Emergency Management Agency Firm

Appendix C – Natural Resource Conservative Service, Web Soil Map & Survey

Appendix D – Miami Dade County Land Use Map

Appendix E – Existing and Proposed Typical Sections

Appendix F – Pre-Development Conditions –

Curve Number Calcs

Ad-ICPR Report

Appendix G – Post-Development Conditions – FPID 432687-1-52-01 (main line)

Curve Number Calcs,

French Drain Calcs

Rating Curve

Ad-ICPR Report

Appendix H – Post-Development Condition – FPID 441830—52-01 & 441831-1-52-01

Curve Number Calcs

Rating Curve Calcs

Ad-ICPR Report

Appendix I – Hydroplaning Calculations

Appendix J – Design Aids

Appendix K – Percolation Testing

Appendix L – Corrosion Analysis FPID 432687-1-52-01

Appendix M – Variable Tailwater Elevations

Appendix N – Spread Calculations

Appendix O – Correspondence

Appendix P – Base Clearance Calcs

Appendix Q – Existing Permit Information

1.0 INTRODUCTION

State Road (SR) 826/Palmetto Expressway is a major limited access, urban freeway in Miami-Dade County, Florida, extending north-south from the Golden Glades Interchange (GGI) to US1 for approximately 25 miles. SR 826 is one of the most traveled transportation corridors in Miami-Dade County and connects southern Miami-Dade County to northern Miami-Dade County and serves as a feeder route to the County's busiest east-west SR 836 corridor. SR 826 also provides system-level connections to I-75, Florida's Turnpike, SR 924/Gratigny Parkway, SR 874/Don Shula Expressway and SR 9/I-95. SR 826 is part of the Strategic Intermodal System (SIS), Florida Intrastate Highway System (FIHS) and the National Highway System (NHS). SR 826 is listed as a local evacuation route in Miami-Dade County.

The purpose of the SR 826/Palmetto Expressway Capacity Improvement project (FPID 447165-1-52-01) consists of improvements in the southbound direction to retrofit the ingress/egress access points including widening in the northbound direction to correct substandard shoulder width created under the Northbound Express Lanes Interim Improvements project, widening of the NW 103rd Street on/off ramps, and a comprehensive milling and resurfacing plan. Furthermore, improvements include the installation of a new Tolling Site along both the northbound and southbound directions that will require a specific pavement design to be implemented 50 feet north/south of the gantry location. See **Figure 1.1** for location map.

In conjunction with SR 826/Palmetto Expressway Capacity Improvement project improvements, the Department has included the SR 826 Frontage Road RRR improvements from Okeechobee Road to NW 103rd Street (FPID 441830-1-52-01) and from NW 103rd Street to NW 122nd Street (FPID 441831-1-52-01). See **Figures 1.2** and **1.3** for location maps.

The Department recently completed the Palmetto Express Lanes Segment 2A project (FPID 432687-1-52-01/432687-2-52-01) providing additional capacity (one (1) lane in each direction) for most of the corridor and converted an existing general-purpose lane to an express lane. Although an additional lane was provided at most locations, the existing lane configuration of three, general-use lanes (GUL) with no auxiliary lane at the NW 103rd Street interchange is contributing to significant congestion in both directions. Refer to proposed typical section in **Appendix E**.

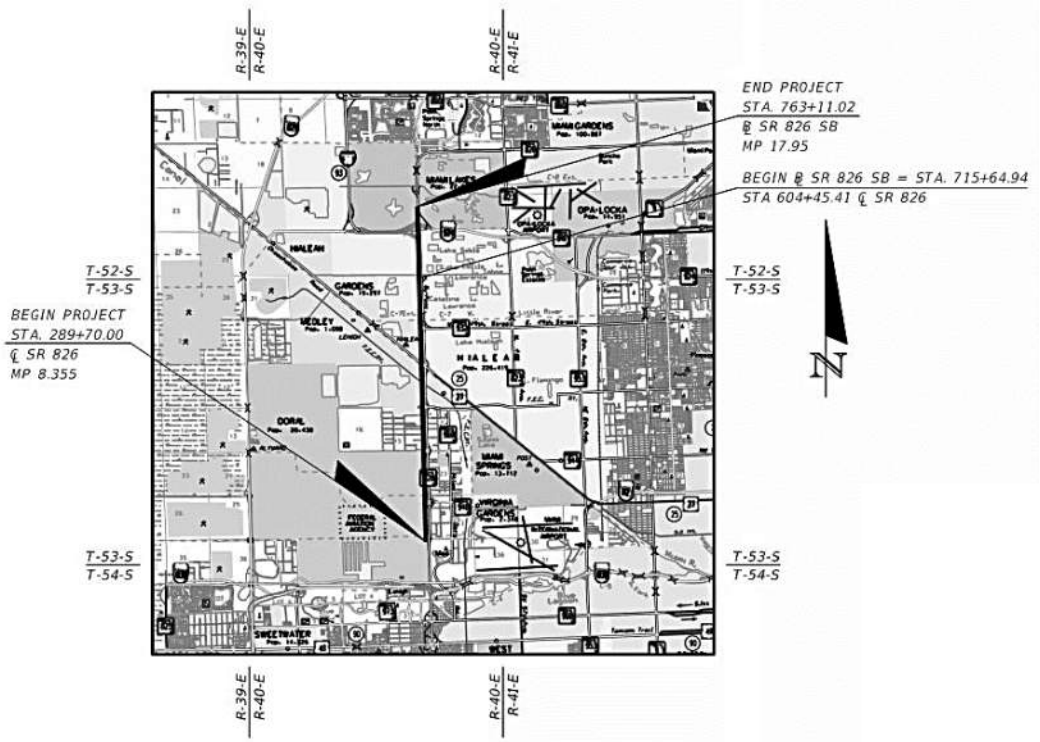


Figure 1.1: Location Map (SR 826/Palmetto Expressway 447165-1-52-01)

Figure 1.2: Location Map (SR 826 Frontage Road 441830-1-52-01)

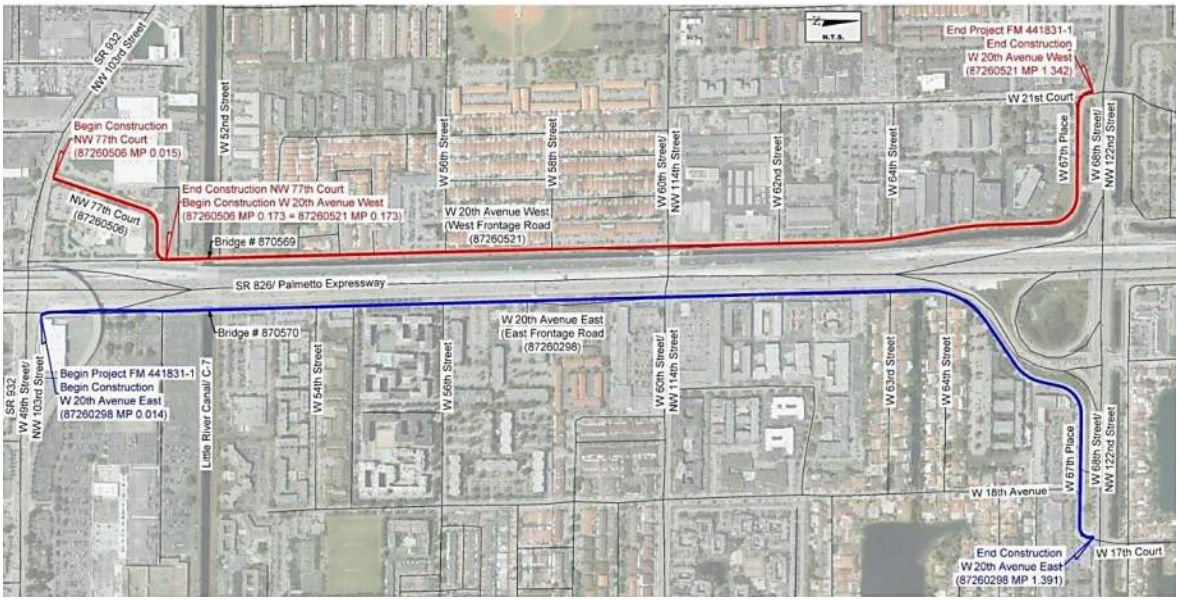


Figure 1.3: Location Map (SR 826 Frontage Road 441831-1-52-01)

2.0 EXISTING CONDITIONS

2.1 EXISTING DRAINAGE

The existing drainage system is divided into two separate systems, typically divided by major east-west arterial crossings NW 25th Street, Palmetto Station Railroad and NW 122nd Street. The systems have been identified in the latest SR 826/I-75 Express Lanes Design Build project documents (FDOT project FPID No. 432687-1-52-01) as Segment 1 and Segment 2A. There is no jurisdictional wetland within project limits.

Segment 1. The drainage study area for Segment 1 includes the project area between NW 25th Street to the crossing over the Palmetto Station Railroad, just north of NW 74th Street and comprises the Basins BX-1 to BX-12. This project will only disturb basin BX-12 at the beginning of the project.

Basin BX-12: This basin includes the area of the Palmetto Expressway from north of NW 58th Street to the crossing over Palmetto Station Railroad, including the SR 826/ NW 74th Street Interchange and has a total area of 46.10 acres. The existing drainage system is based on French drains located on both sides of the expressway and retention ponds located in the infield area of

the SR 826/NW 74th Street Interchange. Overflows from this system are being discharged into the NW 58th Street Canal.

Segment 2A consists of the project area along SR 826 between the crossing over the Palmetto Station Railroad north of NW 74th Street and NW 122nd Street. This segment includes the following basins: (Advanced Inter-Connected Pond Routing (Ad-ICPR) Report and Calculations are attached in **Appendix F**.)

Basin BX-13: This basin has a total area of 25.56 acres; it comprises the area of the SR 826/Palmetto Expressway from the crossing over Palmetto Station Railroad north of NW 74th Street to Okeechobee Road, including the southwest area of the SR 826/Okeechobee Road interchange. The existing drainage system is based on a French drain system built on both sides of the expressway and a retention area located in the mentioned interchange. This basin is subdivided into sub-basins BX-13A, BX-13B and BX-13C which include the systems behind three (3) existing weirs in this basin. This system overflows into the Miami Canal (C-6).

Basin BX-14: This basin comprises the area of the northbound of SR 826 from the crossing over the Metrorail to Okeechobee Road, including the southeast area of the interchange with Okeechobee Road. The existing drainage system is based on the retention area located in the mentioned interchange. This system has a total area of 9.22 acres and overflows into the Miami Canal (C-6).

Basin BX-15: This basin includes the northwest area of the SR 826/Okeechobee Interchange and the southbound of the expressway up to NW 95th Street. The existing drainage system is based on a French drain system built along the west side of the expressway and a retention area located in the mentioned interchange. This basin is subdivided into sub-basins BX-15A, BX-15B and BX-15C which include the systems behind three (3) existing weirs in this basin. This system has a total area of 11.16 acres and overflows into the Miami Canal (C-6).

Basin BX-16: This basin has a total area of 13.66 acres and consists of the northeast area of the SR 826/Okeechobee Interchange and the northbound of the expressway up to NW 95th Street. The existing drainage system is based on a French drain system built along the east side of the expressway and a retention area located in the mentioned interchange. This system overflows into the Miami Canal (C-6).

Basin BX-17: This basin consists of the Palmetto Expressway from NW 95th Street to the Little River Canal (C-7), including the area of the NW 103 Street Interchange. The existing drainage system is based on French drains located on both sides of the expressway. This basin has a total area of 28.47 acres and is subdivided into six (6) sub-basins which include the systems behind six (6) existing weirs in this basin. This system overflows into the Little River Canal (C-7).

Basin BX-18: This basin includes the area of the Palmetto Expressway from the Little River Canal (C-7) to W 60th Street and has a total area of 15.88 acres. The existing drainage consists of

French drains located along the east side of the expressway and overflows into the Peter's Pike Canal.

Basin BX-19: This basin comprises the area of the Palmetto Expressway from W 60th Street to the NW 122nd Street Interchange including NW 122nd Street from the Palmetto to W 17th Court. This basin is subdivided into two (2) sub-basins which include the systems behind two (2) existing weirs in this basin. The existing drainage system is based on retention ponds located at the interchange. This system overflows into the NW 122nd Street Canal and has a total area of 21.44 acres.

2.2 SOILS

The Natural Resource Conservative Service, Web Soil Map & Survey is included in **Appendix C**. Seasonal High Water (SHW) depth varies from 0.95 feet to 1.95 feet within project limits.

2.3 EXISTING LAND USE

The project is located within a predominantly urban setup surrounded by a mix of residential, commercial and green areas and canals. Refer to **Appendix D**.

2.4 FLOODPLAINS AND FLOODWAYS

The SR 826 project falls within the limits of the Community Panels 12086C0114L, 12086C0277L and 12086C0279L of the FEMA FIRM Maps of Miami-Dade County. The project is located within the Flood Zones AH, AE, and X. For more detail refer to **Appendix B**. There is very negligible flood impact due to proposed improvements.

2.5 FLOODING HISTORY

To determine the flooding history in the project area, FDOT construction plans, United States Geological Survey (USGS) Quadrangle Maps, South Florida Water Management District (SFWMD) information and FEMA Flood Insurance Rate Maps (FIRM) were used for areas within the corridor. A field inspection was conducted to identify obvious drainage problems. Additionally, FDOT District Six Maintenance staff members were contacted about any local drainage conditions.

There is a history of flooding at SR 826 frontage road NB before NW 122nd Street. The reason of the flooding is due to no existing drainage collection system in the area.

This information was taken into consideration for the proposed design and additional drainage structures were added. Please see Proposed Drainage Maps **Appendix A** and communication with FDOT maintenance team in **Appendix O**.

3.0 PROPOSED CONDITIONS

3.1 PROPOSED DRAINAGE

The proposed drainage system of SR-826 Mainline is primarily divided into two (2) separate systems following existing drainage basins as identified in the latest SR 826/I-75 Express Lanes Design Build project documents (FDOT project FPID No. 447165-1-52-01) as Segment 1 and Segment 2A. The proposed drainage improvements will maintain the existing basins and their corresponding outfalls. The general limits of the existing basins will remain the same in the post-development conditions. It is noted that proposed storm sewer systems shall meet FDOT wall zone requirements however in some areas pipe running along MSE wall are shown to tie existing systems or avoid extensive pipe installations. These locations J-Bottom are proposed to offset pipe and meet wall strap requirement.

Additional French drains are being proposed in some areas of the project in order to compensate for the additional impervious areas along SR 826 and the Frontage roads. The existing weir in Basin 16 will be modified in order to ensure post-development discharge requirements are met for all receiving surface water bodies. **Appendix F** includes the conceptual drainage basins along the corridor within the study limits and proposed drainage systems are described below:

Segment 1. The drainage study area for Segment 1 includes the project area between NW 25th Street to the crossing over the Palmetto Station Railroad, just north of NW 74th Street and comprises the Basins BX-1 to BX-12. This project will only disturb Basin BX-12. Ad-ICPR and calculations are attached in **Appendix G**.

Basin B-12: Includes the area of the Palmetto Expressway from north of NW 58th Street to the crossing over Palmetto Station Railroad, including the SR 826/NW 74th Street Interchange and has a total area of 46.10 acres and a total development area of 3.42 acres. The proposed improvements consist of storm sewer system adjustment and addition of drainage structures along the west side of the expressway. Overflows from this system continue being discharged into the NW 58th Street Canal. Since there is no proposed additional impervious area within the basin, no treatment and attenuation are required.

Segment 2A consists of the project area along SR 826 between the crossing over of Palmetto Station Railroad north of NW 74th Street and NW 122nd Street. This segment includes the following basins:

Basin B-13: This basin has a total area of 25.56 acres and a total development area of 13.46 with 0.55 acres of additional impervious. It comprises the area of the SR 826/Palmetto Expressway from the crossing over Palmetto Station Railroad north of NW 74th Street to Okeechobee Road, including the southwest area of the SR 826/Okeechobee Road Interchange. The proposed improvements consist of storm sewer system adjustment and addition of drainage structures along the west side of the expressway and approximately 50 LF of French drain (perforated pipe).

This basin was originally subdivided into sub-basins B13A, B-13B and B-13C which include the systems behind three (3) existing weirs in this basin. For the purpose of this project, only sub-basins B-13B and B-13C were modified. This system overflows into the Miami Canal (C-6). The additional impervious area is treated and attenuated in the proposed additional French drain.

Basin B-15: This basin includes the northwest area of the SR 826/Okeechobee Interchange and the southbound of the expressway up to NW 95th Street. The proposed drainage improvements consist of storm sewer system adjustment and addition of drainage structures along the west side of the corridor and 80 LF of French drain (perforated pipe). This basin has a total area of 11.32 acres. 0.30 acres of impervious area is added within the basin. The additional impervious area will be treated and attenuated the additional French drain. The Basin was originally subdivided into sub-basins B-15A, B-15B and B-15C which include the systems behind three (3) existing weirs in this basin. For the purpose of this project, only sub-basins B-15B and B-15C were modified. This system overflows into the Miami Canal (C-6).

Basin B-16: This basin has a total area of 13.66 acres addition 0.14 acres of impervious area. It includes the northeast area of the SR 826/Okeechobee Interchange and the northbound of the expressway up to NW 95th Street. The proposed drainage improvements consist of minor adjustments of the existing weir in the retention area at the interchange, and storm sewer system adjustment and addition of drainage structures along the west side of the corridor. This system overflows into the Miami Canal (C-6).

Basin B-17: This basin consists of the Palmetto Expressway from NW 95th Street to the Little River Canal (C-7), including the area of the NW 103 Street Interchange. The proposed drainage improvements consist of storm sewer system adjustment and addition of drainage structures along both sides of the corridor and approximately 306 LF of French drain (perforated pipe). This basin has a total area of 28.47 acres and is subdivided into six (6) sub-basins which include the systems behind six (6) existing weirs in this basin. This system overflows into the Little River Canal (C-7). Some of drainage structures near 103rd South Bound Off Ramp has shown hydraulic gradient line above for some FDOT design storms. This issue needs to be addressed during design phase.

Basin B-18: This basin includes the area of the Palmetto Expressway from the Little River Canal (C-7) to W 60th Street and has a total area of 15.88 acres, with 0.33 acres of additional impervious area. The proposed drainage improvements consist of storm sewer system adjustment and addition of drainage structures along both sides of the corridor and approximately 180 LF of French drain (perforated pipe) to accommodate the expressway widening. This system overflows into the Peter's Pike Canal.

Basin B-19: Comprises the area of the Palmetto Expressway from W 60th Street to the NW 122nd Street Interchange including NW 122nd Street from the Palmetto to W 17th Court. This basin is subdivided into two (2) sub-basins which include the systems behind two (2) existing weirs in this basin. The proposed drainage improvements consist of storm sewer system adjustment and

addition of drainage structures along both sides of the SR 826 corridor to accommodate the widening of the expressway. Other improvements include approximately 50 LF of French drain (perforated pipe) on NW 122nd Street as well as addition and adjustment of drainage structures to accommodate the reconstruction of this section of road. This system overflows into the NW 122nd Street Canal and has a total area of 21.92 acres, total development area of 2.83 acres with 0.11 acres of additional impervious area.

TABLE 1: SUMMARY OF PROPOSED FRENCH DRAIN LENGTH

BASIN	IMP. AREA (AC)		ADDITIONAL IMP. (AC) (3)	REQUIRED TREATMENT VOL. FOR ADDITIONAL IMP. AREA (AC-FT) (4)	REQUIRED ATTENUATION VOL. FOR ADDITIONAL IMP. AREA (AC-FT) (5)	MAX OF COLUMN (4) & (5) (AC-FT) (6)	FACTOR OF SAFETY (7)	REQUIRED VOL. TO HOLD IN ADDITIONAL FRENCH DRAIN (AC-FT) (8)	PROVIDED FRENCH DRAIN (FT) (9)	PROVIDED ADDITIONAL FRENCH DRAIN (FT) (10)
	PRE (1)	POST (2)								
BASIN 12	3.42	3.42	-	0	0	0	2	0	0	0
BASIN 13	6.35	6.90	0.55	0.11	0.62	0.62	2	1.24	1.56	50
BASIN 15	4.38	4.68	0.30	0.06	0.34	0.34	2	0.68	0.70	80
BASIN 17	12.51	12.93	0.42	0.09	0.47	0.47	2	0.95	1.05	400
BASIN 18	0.74	1.07	0.33	0.07	0.37	0.37	2	0.74	0.75	180
BASIN 19	1.16	1.27	0.11	0.02	0.12	0.12	2	0.25	0.27	50

1. (3) = (2) - (1)
2. (4) = 2.5" of (3)
3. (5) = $$Q = \frac{(P - 0.2S)^2}{(P + 0.8S)}$$
4. (6) = Max of (4) or (5)
5. (8) = (7) X (6)

The proposed drainage system of the frontage roads NW 77th Avenue and W 20th Avenue comprises the area of the frontage roads from Okeechobee Road to NW 122nd Street. Frontage Road from Okeechobee Road to NW 103rd Street is included in FPID No. 441830-1-52-01 and from NW 103rd Street lies under FPID No. 441831-1-52-01. There is no existing permit for Frontage Road. The design approach is to contain stormwater runoff within the grate elevation for the 10-year – 1-hour, 10-year – 8-hour, 10-year – 24-hour, 100-year – 1-hour, 100-year – 8-hour, 100-year – 24-hour storm event. French drain is being proposed in order to compensate for the additional impervious area. **Appendix H** includes Ad-ICPR Report and Calculations.

Basin B-15F: This basin includes NW 77th Avenue from Okeechobee Road to north of W 41st Street. There is improvement within a 0.10-acre area. Ten linear feet (10 LF) of French drain (perforated pipe) is proposed to contain runoff within the basin for designed storm events.

Basin B-16F: This basin includes W 20th Avenue from Okeechobee Road to W 41st Street. The proposed drainage improvements impact a total of 1.88 acres of area. Approximately 120 LF of French drain (perforated pipe) is proposed to contain storm runoff for designed storm events.

Basin B-17F: This basin includes NW 77th Avenue from north of W 41st Street to Little River Canal (C-7) in the west side and W 20th Avenue from south of NW 103rd Road to Little River Canal (C-7) in the east side. A total of 0.75 acres is impacted within the proposed improvements. A total of 185 LF of French drain (perforated pipe) is proposed to keep the hydraulic grade-line below grate elevation for designed storm events.

Basin B-18F: This basin includes NW 77th Avenue from the Little River Canal (C-7) to W 60th Street on the west side and W 20th Avenue from the Little River Canal (C-7) to W 60th Street on the east side. The proposed drainage improvements consist of storm sewer system adjustment and addition of drainage structures along NW 77th Avenue and W 20th Avenue west and approximately 335 LF of French drain (perforated pipe). The proposed French drain is to contain runoff from 3.77 acres of impacted area.

Basin B-19F: This basin includes NW 77th Avenue from W 60th Street to NW 122nd Street on the west side and W 20th Avenue from W 60th Street to NW 122nd Street on the east side. The proposed drainage improvements consist of addition of drainage structures along NW 77th Avenue and W 20th Avenue. A total of 411 LF of French drain (perforated pipe) is added to contain a total of 4.25 acres of basin area for designed storm events.

4.0 Design Criteria and Parameters

4.1 General

The following sections outline the federal, state and local stormwater quality and quantity criteria applicable to the proposed improvements. These sections also outline the permitting requirements for the project. The criteria and parameters summarized in these sections are derived from the applicable published regulations, permit design manuals and FDOT design standards.

4.2 Stormwater Quality Criteria

The SFWMD requires that all projects meet state water quality standards as set forth in Chapter 17-302, Florida Administrative Code (FAC). To assure that these criteria are met, the project must meet the following volumetric retention/detention requirements, as described in the SFWMD Permit Volume IV:

1. For wet detention systems, the first inch of runoff from the project or the total runoff from 2.5 inches, times the percent of impervious, whichever is greater, must be detained on-site. A wet detention system is a system that maintains the control elevation below one foot from the seasonal high groundwater elevation and does not bleed-down more than one-half inch of detention volume in 24 hours.

2. Dry detention systems must only provide 75 percent of the required wet detention volume. Dry detention systems must maintain the control elevation at least one foot above the seasonal high groundwater elevation.
3. Retention systems must only provide 50 percent of the wet detention volume.
4. For projects with more than 50 percent of imperviousness, discharge to the receiving water bodies must be made through baffles, skimmers, or other mechanisms suitable of preventing oil and grease from discharging to/or from the retention/detention areas.

4.3 STORMWATER QUANTITY CRITERIA

The SFWMD requires that off-site discharge rates be limited to rates not causing adverse impacts to existing off-site properties, and:

1. Historic discharge rates; or
2. Rates determined in previous SFWMD permit actions; or
3. Basin allowable discharge rates.

The receiving water bodies within the managed lanes project include the following:

- Miami Canal (C-6 Canal) (SFWMD has jurisdiction)
- Little River Canal (C-7 Canal) (SFWMD has jurisdiction)
- Peter's Pike Canal (DRER has jurisdiction)
- NW 122nd Street Canal (DRER has jurisdiction)

The SFWMD requires that the pre-development peak discharge rate during a 25-year – 72-hour rainfall event not be exceeded by the post-development peak discharge conditions. Since proposed improvements are not within DRER right of way, SFWMD design criteria is used for this project.

The SFWMD also requires flood protection within the project as follows:

1. Building finish floor elevation must be set at or above the 100-year flood elevation, as determined by the Federal Insurance Rate Maps (FIRM) or 100-year – 72-hour rainfall event peak stages;
2. Centerline of roadways must be set at or above the 5-year – 24-hour rainfall event peak stages or two feet above the seasonal high groundwater elevation, whichever is greater;
3. Parking lots served by French drains must be set at or above the 5-year – 1-hour rainfall event peak stages.
4. The SFWMD also requires that provisions be made to replace or otherwise mitigate the loss of historical basin storage provided by the project.

Pre vs. Post Analysis

Using the Ad-ICPR computer program, the existing and proposed drainage systems were simulated using the 25-year – 72-hour storm as required by the SFWMD water quantity design criteria. The 100-year – 1-hour, 8-hour and 24-hour storms were also simulated. **Table 2** provides a summary of the simulations results. The results depicted are the pre-development and post-development maximum discharges into the adjacent water bodies. They indicate that post-development peak discharges have been reduced from the pre-development discharges.

TABLE 2: SUMMARY OF PRE VS POST DISCHARGE RATE

BASIN No.	RECEIVING WATER BODY	25 YEAR - 72 HOUR STORM		
		PRE-DEV DISCHAGE (CFS)	POST-DEV DISCHARGE (CFS)	DIFFERENCE (CFS)
13	MIAMI CANAL (C-6)	25.31	24.93	0.38
15	MIAMI CANAL (C-6)	30.54	29.42	1.12
16	MIAMI CANAL (C-6)	20.09	20.08	0.01
17	LITTLE RIVER CANAL (C-7)	14.12	13.58	0.54
18	PETER'S PIKE CANAL	12.94	12.87	0.07
19	NW 122 STREET CANAL	37.79	37.32	0.47
TOTAL DISCHARGE INTO THE NW 58th STREET CANAL		0.00	0.00	0.00
TOTAL DISCHARGE INTO THE MIAMI CANAL (C-6)		75.94	74.43	1.51
TOTAL DISCHARGE INTO THE LITTER RIVER CANAL (C-7)		14.12	13.58	0.54
TOTAL DISCHARGE INTO PETER'S PIKE CANAL		12.94	12.87	0.07
TOTAL DISCHARGE NTO THE NW 122 STREET CANAL		37.79	37.32	0.47

4.4 VARIABLE TAILWATER CONDITIONS

Historically, the SFWMD has allowed French drain exfiltration system to be considered in hydrologic/hydraulic modeling for only one-hour of rainfall duration or its equivalent of 3.28 inches precipitation deduction credit for a SFWMD 25-year – 72-hour storm event. This volume of runoff typically is the stormwater quality volume required to be retained on-site with French drains.

However, because of the relatively excellent draining soils in Miami-Dade County, this criterion is overly conservative and stormwater management systems using this criterion are over-designed. Based on local design experience, French drains tend to exfiltrate throughout the duration of long duration rainfall events, such as 24 and 72 hours, and provide quick drawdown of retained stormwater runoff after the end of the rainfall event.

In the last years, based on previous roadway projects and various meetings between FDOT District VI and SFWMD, the use of French drain exfiltration in flood routing modeling during the entire storm duration has been finally accepted for the SFWMD 25-year – 72-hour, 100-year – 1-hour, 100-year – 8-hour, 100-year – 24-hour, and the 100-year – 72-hour pre- versus post-development peak discharge analysis. However, this acceptance is conditional to including in the

development peak discharge analysis. However, this acceptance is conditional to including in the model a boundary condition with variable groundwater and/or surface water levels representative of storm events.

Project tailwater elevation establishment was based on a prudent and practical engineering judgment using a combination of sources such as FEMA/FIRM maps, Metropolitan Dade County Public Works Department Flood Criteria Map (G-7.2), Average Yearly Highest Groundwater Levels Map (W.C. 2.1), Average October Groundwater Levels Map (W.C. 2.2), existing ground elevations, USGS groundwater monitoring wells, SFWMD rain gage station field data and the most updated XP-SWMM Model developed by DRER for these Canals.

Boundary stage hydrographs were developed consistent with project tailwater criteria and were input into AdICPR for the 25-year – 72-hour, 10-year – 1-hour, 10-year – 8-hour, 10-year – 24-hour, 100-year – 1-hour, 100-year – 8-hour, 100-year – 24-hour, and the 100-year – 72-hour storms. FDOT District 6 has implemented an approach that uses the rainfall distribution curves included in the FDOT Drainage Hydrology Handbook to determine the distribution of the variable tailwater elevation conditions for the 8- and 24-hour rainfall durations. For the 72-hour rainfall duration, the SFWMD 72-hour rainfall distribution curve is used to determine the 72-hour distribution of the variable tailwater elevation condition. The distribution used for all rainfall durations of the variable tailwater elevation will vary from the DHW to the return frequency groundwater elevation and return to the DHW. The DHW for Miami-Dade County is the average October groundwater elevation. Variable tailwater elevations developed for this project are included in **Appendix M**.

4.5 Stormwater Management System Design Criteria

This project was developed to comply with SFWMD stormwater quality and quantity criteria.

Retention Ponds

Most of the proposed ponds will be dry retention ponds. These ponds must be designed in accordance with the following design criteria and parameters:

1. Retain the stormwater quality volume prior to off-site discharge. The retained volume must be infiltrated to the groundwater within 24 hours.
2. Bottom shall be at least one foot above the average October groundwater elevation.
3. A minimum length of French drain should be placed at the bottom of the retention/detention ponds and swales to allow a drawdown of retained/detained runoff volume.
4. Discharge from the pond shall be through a control structure, and the post-development peak discharge rate shall not exceed the 25-year – 72-hour pre-development flow rates.
5. Maintain a minimum of one foot of freeboard during a 25-year – 72-hour storm event.

6. Standing water level in pond shall meet FDOT DHW for roadway base clearance criteria during a 10-year storm event.
7. Water level in pond shall be at or below FDOT AHW and meet culvert design criteria during a 50-year and 100-year storm.
8. Containment berms shall not violate roadway stopping sight distances and have a minimum top width of 15 feet.

French Drains

French drains are allowed when in-situ soil hydraulic conductivity is enough to promote exfiltration of the required stormwater quality volumes. French drains must be designed in accordance with FDOT-VI Drainage Section Pamphlet “Subsurface Drainage with French Drains: June 20, 1991” and must address the following design criteria and parameters:

1. French drains should be able to exfiltrate to the stormwater quality volume prior to discharge over control weir.
2. French drains should be able to exfiltrate runoff into areas of aquifer that do not contain contaminated soil.
3. Exfiltration pipe shall be a minimum of 24 inches in diameter with an invert elevation set at or above average October groundwater elevation in order to be given credit for water quality treatment.
4. Provide baffles, skimmers and sumps in inlets to minimize entrance of oils and sediments into drainage pipes.
5. Bottom of skimmers shall be set at a minimum of 18 inches below the invert of the French drainpipe as outlined in the Metropolitan Dade County Public Works Department Design Standards.
6. Rock in trench must be enclosed in filter material, at least on the top and on the sides.
7. In-situ soil exfiltration capacity must be determined by the FDOT percolation test methods. Percolation test holes must be advanced to a depth that will yield a minimum of six gallons per minute per foot of head of exfiltration capacity.
8. Depth of French drain trench must be at or below the percolation test hole depth to a maximum of 20 feet as outlined in the FDOT-VI Drainage Section Pamphlet “Subsurface Drainage with French Drains: June 20, 1991”.
9. The exfiltration rate shall be limited to 0.1 cfs per foot of French drain regardless of the perforations in the pipe or the soil hydraulic conductivity.

Conveyance System

Conveyance systems collect and carry stormwater runoff to receiving bodies of water, other conveyance systems, retention ponds, and/or French drains. The two main conveyance systems used in roadway projects are storm sewer systems and roadway conveyance ditches. The design of both storm sewer systems and conveyance ditches are based on FDOT drainage design criteria. These criteria are summarized as follows:

1. For major interstates a 10-year recurrence interval shall be used in the design of storm sewer systems.
2. For interstates with a sag vertical curve with no outlet other than the storm sewer, a 50-year recurrence shall be used in the design of the storm sewer system. Also, for a depressed expressway with drainage provided by a pumping station, a 50-year recurrence shall be used for the design of the storm sewer system.
3. Design of storm sewer system shall maintain hydraulic grade line (HGL) a minimum of one foot below gutter line when minor losses are not computed in the design. When minor losses are considered, HGL may be maintained at the gutter line.
4. Design of storm sewer system shall maintain a minimum and maximum velocity of 2.5 and 15 feet per second, respectively.
5. Roadway and median ditches are designed to convey the 10-year frequency design storm. Outfall ditches are designed to convey the 25-year frequency storm.
6. The maximum allowed velocity in grass ditches is 4 feet per second. For velocities higher than 4 feet per second, lining other than grass shall be used such as paved concrete, riprap, geo-grid, and interlocking concrete blocks.

4.6 PERMITTING REQUIREMENTS

South Florida Water Management District (SFWMD)

An ERP Permit No. 13-01378-P was issued by SFWMD in October 21, 2013. This permit will be modified according to the proposed modifications to the original drainage system.

USEPA General Construction NPDES Permit

The USEPA, under the Federal Clean Water Act (CWA), requires that construction projects that disturb five acres or more require a General Construction National Pollutant Discharge Elimination System (NPDES) Permit. Since the project anticipates less than five acres of disturb project area, contractor has to verify with USEPA for qualification of waiver of NPDES permit.

5.0 HYDROLOGIC / HYDRAULIC MODELING METHOD AND CRITERIA

5.1 GENERAL

AdICPR is a powerful stormwater management analysis and design tool developed by Streamline Technologies, Inc. AdICPR is a hydrodynamic model that simulates hydrologic and hydraulic conditions using conveyance features such as basins, nodes, and links.

AdICPR computer model (Version 3.02) was used to design the proposed SR 826 stormwater management systems and verify that the required stormwater quantity criteria outlined in Section 4 are met. The AdICPR computer model simulates hydrologic and hydraulic conditions by generating runoff hydrographs and dynamically routing these hydrographs through diverging, looped, and/or bifurcated stormwater management systems.

In AdICPR, the stormwater management system is divided into a network of nodes or junctions and links or reaches. A node is a discrete location in the drainage system where runoff enters the system and conservation of mass or continuity is maintained. The hydrologic conditions within the stormwater management system are modeled by nodes. Links represent connections between nodes and are used to transfer or convey stormwater runoff through the system. The links are used to model the hydraulic response of the system for a defined hydrologic condition.

5.2 HYDROLOGIC MODELING

ICPR uses three methods for generating stormwater runoff hydrographs: The Soils Conservation Service (SCS) unit hydrograph method, Santa Barbara Urban Hydrograph (SBUH) method, and kinematic overland flow method. For the drainage analysis, the SCS method was selected because it is the most suitable method for the size of the drainage areas, land use, soil condition and regional location. This method generates runoff hydrographs using the following hydrologic parameters:

1. Basin areas
2. Curve numbers (CN)
3. Rainfall precipitation
4. Rainfall distribution
5. Storm duration
6. Time of concentration (TOC)

Rainfall Depth

The following design storm events were simulated in AdICPR:

- 10-year – 1-hour (Rainfall Depth = 3.50 inches)

- 10-year – 8-hour (Rainfall Depth = 6.40 inches)
- 10-year – 24-hour (Rainfall Depth = 8.88 inches)
- 100-year – 1-hour (Rainfall Depth = 5.00 inches)
- 100-year – 8-hour (Rainfall Depth = 9.60 inches)
- 100-year – 24-hour (Rainfall Depth = 13.44 inches)
- 25-year – 72-hour (Rainfall Depth = 14.00 inches)

Rainfall Distribution

The design rainfall distribution defines how the mass rainfall is distributed throughout the storm event. The SFWMD distribution was used for the 72-hour duration storms, the FDOT distribution was used for the 1-hour and 8-hour duration storms, and the SCS Type II (Florida Modified) distribution was used for the 24-hour duration storms.

Time of Concentration (TOC)

The drainage basin TOC is the time for a drop of water to reach the basin discharge point from the most hydraulically remote point in the basin. The pre-development and post-development conditions drainage basins of the project are relatively small and highly impervious. These basins are presumed to have a TOC less than 10 minutes. Therefore, a TOC of 10 minutes was assumed for all basins where the majority of runoff occurs via overland flow.

6.0 ICPR SUMMARY OF RESULTS

Using the AdICPR computer program, the proposed drainage system was simulated using several storm events as required by the FDOT & SFWMD. The maximum water elevations obtained for the 10-year storms were compared with the minimum edge of pavement elevation of each inlet. Summary of maximum stage is in **Appendix G** and **Appendix H** under each basin tab. Results show that maximum stages are within design requirements.

7.0 ROADWAY BASE CLEARANCE

FDOT requires that there is sufficient clearance between the bottom of the roadway base and the Base Clearance Water Elevation (BCWE) to maintain the integrity of the pavement structure. FDOT District Six also requires that the Allowable High Water (AHW) elevation shall not exceed the roadway edge of pavement. The BCWE shall also not exceed the pavement base bottom elevation for a period greater than 24 hours. The AHW for this project is 4.00 NGVD (2.44 NAVD with 1.56 datum shift) per Miami-Dade County Public Works Average Yearly Highest Water Level Map. Base clearance is checked for where widening is proposed for lowest edge within basins. As shown in **Appendix P** some roadway sections do not meet the 3 feet of base clearance

requirement. There is no historical pavement deterioration within project area. However base clearance needs to be address during design process.

8.0 OFFSITE IMPACTS ANALYSIS

In order to ensure that the proposed project will not adversely affect adjacent off-site properties, the proposed drainage system has been designed to either maintain or reduce flooding levels below pre-development levels.

9.0 SPREAD CALCULATIONS

Allowable Spread

The spread resulting from a rainfall intensity of 4.0 in/hr shall be limited as follows:

TABLE 3: FDOT Spread Design Criteria

Typical Section Condition	Design Speed (mph)	Spread Criteria
Parking Lane or Full Width Shoulders	All	No encroachment
All other	Design Speed ≤ 45	Keep 1/2 of lane clear
	45 < Design Speed ≤ 55	Keep 8 FT of lane clear
	Design Speed > 55	No encroachment

* The criteria in this column apply to travel, turn, or auxiliary lanes adjacent to barrier wall or curb, in normal or super elevated sections.

Design speed for the expressway is greater than 55 mile per hour (mph). Therefore, no encroachment is allowed in the travel lane. For Frontage Road, design speed is less than 45 mph; spread is allowed to encroach a ½ of lane.

In addition to the above standards, for sections with a shoulder gutter, the spread resulting from a 10-year frequency storm shall not exceed 1'-3" outside the gutter in the direction toward the front slope. The distance limits the spread to the face of guardrail posts.

Spread calculations are depicted in **Appendix N**.

10.0 OPTIONAL CULVERT MATERIAL

The pipe materials were selected based on the corrosion classification test results and the FDOT selection criteria. The required service life and allowable culvert materials on this project, which is designated as an urban facility, is as indicated in the FDOT guidelines for Optional Pipe Material Selection is:

Function	DSL (yrs.)
Storm Drain	100
Cross Drain	100
French Drain	100

Input values for the FDOT Culvert Service Life Estimator program include Resistivity [Ohm-cm], pH, Sulfates [ppm], and Chlorides [ppm]. Values entered for the purposes of this report were taken as averages of the results of the sample tests shown as part of the geotechnical data in **Appendix K**.

As indicated in **Appendix L**: Corrosion Analysis, Concrete Pipes, Aluminum Pipes and Aluminized Steel Pipes are optional materials that can be used for the proposed drainage system.

11.0 Recommendations and Conclusions

The design approach is to treat and attenuate additional impervious area. The proposed additional French drain and minor adjustment of existing weir for Basin 16 are meeting stormwater quality and quantity requirements set forth by the regulatory agencies to obtain the necessary permits.

12.0 References

FDOT Drainage Manual dated January 2020.

PD&E Manual, 2019.

FDOT Drainage Design Guide dated January 2020.

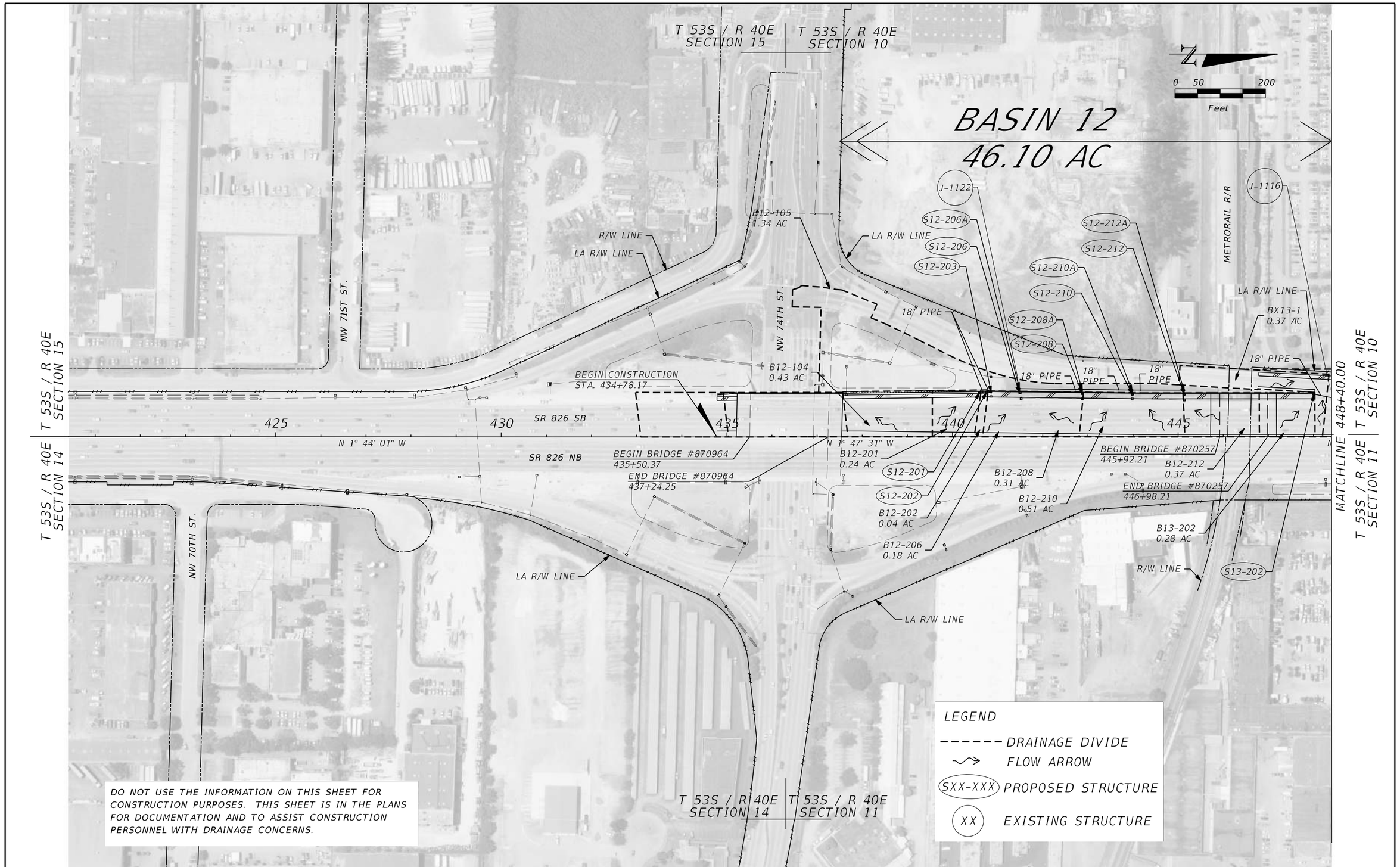
FDOT Design Standards, 2020.

SFWMD Environmental Resource Permit Information Manual, 2014.

FDOT PD&E Manual, 2020.

District 6 – Exfiltration Trench Reference Manual 2020

APPENDIX A
Drainage Map



DO NOT USE THE INFORMATION ON THIS SHEET FOR CONSTRUCTION PURPOSES. THIS SHEET IS IN THE PLANS FOR DOCUMENTATION AND TO ASSIST CONSTRUCTION PERSONNEL WITH DRAINAGE CONCERNS.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01, 441830-1-52-01, 441831-1-52-01

DRAINAGE MAP

SHEET NO.

SEABOARD MARINE

BASIN 13
25.56 AC

U-HAUL MOVING & STORAGE DORAL

0 50 200
Feet

T 53S / R 40E | SECTION 11
MATCHLINE 448+40.00

T 53S / R 40E | SECTION 10
MATCHLINE 476+40.00

NW 80TH ST.

SR 826 SB

SR 826 NB

1° 46' 40" W

N 1° 47' 57" W

N 1° 44' 02

450 455 460 465 470 475

END BRIDGE #870258
463+67.52

BEGIN BRIDGE #870258
462+17.70

S13-202A
S13-202B
BX13-4
0.45 AC
J-1115
J-1112
LA R/W LINE
B13-203
0.64 AC
B13-204
0.42 AC
18" PIPE
R/W LINE
S13-206
S13-206A
S13-206B
Y-118A
B13-207
0.58 AC
B13-206
0.43 AC
BX13-43
0.85 AC
18" PIPE
18" PIPE
S13-208
S13-208A
24" FD
18" PIPE
LA R/W LINE
B13-210
0.52 AC
18" PIPE
S13-210
S13-210A
S13-210B
LA R/W LINE
BX13-58
7.01 AC
Y-107
R/W LINE
LA R/W LINE

S13-203
S13-204
S13-204A
Y-116A
Y-115A
S13-205
S13-205A
S13-205B
Y-117A
B13-205
0.37 AC
S13-207
S13-207A
S13-207B
LA R/W LINE
B13-208
0.45 AC
S13-209
S13-209A
Y-160
B13-209
0.57 AC
BX13-46
0.52 AC
LA R/W LINE

DO NOT USE THE INFORMATION ON THIS SHEET FOR CONSTRUCTION PURPOSES. THIS SHEET IS IN THE PLANS FOR DOCUMENTATION AND TO ASSIST CONSTRUCTION PERSONNEL WITH DRAINAGE CONCERNS.

LEGEND

- DRAINAGE DIVIDE
- FLOW ARROW
- SXX-XXX PROPOSED STRUCTURE
- XX EXISTING STRUCTURE

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01, 441830-1-52-01, 441831-1-52-01

DRAINAGE MAP

SHEET NO.

CALLI 12/16/2020 4:37:13 PM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\44716515201\drainage\DRMPRD02.dgn

T 53S / R 40E SECTION 10 | T 53S / R 40E SECTION 03

RESTAURANT DEPOT

WALMART SUPERCENTER

0 50 200 Feet

R/W LINE

BASIN 13
25.56 AC

BASIN 15
11.32 AC

USA TRUCK SERVICE PLAZA

R/W LINE

BX13-58
7.01 AC

LA R/W LINE

LA R/W LINE

BX15-18
0.24 AC

S15-201D

S15-201E

S15-201C

F-3039

18" PIPE

S15-201B

B15-1A
1.91 AC

OUTFALL TO THE MIAMI CANAL

MIAMI CANAL (C6)

S15-201A

S15-22

S15-202B

S15FW-01

F-3037

S15FW-02

F-3026

B15-22
0.16 AC

B15-11
0.09 AC

S15-201

S15-201F

24" FD

B15-13A
0.21 AC

B15FW-1
0.07 AC

B15FW-2
0.03 AC

BX15-15A
0.11 AC

18" PIPE

NW 77TH AVE.

BEGIN BRIDGE #870975
481+20.19

480

485

490

495

500

SR 826 SB

SR 826 NB

18" PIPE

B15-11A
0.48 AC

S15-202A

N 1° 48' 01" W

S15-201G

S15-202

B15-203
0.74 AC

B15-16
0.66 AC

END BRIDGE #870975
485+91.63

B15-7
0.46 AC

B15-201
0.34 AC

B16FE-6
0.23 AC

B15-202A
0.36 AC

S15-203

B16FE-5
0.37 AC

W 20TH AVE.

24" FD

R/W LINE

24" FD

R/W LINE

T 53S / R 40E SECTION 11 MATCHLINE 476+40.00

NW SOUTH RIVER DR.

US-27/W OKEECHOBEE RD. EB

US-27/W OKEECHOBEE RD. WB

BX16-3
3.63 AC

B16FE-4
0.37 AC

B16FE-7
0.20 AC

W 39TH ST.

W 41ST ST.

LA R/W LINE

R/W LINE

B16FE-2
0.29 AC

LA R/W LINE

R/W LINE

B16FE-3
0.24 AC

24" FD

S16FE-06

BEST BUY

S16FE-07

S16FE-7A

R/W LINE

24" FD

S16FE-05

24" FD

24" FD

S16FE-02

24" FD

S16FE-04

S16FE-03

R/W LINE

WESTLAND PROMENADE

BASIN 16
13.66 AC (W 20TH AVENUE)

T 53S / R 40E SECTION 11 | T 53S / R 40E SECTION 02

T 53S / R 40E SECTION 11 MATCHLINE 504+40.00

T 53S / R 40E SECTION 02

LEGEND

DRAINAGE DIVIDE

FLOW ARROW

SXX-XXX PROPOSED STRUCTURE

XX EXISTING STRUCTURE

DO NOT USE THE INFORMATION ON THIS SHEET FOR CONSTRUCTION PURPOSES. THIS SHEET IS IN THE PLANS FOR DOCUMENTATION AND TO ASSIST CONSTRUCTION PERSONNEL WITH DRAINAGE CONCERNS.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01, 441830-1-52-01, 441831-1-52-01

DRAINAGE MAP

SHEET NO.

BASIN 17
28.47 AC

T 53S / R 40E
SECTION 02
MATCHLINE 504+40.00

T 53S / R 40E
SECTION 03
MATCHLINE 532+40.00

0 50 200
Feet

N

R/W LINE
NW 95TH ST.
S17FW-01
B17FW-1
0.03 AC
S17FW-02
S17FW-2A
B17FW-2
0.42 AC
S17FW-03
S17FW-04
S17FW-05
S17FW-06
24" FD
W 21ST AVE
24" FD
SR 826 SB
SR 826 NB
W 20TH AVE.
LA R/W LINE
R/W LINE
S17-201
B17-201
0.69 AC
N 1° 48' 08" W
B17-12A
0.15 AC
S17-202
S17-203
B17-203
0.21 AC
S17-204
B17-204
0.49 AC
B17-202
0.35 AC
FLORIDA
NATIONAL
UNIVERSITY
W 44TH PL.
S17-206
S17-205
B17-205
0.32 AC
S17FW-07
S17FW-08
R-1588
S17FW-09
S17FW-10
24" FD
24" FD
NW 98TH ST.
24" FD
B17-206
0.35 AC
S17-208
S17-208A
S17-209
B17-208
0.28 AC
S17-210A
S17-210B
S17-210
B17-210
0.28 AC
S17-211
S17-212
B17FW-11
0.10 AC
24" FD
S17FW-11
NW 99TH ST.
18" PIPE
B17-208A
0.13 AC
S17-212A
N 1° 47' 04" W
18" PIPE
S17-232
R-1565
BX17-26
0.21 AC
S17-233
B17-210A
0.07 AC
S17FW-12
24" FD
B17FW-12
0.11 AC
S17FW-13
B17FW-13
0.29 AC
S17-211A
BX17-38
0.21 AC
S17-235
B17-212
0.65 AC
B17-233
0.34 AC
S17FW-14
BX17-36
0.72 AC
B17-235
0.64 AC
BX17-43
0.24 AC
S17-237
B17-216
0.16 AC
EX-16
S17-216
S17FW-14
24" FD
B17-222
0.11 AC
S17-222
S17-224
S17-252
S17-253
S17-254
R/W LINE
48"
PIPE
N 1° 48' 27" W
18" PIPE
BX17-45
0.19 AC
S17-239A
B17-237
0.32 AC
S17-239
BX17-54
0.22 AC
18"
PIPE
48"
PIPE
B17-221
0.37 AC
B17-226
0.39 AC
N 1° 44' 40" W
S17-241
NW 103RD AVE
B17-240
0.45 AC
R/W LINE
B17-239
0.29 AC
EL DORADO
FURNITURE

LEGEND
DRAINAGE DIVIDE
FLOW ARROW
SXX-XXX PROPOSED STRUCTURE
XX EXISTING STRUCTURE

DO NOT USE THE INFORMATION ON THIS SHEET FOR CONSTRUCTION PURPOSES. THIS SHEET IS IN THE PLANS FOR DOCUMENTATION AND TO ASSIST CONSTRUCTION PERSONNEL WITH DRAINAGE CONCERNS.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01, 441830-1-52-01, 441831-1-52-01

DRAINAGE MAP

SHEET NO.

CALLI 12/16/2020 4:51:26 PM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\44716515201\drainage\DRMPRD04.dgn

T 52S / R 40E SECTION 03 | T 52S / R 40E SECTION 34

T 52S / R 40E SECTION 02 | T 52S / R 40E SECTION 35

MATCHLINE 532+40.00 NE

MATCHLINE 560+40.00 NE

BASIN 17
28.47 AC

BASIN 18
15.88 AC

0 50 200
Feet

R/W LINE

LITTLE RIVER CANAL

NW 106TH ST.

W 54TH ST.

W 56TH ST.

W 20TH AVE WEST

W 20TH AVE. EAST

PETER'S PIKE CANAL

SR 826 SB

SR 826 NB

OUTFALL TO THE LITTLE RIVER CANAL BEGIN BRIDGE #870758 540+84.16

END BRIDGE #870758 541+69.16

LA R/W LINE

EX-25 EX-26 EX-27 EX-28 EX-29 EX-30 Y-221 R-1581 P-48 P-51 P-51A

S17-225 S17-226 S17-227 S17-228 S17-229 S17-230 S17-231 S17-234 S17-240 S17-241A S17-241B S17-242 S17-243 S17-245 S17-247 S17-248 S17-249 S17-250 S17-251 S17-255 S17-240A S17-240B S17-227A

S17FW-14A S17FW-15

S18FW-01 S18FW-02 S18FW-03 S18FW-04 S18FW-05 S18FW-06 S18FW-07 S18FW-1A S18FW-11 S18FW-12 S18FW-13 S18FW-14

S17FE-01 S18FE-01 S18FE-02 S18FE-03 S18FE-05 S18FE-06 S18FE-07

B17FW-3 0.17 AC

B18FW-1 0.82 AC

B18FW-2 0.38 AC

B18FW-4 1.42 AC

B17-229 0.47 AC

B17-225 0.09 AC

B17-227 0.25 AC

B17-241 0.18 AC

B17-241A 0.28 AC

B17-241B 0.06 AC

B17-242 0.54 AC

B17-243 0.08 AC

B17FE-1 0.13 AC

B18FE-1 0.19 AC

B18FE-2 0.26 AC

B18FE-3 0.14 AC

B18FE-4 0.14 AC

BX18-9 0.41 AC

BX18-15 0.34 AC

BX18-23 1.49 AC

18" PIPE

24" FD

30" FD

30" PIPE

N 47° 57" W

N 2° 38' 07" W

DO NOT USE THE INFORMATION ON THIS SHEET FOR CONSTRUCTION PURPOSES. THIS SHEET IS IN THE PLANS FOR DOCUMENTATION AND TO ASSIST CONSTRUCTION PERSONNEL WITH DRAINAGE CONCERNS.

LEGEND

- DRAINAGE DIVIDE
- FLOW ARROW
- SXX-XXX PROPOSED STRUCTURE
- XX EXISTING STRUCTURE

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

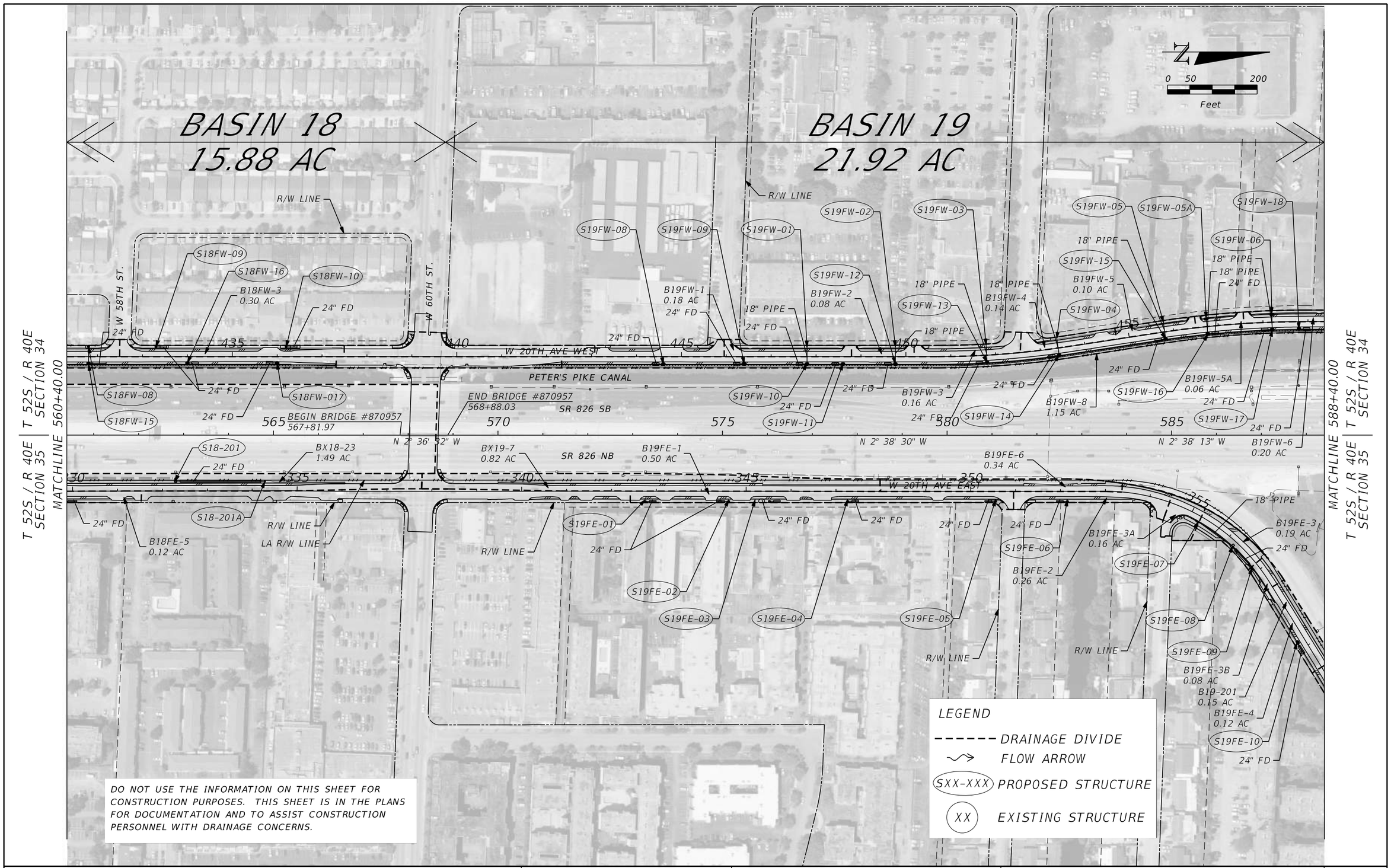
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01, 441830-1-52-01, 441831-1-52-01

DRAINAGE MAP

SHEET NO.

CALLI 12/17/2020 11:24:27 AM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\44716515201\drainage\DRMPRD05.dgn



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01, 441830-1-52-01, 441831-1-52-01

DRAINAGE MAP

SHEET NO.

CALLI 12/16/2020 5:03:42 PM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\44716515201\drainage\DRMPRD06.dg

T 52S / R 40E SECTION 34

MATCHLINE 588+40.00

T 52S / R 40E SECTION 35

T 52S / R 40E SECTION 27

T 52S / R 40E SECTION 26

T 52S / R 40E SECTION 27 | T 52S / R 40E SECTION 27

R/W LINE

LA R/W LINE

BASIN 19
21.92 AC

NW 122ND ST.

NW 20TH AVE

465

S19FW-07

B19FW-6
0.20 AC

460

18" PIPE

24" FD

S19FW-19

PETER'S PIKE CANAL

B19FW-7
0.46 AC

24" FD

590 595 600 605 610 615

N 2° 37' 35" W

N 2° 37' 57" W

N 2° 40' 13" W

N 3° 58' 40" W

N 2°

SR 826 SB

SR 826 NB

R/W LINE

LA R/W LINE

R/W LINE

LA R/W LINE

S19-202

24" FD

BX19-56
1.53 AC

B19FE-5
0.07 AC

B19-202
0.33 AC

24" FD

S19FE-11

T 52S / R 40E SECTION 27 | T 52S / R 40E SECTION 27

W 20TH AVE

595

0 50 200

Feet

LEGEND

DRAINAGE DIVIDE

FLOW ARROW

SXX-XXX PROPOSED STRUCTURE

XX EXISTING STRUCTURE

DO NOT USE THE INFORMATION ON THIS SHEET FOR CONSTRUCTION PURPOSES. THIS SHEET IS IN THE PLANS FOR DOCUMENTATION AND TO ASSIST CONSTRUCTION PERSONNEL WITH DRAINAGE CONCERNS.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01, 441830-1-52-01, 441831-1-52-01

DRAINAGE MAP

SHEET NO.

CALLI 12/16/2020 5:08:33 PM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\44716515201\drainage\DRMPRD07.dgn

EXISTING DRAINAGE STRUCTURES

J-1122
MANHOLE
RIM ELEV. = 10.25'

Y-160
CATCH BASIN
RIM ELEV. = 2.17'

J-1116
CATCH BASIN
RIM ELEV. = 30.50'
18" PVC (NE)
INV. ELEV. = 25.83'

J-1115
CATCH BASIN
RIM ELEV. = 27.30'
18" PVC (SE)
INV. ELEV. = 23.43'

J-1112
CATCH BASIN
RIM ELEV. = 28.63'
18" PVC (NW)
INV. ELEV. = 23.03'
18" PVC (S)
INV. ELEV. = 23.05'

Y-115A
MANHOLE
RIM ELEV. = 23.14'

Y-116A
MANHOLE
INV. ELEV. = 20.16'

Y-117A
MANHOLE
INV. ELEV. = 20.00'

Y-118A
MANHOLE
INV. ELEV. = 20.05'

Y-107
CATCH BASIN
RIM ELEV. = 24.80'
18" PVC (N)
INV. ELEV. = 20.20'
18" PVC (S)
INV. ELEV. = 20.10'

F-3039
MANHOLE
RIM ELEV. = 4.04'
18" PVC (SE)
INV. ELEV. = 0.94'
18" CMP (N)
INV. ELEV. = (–)0.26'
18" PVC (NW)
INV. ELEV. = (–)0.81'

F-3037
CATCH BASIN
RIM ELEV. = 4.98'
18" CMP (N)
INV. ELEV. = 1.78'
18" CMP (S)
INV. ELEV. = 1.88'
24" PVC (W)
INV. ELEV. = (–)0.22'

F-3026
CATCH BASIN
RIM ELEV. = 4.75'
24 CMP (N)
INV. ELEV. = 0.55'
24" PVC (E)
INV. ELEV. = (–)0.15'
24" CMP (S)
INV. ELEV. = 0.55'

R-1588
CATCH BASIN
RIM ELEV. = 6.25'
18" CMP (W)
INV. ELEV. = 2.00'

R-1565
CATCH BASIN
RIM ELEV. = 19.75'
24" RCP (S)
INV. ELEV. = 15.05'
24" RCP (W)
INV. ELEV. = 15.25'

EX-16
CATCH BASIN
RIM ELEV. = 30.48'
18" RCP (E)
INV. ELEV. = 25.43'
18" RCP (S)
INV. ELEV. = 25.43'

EX-25
MANHOLE
RIM ELEV. = 4.91'
20" RCP (E)
INV. ELEV. = (–)0.39'
24" RCP (S)
INV. ELEV = (–)0.19'

EX-26
MANHOLE
RIM ELEV. = 6.71'
24" CMP (W)
INV. ELEV. = 0.66'

EX-30
MANHOLE
RIM ELEV. = 6.30'
24" RCP (N)
INV. ELEV. = 0.36'
30" RCP (S)
INV. ELEV = 0.55'

Y-221
MANHOLE
RIM ELEV. = 6.64'
48" RCP (N)
INV. ELEV. = (–)2.93'
48" RCP (S)
INV. ELEV = (–)3.08'

EX-29
CATCH BASIN
RIM ELEV. = 7.78'

EX-27
MANHOLE
RIM ELEV. = 14.82'
24" RCP (E)
INV. ELEV. = 2.77'
(S)
INV. ELEV. = 2.47'

EX-28
CATCH BASIN
RIM ELEV. = 17.13'
24" RCP (S)
INV. ELEV. = 11.78'
(E)
INV. ELEV. = 6.83'

R-1581
CATCH BASIN
RIM ELEV. = 6.33'
24" RCP (W)
INV. ELEV. = 1.33'

P-48
CATCH BASIN
RIM ELEV. = 7.50'
18" CMP (W)
INV. ELEV. = 1.10'

P-51
CATCH BASIN
RIM ELEV. = 9.30'
18" RCP (W)
INV. ELEV. = 3.10'
18" CMP (E)
INV. ELEV. = 3.14'

P-51A
MANHOLE
RIM ELEV. = 5.80'

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01, 441830-1-52-01, 441831-1-52-01

DRAINAGE MAP

SHEET NO.

APPENDIX B
Federal Emergency Management Agency Firmette

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' National Geodetic Vertical Datum of 1929 (NGVD 29). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations tables in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations tables should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Florida State Plane east zone (FIPSZONE 0901). The **horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the National Geodetic Vertical Datum of 1929. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was provided in digital format by the Miami-Dade County Information Technology Department. These data were compiled at a scale of 1:3,600 from digital orthophotography dated 2001. Additional base map information was provided by the Cities of Aventura, Coral Gables, and Homestead, the Town of Cutler Bay, and Miami-Dade County.

This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to confirm to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at http://msc.fema.gov.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov.

LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

	Floodplain boundary
	Floodway boundary
	Zone D boundary
	CBRS and OPA boundary
	Boundary dividing Special Flood Hazard Area zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
513	Base Flood Elevation line and value; elevation in feet*
(EL 987)	Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the National Geodetic Vertical Datum of 1929

A — A	Cross section Line
23 — 23	Transect line
87°07'45", 32°22'30"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
2776000mN	1000-meter Universal Transverse Mercator grid values, zone 17
600000 FT	5000-foot grid ticks: Florida State Plane coordinate system, East zone (FIPSZONE 0901), Transverse Mercator projection
DX5510 ×	Bench mark (see explanation in Notes to Users section of this FIRM panel)
●M1.5	River Mile

MAP REPOSITORY
Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE
FLOOD INSURANCE RATE MAP
January 20, 1993

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
March 2, 1994 - May 16, 1994 - July 17, 1995 - for description of revision, see Notice to Users page in the Flood Insurance Study report.
September 11, 2009 - to reflect revised shoreline, to incorporate previously issued Letters of Map Revision, to reflect updated topographic information, to add and change Base Flood Elevations, to update corporate limits, to change zone designations, to add roads and road names, and to add and change Special Flood Hazard Areas

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'

250 0 500 1000 FEET
150 0 150 300 METERS

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0114L

FIRM
FLOOD INSURANCE RATE MAP

MIAMI-DADE COUNTY, FLORIDA
AND INCORPORATED AREAS

PANEL 114 OF 1031

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
HIALEAH GARDENS, CITY OF	120644	0114	L
HIALEAH, CITY OF	120643	0114	L
MIAMI LAKES, TOWN OF	120686	0114	L

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
12086C0114L

MAP REVISED
SEPTEMBER 11, 2009

Federal Emergency Management Agency

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' National Geodetic Vertical Datum of 1929 (NGVD 29). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations tables in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations tables should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Florida State Plane east zone (FIPSZONE 0901). The **horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the National Geodetic Vertical Datum of 1929. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was provided in digital format by the Miami-Dade County Information Technology Department. These data were compiled at a scale of 1:3,600 from digital orthophotography dated 2001. Additional base map information was provided by the Cities of Aventura, Coral Gables, and Homestead, the Town of Cutler Bay, and Miami-Dade County.

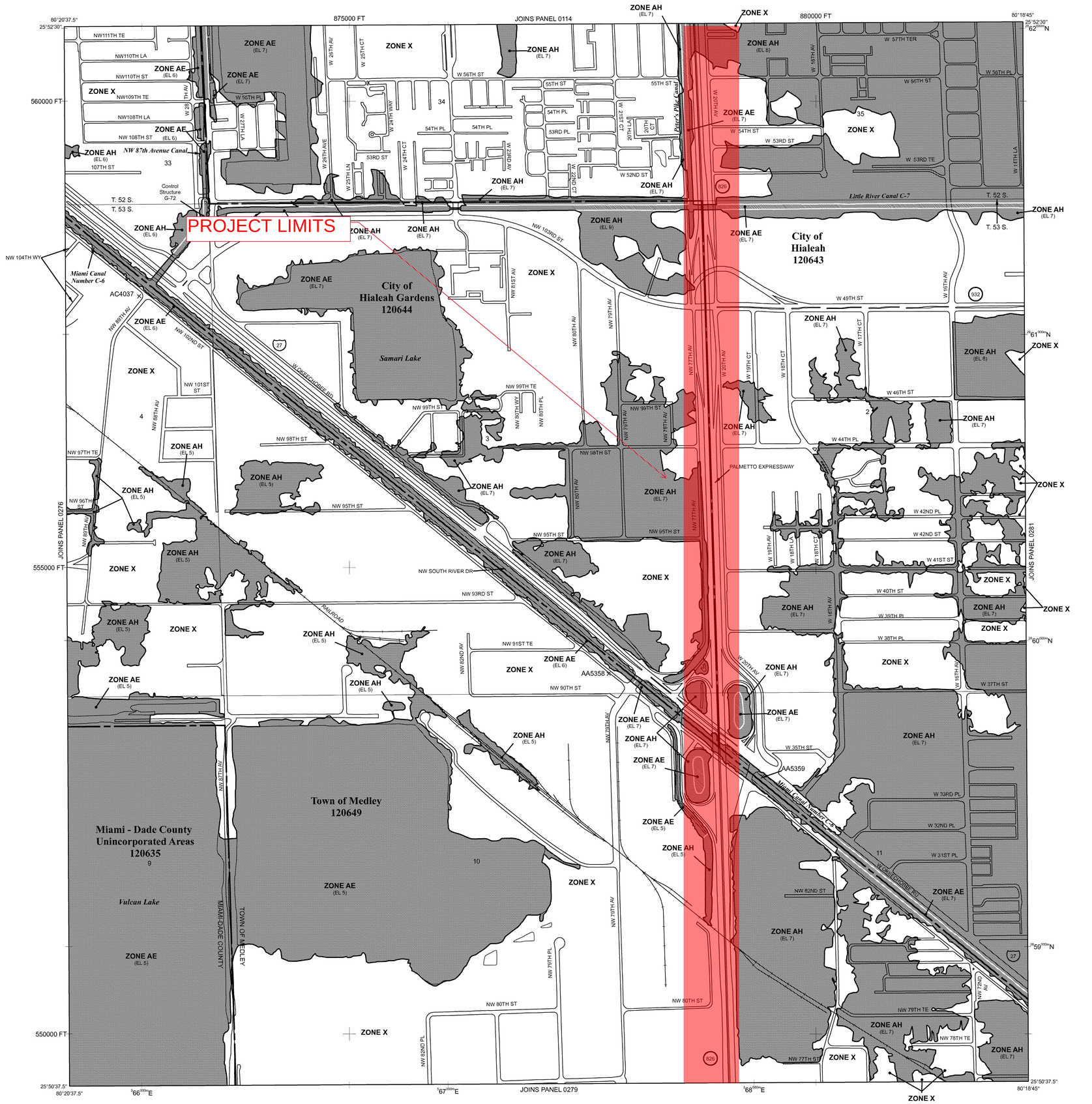
This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to confirm to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at http://msc.fema.gov.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov.



LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

	Floodplain boundary
	Floodway boundary
	Zone D boundary
	CBRS and OPA boundary
	Boundary dividing Special Flood Hazard Area zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
513	Base Flood Elevation line and value; elevation in feet*
(EL 987)	Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the National Geodetic Vertical Datum of 1929

A-A	Cross section Line
23-23	Transect line
87°07'45", 32°22'30"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
2776000mN	1000-meter Universal Transverse Mercator grid values, zone 17
600000 FT	5000-foot grid ticks: Florida State Plane coordinate system, East zone (FIPSZONE 0901), Transverse Mercator projection
DX5510 X	Bench mark (see explanation in Notes to Users section of this FIRM panel)
M1.5	River Mile

MAP REPOSITORY
Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE
FLOOD INSURANCE RATE MAP
January 20, 1993

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
March 2, 1994 - May 16, 1994 - July 17, 1995 - for description of revision, see Notice to Users page in the Flood Insurance Study report.
September 11, 2009 - to reflect revised shoreline, to incorporate previously issued Letters of Map Revision, to reflect updated topographic information, to update corporate limits, to add and change Base Flood Elevations, to change zone designations, to add roads and road names, and to add and change Special Flood Hazard Areas

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 500'

250 0 500 1000 FEET

150 0 150 300 METERS

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0277L

FIRM

FLOOD INSURANCE RATE MAP

MIAMI-DADE COUNTY, FLORIDA AND INCORPORATED AREAS

PANEL 277 OF 1031

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
HIALEAH GARDENS, CITY OF	120644	0277	L
HIALEAH, CITY OF	120643	0277	L
MEDLEY, TOWN OF	120649	0277	L
MIAMI - DADE COUNTY	120635	0277	L

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
12086C0277L

MAP REVISED
SEPTEMBER 11, 2009

Federal Emergency Management Agency

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' National Geodetic Vertical Datum of 1929 (NGVD 29). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations tables in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations tables should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Florida State Plane east zone (FIPSZONE 0901). The **horizontal datum** was NAD 83, GRS80 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the National Geodetic Vertical Datum of 1929. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was provided in digital format by the Miami-Dade County Information Technology Department. These data were compiled at a scale of 1:3,600 from digital orthophotography dated 2001. Additional base map information was provided by the Cities of Aventura, Coral Gables, and Homestead, the Town of Cutler Bay, and Miami-Dade County.

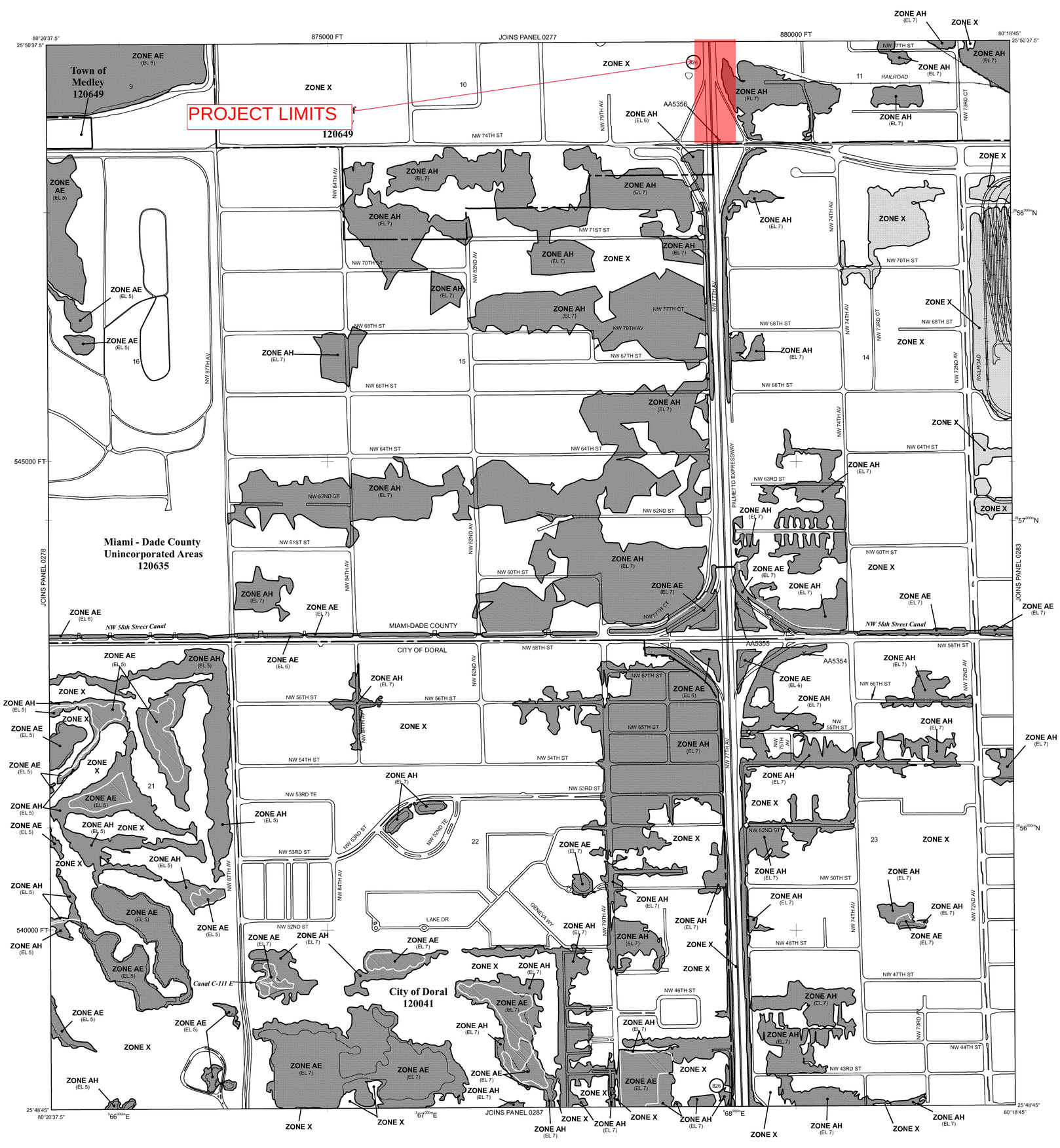
This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to confirm to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a Flood Insurance Study report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at http://msc.fema.gov.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov.



LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

	Floodplain boundary
	Floodway boundary
	Zone D boundary
	CBRS and OPA boundary
	Boundary dividing Special Flood Hazard Area zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
513	Base Flood Elevation line and value; elevation in feet*
(EL 987)	Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the National Geodetic Vertical Datum of 1929

A23 — A23	Cross section Line
23 — 23	Transect line
87°07'45", 32°22'30"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
2776000mN	1000-meter Universal Transverse Mercator grid values, zone 17
600000 FT	5000-foot grid ticks: Florida State Plane coordinate system, East zone (FIPSZONE 0901), Transverse Mercator projection
DX5510 X	Bench mark (see explanation in Notes to Users section of this FIRM panel)
M1.5	River Mile

MAP REPOSITORY
Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
January 20, 1993

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
March 2, 1994 - May 16, 1994 - July 17, 1995 - for description of revision, see Notice to Users page in the Flood Insurance Study report.
September 11, 2009 - to reflect revised shoreline, to incorporate previously issued Letters of Map Revision, to reflect updated topographic information, to update corporate limits, to add and change Base Flood Elevations, to change zone designations, to add and change Special Flood Hazard Areas, and to add roads and road names

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP

APPENDIX C
Natural Resource Conservative Service, Web Soil Map & Survey

United States Department of Agriculture

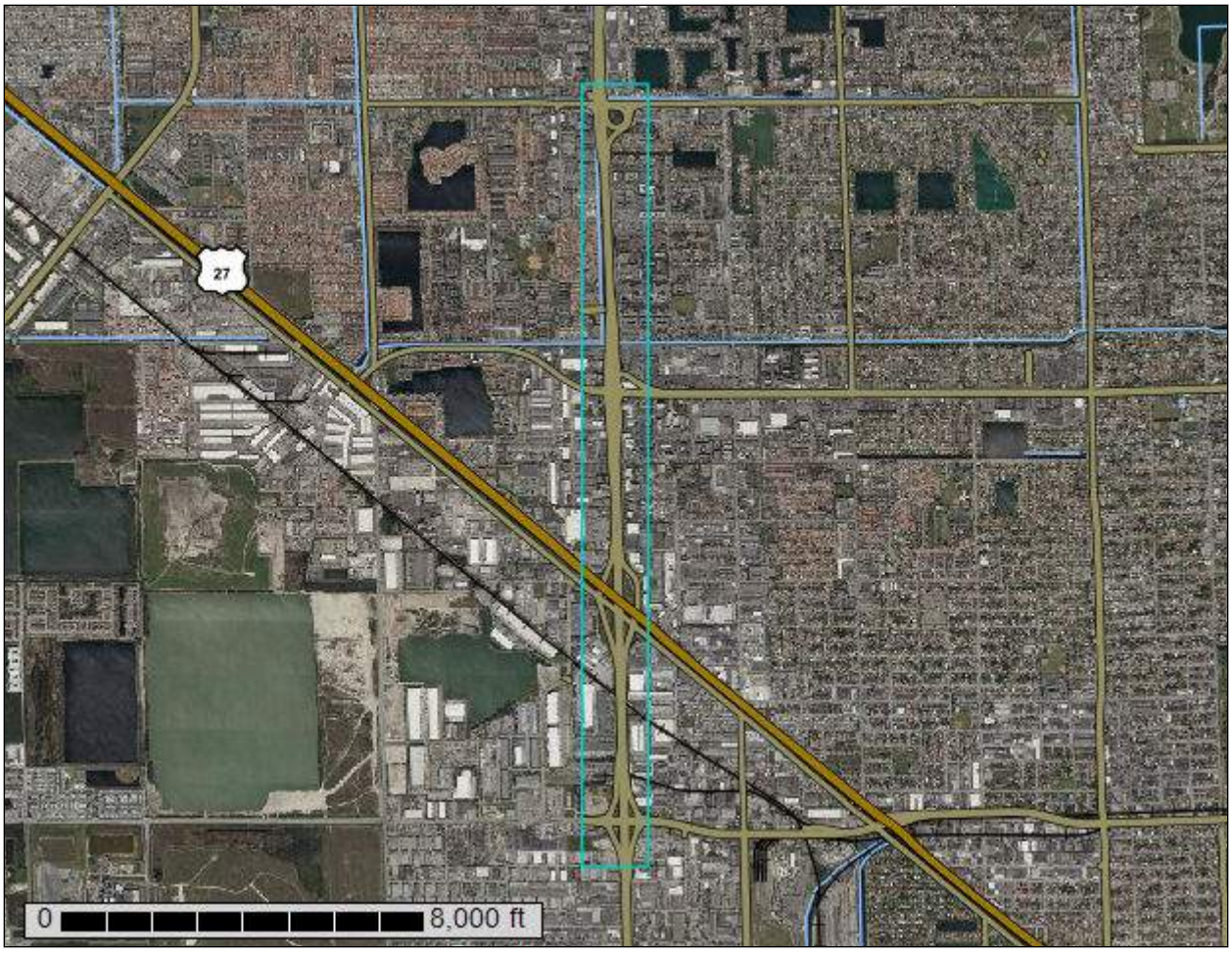
NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Miami-Dade County Area, Florida

NRCS Custom Soil Resource Report Miami Dade, Florida



October 27, 2020

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Preface.....2
How Soil Surveys Are Made.....5
Soil Map.....8
Soil Map.....9
Legend.....10
Map Unit Legend.....11
Map Unit Descriptions.....11
Miami-Dade County Area, Florida.....13
9—Udorthents-Water complex.....13
10—Udorthents, limestone substratum-Urban land complex.....14
15—Urban land, 0 to 2 percent slopes.....16
99—Water.....18
References.....20

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

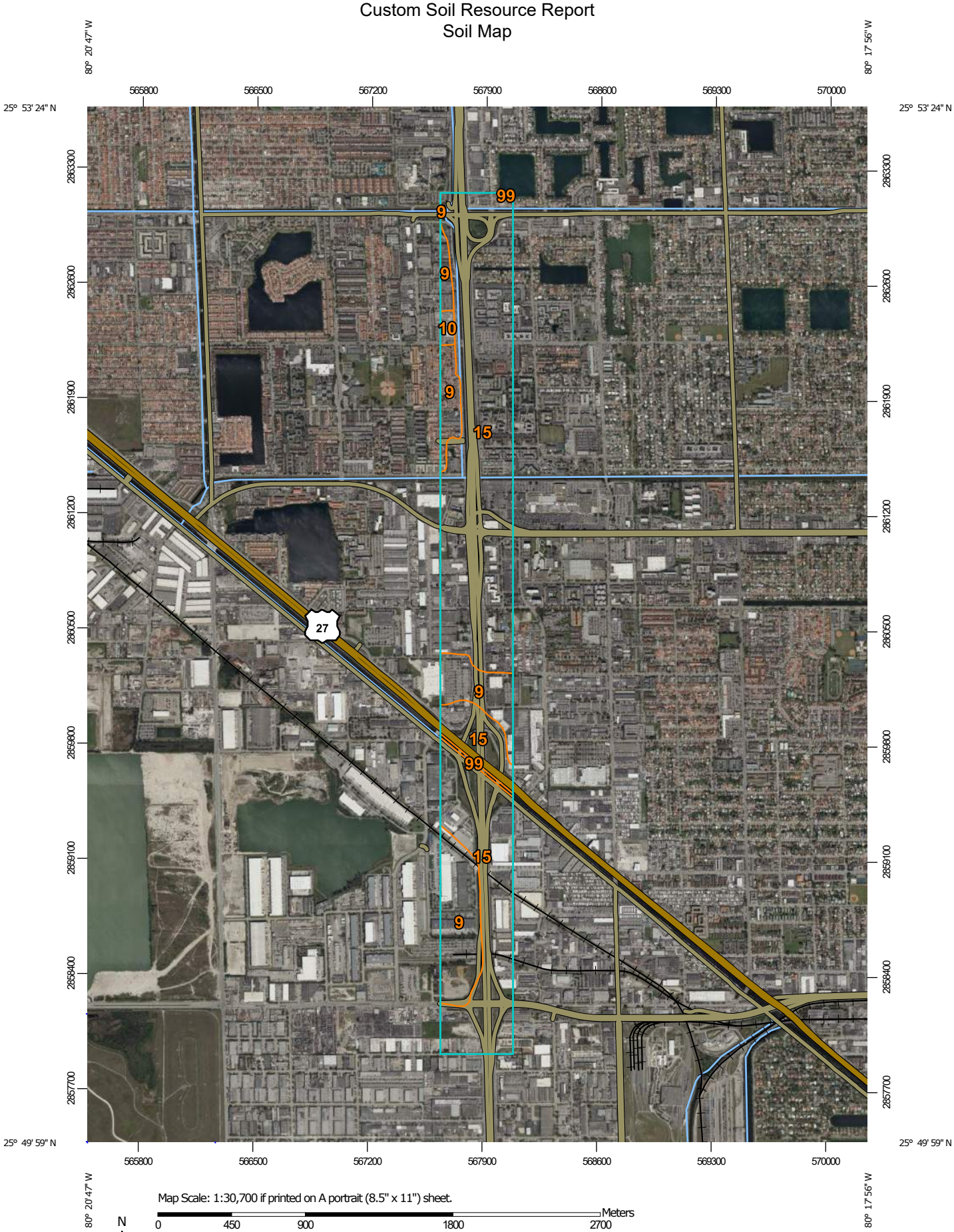
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:30,700 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 450 900 1800 2700

Feet
0 1000 2000 4000 6000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons

Soil Map Unit Lines

Soil Map Unit Points

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot

Other

Special Line Features

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Miami-Dade County Area, Florida
Survey Area Data: Version 12, Jun 9, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 6, 2019—Mar 24, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
9	Udorthents-Water complex	117.0	20.3%
10	Udorthents, limestone substratum-Urban land complex	4.5	0.8%
15	Urban land, 0 to 2 percent slopes	451.1	78.3%
99	Water	3.2	0.6%
Totals for Area of Interest		**575.8**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate

pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Miami-Dade County Area, Florida

9—Udorthents-Water complex

Map Unit Setting

National map unit symbol: p66b
Mean annual precipitation: 62 to 70 inches
Mean annual air temperature: 73 to 81 degrees F
Frost-free period: 358 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Udorthents and similar soils: 75 percent
Water: 20 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udorthents

Setting

Landform: Marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Altered marine deposits

Typical profile

C - 0 to 80 inches: gravelly loam

Properties and qualities

Slope: 15 to 60 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (1.98 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water capacity: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: A
Forage suitability group: Forage suitability group not assigned (G156AC999FL)
Other vegetative classification: Forage suitability group not assigned (G156AC999FL)
Hydric soil rating: No

Description of Water

Interpretive groups

Land capability classification (irrigated): None specified

Forage suitability group: Forage suitability group not assigned (G156AC999FL)
Other vegetative classification: Forage suitability group not assigned (G156AC999FL)
Hydric soil rating: Unranked

Minor Components

Urban land
Percent of map unit: 5 percent
Landform: Marine terraces
Landform position (three-dimensional): Interfluve, talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned (G156AC999FL)
Hydric soil rating: Unranked

10—Udorthents, limestone substratum-Urban land complex

Map Unit Setting
National map unit symbol: p66c
Elevation: 10 feet
Mean annual precipitation: 62 to 70 inches
Mean annual air temperature: 73 to 81 degrees F
Frost-free period: 358 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition
Udorthents and similar soils: 55 percent
Urban land: 35 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udorthents

Setting
Landform: Marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Altered marine deposits

Typical profile
C - 0 to 55 inches: extremely gravelly loam
2R - 55 to 59 inches: unweathered bedrock

Properties and qualities
Slope: 0 to 2 percent
Depth to restrictive feature: 40 to 72 inches to lithic bedrock
Drainage class: Somewhat poorly drained

Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (1.98 to 19.98 in/hr)
Depth to water table: About 24 to 48 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water capacity: Very low (about 2.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: A
Forage suitability group: Forage suitability group not assigned (G156AC999FL)
Other vegetative classification: Forage suitability group not assigned (G156AC999FL)
Hydric soil rating: No

Description of Urban Land

Setting

Landform: Marine terraces
Landform position (three-dimensional): Interfluve, talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: No parent material

Interpretive groups

Land capability classification (irrigated): None specified
Forage suitability group: Forage suitability group not assigned (G156AC999FL)
Other vegetative classification: Forage suitability group not assigned (G156AC999FL)
Hydric soil rating: Unranked

Minor Components

Cardsound

Percent of map unit: 5 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned (G156AC999FL)
Hydric soil rating: No

Krome

Percent of map unit: 5 percent
Landform: Rises on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned (G156AC999FL)
Hydric soil rating: No

15—Urban land, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2x9fc
Elevation: 0 to 200 feet
Mean annual precipitation: 40 to 68 inches
Mean annual air temperature: 68 to 79 degrees F
Frost-free period: 345 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting

Landform: Knolls on marine terraces, rises on marine terraces, ridges on marine terraces, flatwoods on marine terraces, hills on marine terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Side slope, interfluve, riser, rise, talf
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: No parent material

Interpretive groups

Land capability classification (irrigated): None specified
Forage suitability group: Forage suitability group not assigned (G155XB999FL)
Other vegetative classification: Forage suitability group not assigned (G155XB999FL)
Hydric soil rating: Unranked

Minor Components

Matlacha

Percent of map unit: 3 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear, convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned (G155XB999FL)
Hydric soil rating: No

St. augustine

Percent of map unit: 3 percent
Landform: Marine terraces
Landform position (three-dimensional): Tread, rise

Down-slope shape: Linear
Across-slope shape: Convex
Other vegetative classification: Forage suitability group not assigned (G155XB999FL)
Hydric soil rating: No

Eaugallie

Percent of map unit: 1 percent
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Tread, talf
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)
Hydric soil rating: No

Immokalee

Percent of map unit: 1 percent
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Riser, talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)
Hydric soil rating: No

Pomello

Percent of map unit: 1 percent
Landform: Knolls on marine terraces, ridges on marine terraces
Landform position (two-dimensional): Backslope, summit
Landform position (three-dimensional): Interfluve, side slope, riser
Down-slope shape: Convex, linear
Across-slope shape: Linear
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G155XB131FL), Sand Pine Scrub (R155XY001FL)
Hydric soil rating: No

Boca

Percent of map unit: 1 percent
Landform: Drainageways on marine terraces, flats on marine terraces
Landform position (three-dimensional): Tread, dip, talf
Down-slope shape: Linear, convex
Across-slope shape: Linear, concave
Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic lowlands (G155XB241FL), South Florida Flatwoods (R155XY003FL)
Hydric soil rating: Yes

Myakka

Percent of map unit: 1 percent
Landform: Drainageways on flatwoods on marine terraces
Landform position (three-dimensional): Tread, talf, dip
Down-slope shape: Linear
Across-slope shape: Linear, concave
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)
Hydric soil rating: No

Paola

Percent of map unit: 1 percent
Landform: Knolls on marine terraces, ridges on marine terraces
Landform position (two-dimensional): Backslope, summit
Landform position (three-dimensional): Interfluve, side slope, riser
Down-slope shape: Convex, linear
Across-slope shape: Linear
Other vegetative classification: Sandy soils on ridges and dunes of xeric uplands (G155XB111FL), Sand Pine Scrub (R155XY001FL)
Hydric soil rating: No

Hallandale

Percent of map unit: 1 percent
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)
Hydric soil rating: Yes

Adamsville

Percent of map unit: 1 percent
Landform: Knolls on marine terraces, rises on marine terraces
Landform position (three-dimensional): Tread, rise
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G155XB131FL), Upland Hardwood Hammock (R155XY008FL)
Hydric soil rating: No

Apopka

Percent of map unit: 1 percent
Landform: Ridges on marine terraces, hills on marine terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Side slope, interfluve, riser
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on ridges and dunes of xeric uplands (G155XB111FL), Longleaf Pine-Turkey Oak Hills (R155XY002FL)
Hydric soil rating: No

99—Water

Map Unit Composition

Water: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Water

Interpretive groups

Land capability classification (irrigated): None specified
Forage suitability group: Forage suitability group not assigned (G156AC999FL)
Other vegetative classification: Forage suitability group not assigned (G156AC999FL)
Hydric soil rating: Unranked

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

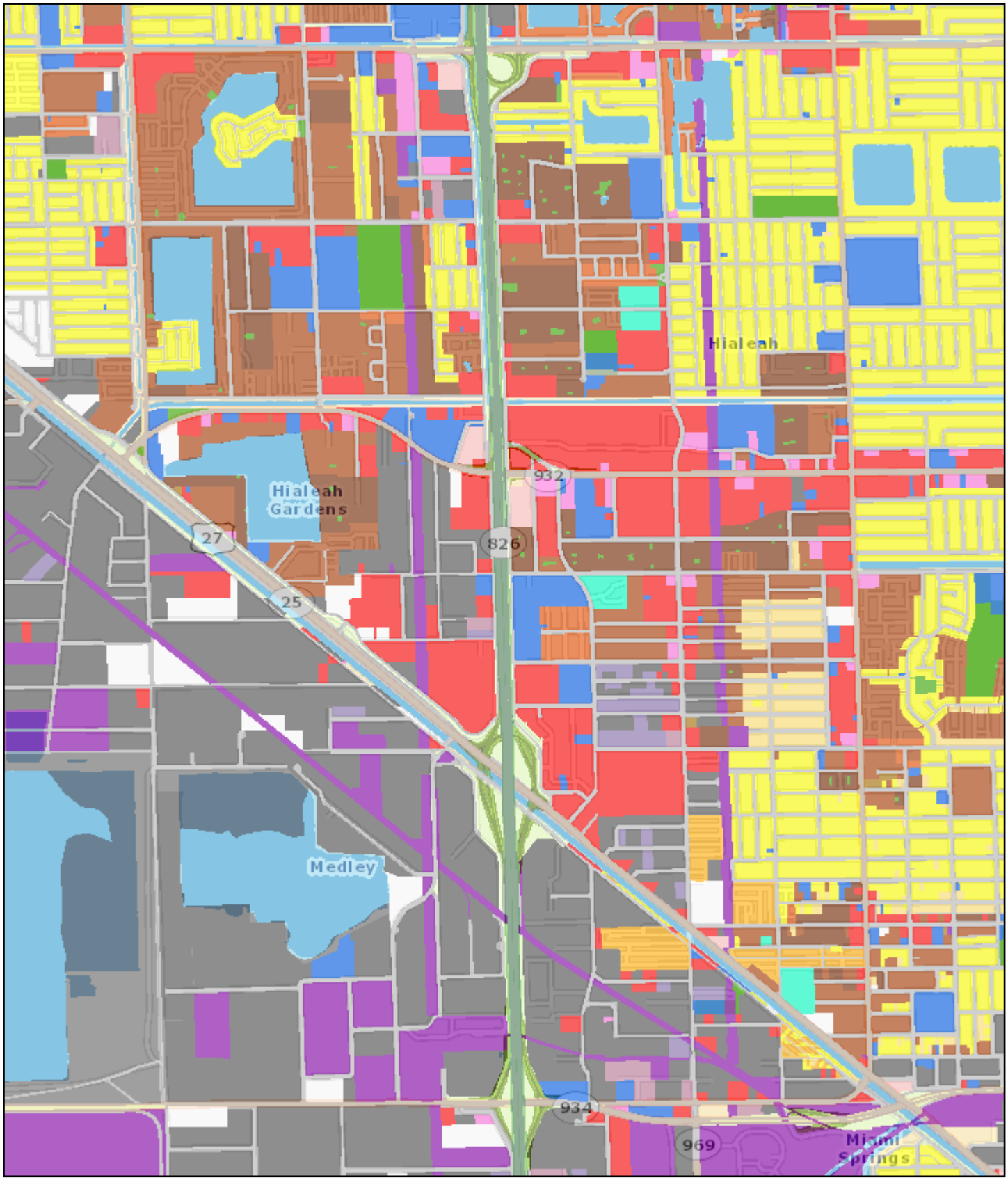
United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

APPENDIX D
Miami Dade County Land Use Map

DQG&HDDP DGH&RQW\



PWREEHU

[LVWLQJDQG&H

DO O RWKHU YDO X HV

6LQJOH)DPLO\

7ZR)DPLOXSOH[HV

%ELOH+RPH3DUNV

RQGRXHV

RPPHUFLDO

,QGXVWULDO

7UDQVLHQW5HVLGHQWLDO RWHOV BWHOV

&RPPXQLW\6HUYLFHV

P

NP

DDPDGH&RQW\ ,7;6

DDPDGH&RQW\

APPENDIX E
Existing and Proposed Typical Sections

STATE OF FLORIDA

DEPARTMENT OF TRANSPORTATION

THIS TYPICAL SECTION PACKAGE INCLUDES
FINANCIAL PROJECT ID(S):
441830-1-52-01 AND 441831-1-52-01

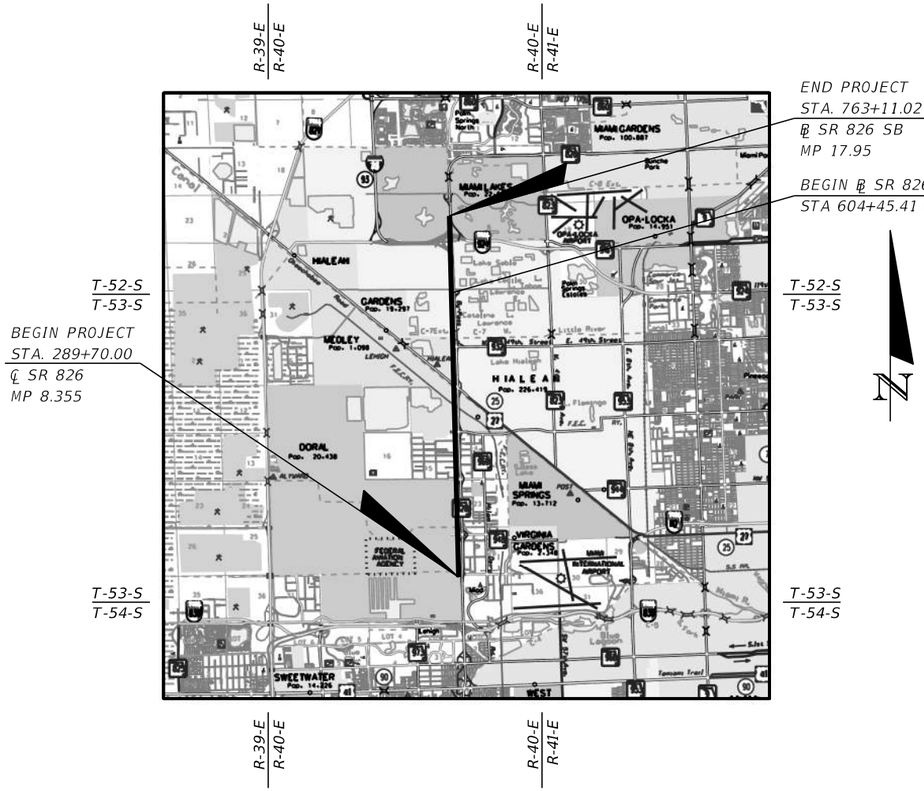
TYPICAL SECTION PACKAGE

FINANCIAL PROJECT ID 447165-1-52-01

MIAMI-DADE COUNTY (87260)

STATE ROAD NO. 826

FROM SOUTH OF NW 36TH ST. TO NW 154TH ST.



BRIDGE NO.	CROSSING	STATION		MILEPOST		BRIDGE NO.	CROSSING	STATION		MILEPOST	
		BEGIN	END	BEGIN	END			BEGIN	END	BEGIN	END
870964	SR 826 OVER NW 74TH STREET	435+50.81	437+29.87	11.346	11.379	870856	NW 103RD ST. SB FYLOVER ON-RAMP	100+00.00	110+84.70	13.213	13.224
870257	SR 826 OVER METRORAIL	445+72.21	446+98.06	11.541	11.574	870570	W 20TH AVE E OVER LITTLE RIVER CANAL	310+26.79	311+36.42	0.197	0.214
870258	SR 826 OVER FEC RR	462+17.94	463+67.36	11.835	11.877	870569	W 20TH AVE W OVER LITTLE RIVER CANAL	411+81.83	412+71.84	0.222	0.239
870975	SR 826 OVER S. RIVER DR./MIAMI CANAL /OKEECHOBEE ROAD	481+20.39	485+91.26	12.197	12.288	870758	SR 826 OVER LITTLE RIVER CANAL	540+84.25	541+69.15	13.335	13.359
						870957	SR 826 OVER W 60TH STREET	567+82.06	568+87.97	13.846	13.872
870995	SR 826 NB OVER NW 103RD STREET	529+96.72	532+28.78	13.129	13.179	870766	SR 826 OVER NW 122ND STREET	593+16.24	594+71.22	14.324	14.362
870757	SR 826 SB OVER NW 103RD STREET	529+96.72	532+28.78	13.129	13.179	870467	SR 826 OVER NW 138TH STREET	757+71.93	758+67.78	15.332	15.363

APPROVED BY:

JAVIER MANSO
LICENSE
No 69183
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY:

ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED. THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

HDR ENGINEERING, INC.
15450 NEW BARN ROAD, SUITE 304
MIAMI LAKES, FLORIDA 33014
CERTIFICATE OF AUTHORIZATION 4213
JAVIER MANSO, P.E. NO. 69183

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

TYPICAL SECTION PACKAGE

SHEET NO	SHEET DESCRIPTION
1	COVER SHEET
2-37	TYPICAL SECTION NO. 1 - NO. 36

TYPICAL SECTION CONCURRENCE

FDOT DISTRICT DESIGN ENGINEER

FDOT DISTRICT STRUCTURES DESIGN ENGINEER

FHWA TRANSPORTATION ENGINEER

DESIGN SPEED AND POSTED SPEED CONCURRENCE:

FDOT DISTRICT TRAFFIC OPERATIONS ENGINEER

FDOT DISTRICT DESIGN ENGINEER

CONTEXT CLASSIFICATION CONCURRENCE:

FDOT DISTRICT PLANNING AND ENVIRONMENTAL ADMINISTRATOR

SHEET NO.
1

9/28/2020 11:10:36 AM

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

(X) NATIONAL HIGHWAY SYSTEM
(X) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

CRITERIA

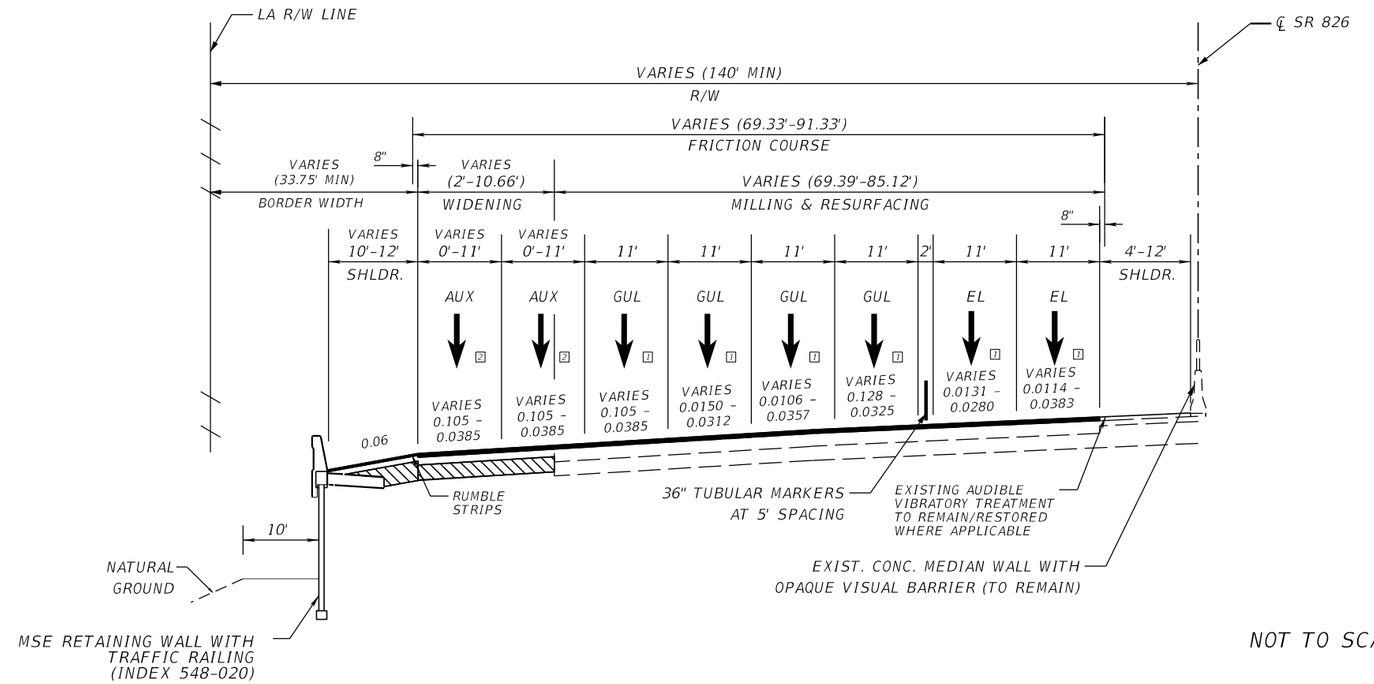
(X) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN EXCEPTION
1. LANE & SHOULDER WIDTH

DESIGN VARIATION
1. SHOULDER WIDTH
2. CROSS SLOPE
3. EXPRESS LANE BUFFER SEPARATION WIDTH
4. BORDER WIDTH
5. EXPRESS LANES TUBULAR MARKER COLOR

TYPICAL SECTION No. 1



NOT TO SCALE

SR 826 (SOUTHBOUND ONLY)
STA. 434+78.16 TO STA. 467+49.78

LEGEND:
EL = EXPRESS LANES
GUL = GENERAL USE LANES
AUX = AUXILARY LANES

NOTES;
1. MATCH EXISTING CROSS SLOPES (VALUE RANGE IS SHOWN)
2. MATCH ADJACENT LANE CROSS SLOPE. VALUE RANGE IS SHOWN

TRAFFIC DATA

CURRENT YEAR = 2020 AADT = 52,280 - 127,060
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = 6.6%
DESIGN SPEED = 60 MPH
POSTED SPEED = 55 MPH

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-01	2

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

(X) NATIONAL HIGHWAY SYSTEM
(X) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

CRITERIA

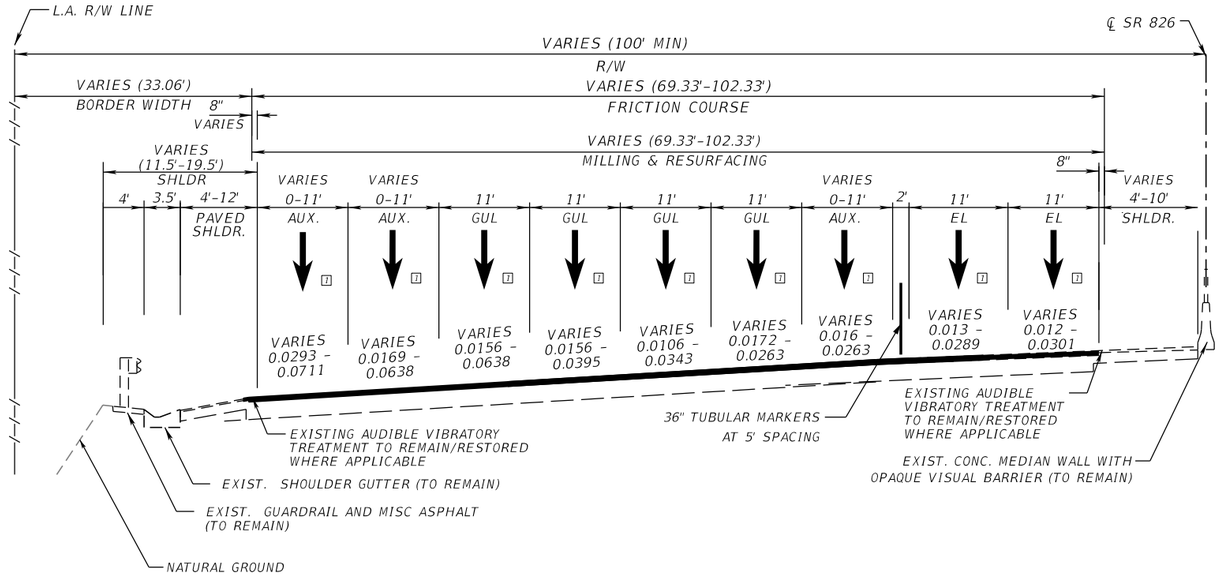
(X) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN EXCEPTION:
1. LANE WIDTH

DESIGN VARIATION:
1. EXPRESS LANE BUFFER SEPARATION WIDTH
2. EXPRESS LANES TUBULAR MARKER COLOR

TYPICAL SECTION No. 2



SR 826 (SOUTHBOUND ONLY)

STA. 467+49.78 TO STA. 497+17.00

NOT TO SCALE

LEGEND:
EL = EXPRESS LANES
GUL = GENERAL USE LANES
AUX = AUXILARY LANES

NOTES;
1. MATCH EXISTING CROSS SLOPES (VALUE RANGE IS SHOWN)

TRAFFIC DATA

CURRENT YEAR = 2020 AADT = 52,280 - 127,060
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = 6.6%
DESIGN SPEED = 60 MPH
POSTED SPEED = 55 MPH

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-01	3

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( ) C1 : NATURAL
( ) C2 : RURAL
( ) C2T : RURAL TOWN
( ) C3R : SUBURBAN RES.
( ) C3C : SUBURBAN COMM.
( ) C4 : URBAN GENERAL
( ) C5 : URBAN CENTER
( ) C6 : URBAN CORE
(X) N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

( ) INTERSTATE
(X) FREEWAY/EXPWY.
( ) PRINCIPAL ARTERIAL
( ) MINOR ARTERIAL
( ) MAJOR COLLECTOR
( ) MINOR COLLECTOR
( ) LOCAL

HIGHWAY SYSTEM

(X) NATIONAL HIGHWAY SYSTEM
(X) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

CRITERIA

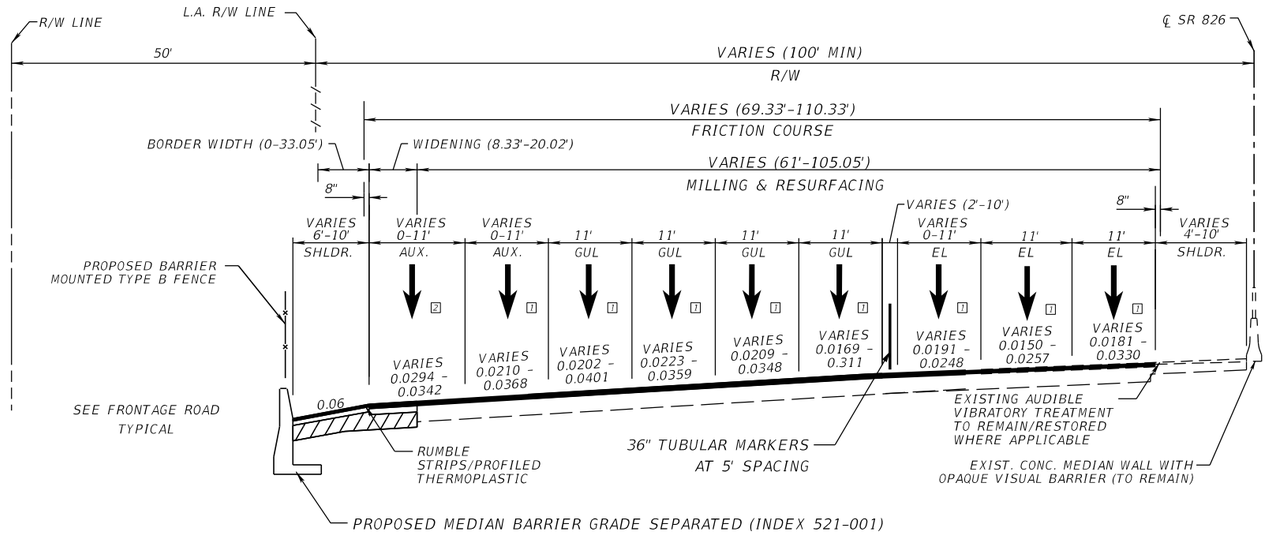
(X) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN EXCEPTION:
1. LANE WIDTH

DESIGN VARIATION:
1. EXPRESS LANE BUFFER SEPARATION WIDTH
2. MINIMUM OFFSET TO HAZARD ON TOP OF BARRIER WALL
3. EXPRESS LANES TUBULAR MARKER COLOR

TYPICAL SECTION No. 3



SR 826 (SOUTHBOUND ONLY)
STA 497+17.00 TO STA 518+41.90

NOT TO SCALE

LEGEND:
EL = EXPRESS LANES
GUL = GENERAL USE LANES
AUX = AUXILARY LANES

NOTES;
1. MATCH EXISTING CROSS SLOPES (VALUE RANGE IS SHOWN)
2. MATCH ADJACENT LANE CROSS SLOPE. VALUE RANGE IS SHOWN

TRAFFIC DATA

CURRENT YEAR = 2020 AADT = 52,280 - 127,060
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = 6.6%
DESIGN SPEED = 60 MPH
POSTED SPEED = 55 MPH

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-01	4

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

(X) NATIONAL HIGHWAY SYSTEM
(X) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

CRITERIA

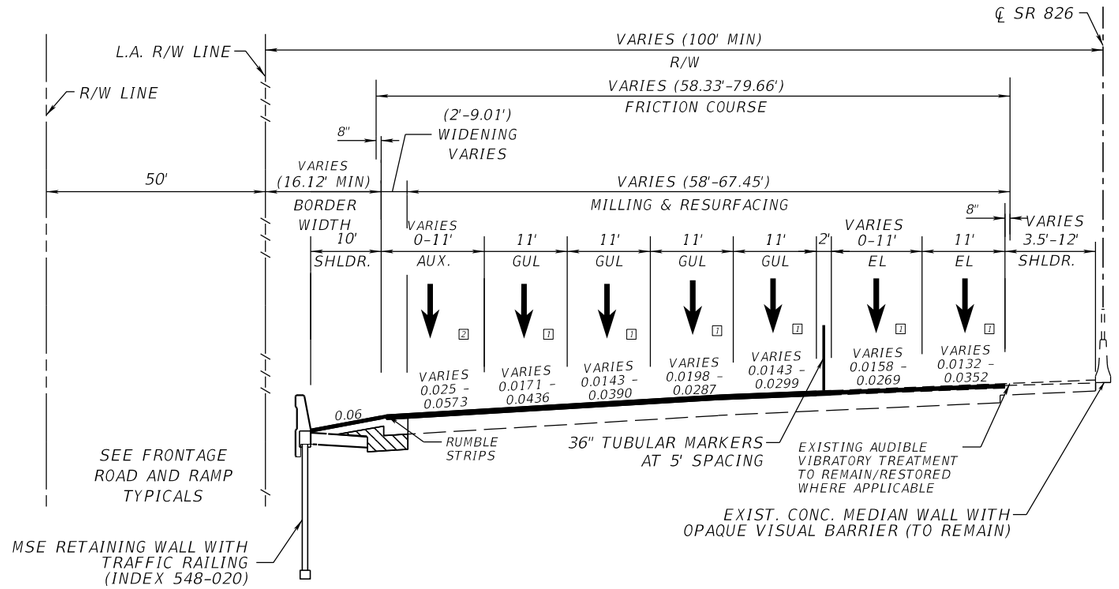
(X) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN EXCEPTION
1. LANE & SHOULDER WIDTH

DESIGN VARIATION
1. CROSS SLOPE
2. EXPRESS LANE BUFFER SEPARATION WIDTH
3. BORDER WIDTH
4. EXPRESS LANES TUBULAR MARKER COLOR

TYPICAL SECTION No. 4



SR 826 (SOUTHBOUND ONLY)
STA. 518+41.90 TO STA. 541+65.30

NOT TO SCALE

LEGEND:
EL = EXPRESS LANES
GUL = GENERAL USE LANES
AUX = AUXILARY LANES

NOTES;
1. MATCH EXISTING CROSS SLOPES (VALUE RANGE IS SHOWN)
2. MATCH ADJACENT LANE CROSS SLOPE. VALUE RANGE IS SHOWN

TRAFFIC DATA

CURRENT YEAR = 2020 AADT = 52,280 - 127,060
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = 6.6%
DESIGN SPEED = 60 MPH
POSTED SPEED = 55 MPH

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-01	5

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( ) C1 : NATURAL
( ) C2 : RURAL
( ) C2T : RURAL TOWN
( ) C3R : SUBURBAN RES.
( ) C3C : SUBURBAN COMM.
( ) C4 : URBAN GENERAL
( ) C5 : URBAN CENTER
( ) C6 : URBAN CORE
(X) N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

( ) INTERSTATE
(X) FREEWAY/EXPWY.
( ) PRINCIPAL ARTERIAL
( ) MINOR ARTERIAL
( ) MAJOR COLLECTOR
( ) MINOR COLLECTOR
( ) LOCAL

HIGHWAY SYSTEM

(X) NATIONAL HIGHWAY SYSTEM
(X) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

CRITERIA

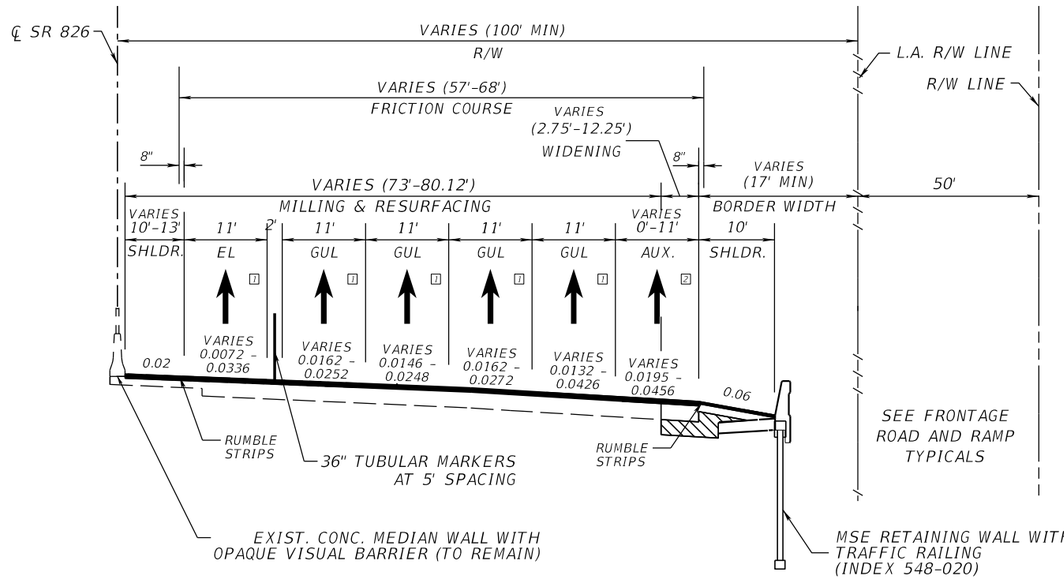
(X) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN EXCEPTION
1. LANE WIDTH

DESIGN VARIATION
1. SHOULDER WIDTH
2. CROSS SLOPE
3. EXPRESS LANE BUFFER SEPARATION WIDTH
4. BORDER WIDTH
5. EXPRESS LANES TUBULAR MARKER COLOR

TYPICAL SECTION No. 5



SR 826 (NORTHBOUND ONLY)
STA. 520+08.96 TO STA. 538+48.37

NOT TO SCALE

LEGEND:
EL = EXPRESS LANES
GUL = GENERAL USE LANES
AUX = AUXILARY LANES

NOTES;
1. MATCH EXISTING CROSS SLOPES (VALUE RANGE IS SHOWN)
2. MATCH ADJACENT LANE CROSS SLOPE. VALUE RANGE IS SHOWN

TRAFFIC DATA

CURRENT YEAR = 2020 AADT = 52,280 - 127,060
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = 6.6%
DESIGN SPEED = 60 MPH
POSTED SPEED = 55 MPH

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-01	6

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

(X) NATIONAL HIGHWAY SYSTEM
(X) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

CRITERIA

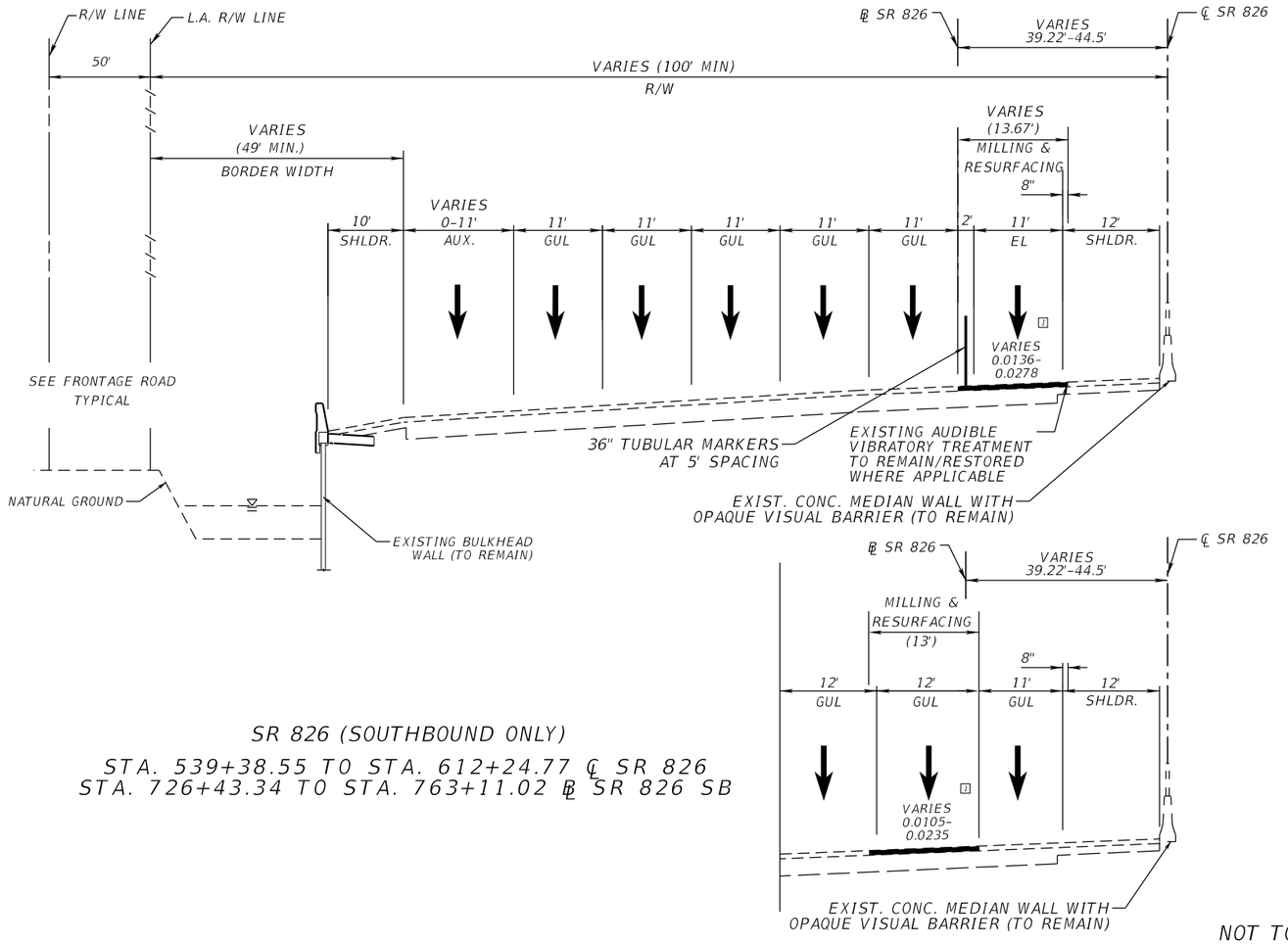
(X) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN EXCEPTION:
1. LANE WIDTH

DESIGN VARIATION:
1. EXPRESS LANE BUFFER SEPARATION WIDTH
2. EXPRESS LANES TUBULAR MARKER COLOR

TYPICAL SECTION No. 6



*STA 734+11.32 TO STA 763+11.02

SR 826 (SOUTHBOUND ONLY)

STA. 539+38.55 TO STA. 612+24.77 ℄ SR 826
STA. 726+43.34 TO STA. 763+11.02 ℄ SR 826 SB

NOT TO SCALE

LEGEND:
EL = EXPRESS LANES
GUL = GENERAL USE LANES
AUX = AUXILARY LANES

NOTES;
1. MATCH EXISTING CROSS SLOPES (VALUE RANGE IS SHOWN)

TRAFFIC DATA

CURRENT YEAR = 2020 AADT = 52,280 - 127,060
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = 6.6%
DESIGN SPEED = 60 MPH
POSTED SPEED = 55 MPH

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-01	7

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

(X)	NATIONAL HIGHWAY SYSTEM
(X)	STRATEGIC INTERMODAL SYSTEM
(X)	STATE HIGHWAY SYSTEM
( )	OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X)	1 - FREEWAY
( )	2 - RESTRICTIVE w/Service Roads
( )	3 - RESTRICTIVE w/660 ft. Connection Spacing
( )	4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( )	5 - RESTRICTIVE w/440 ft. Connection Spacing
( )	6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( )	7 - BOTH MEDIAN TYPES

CRITERIA

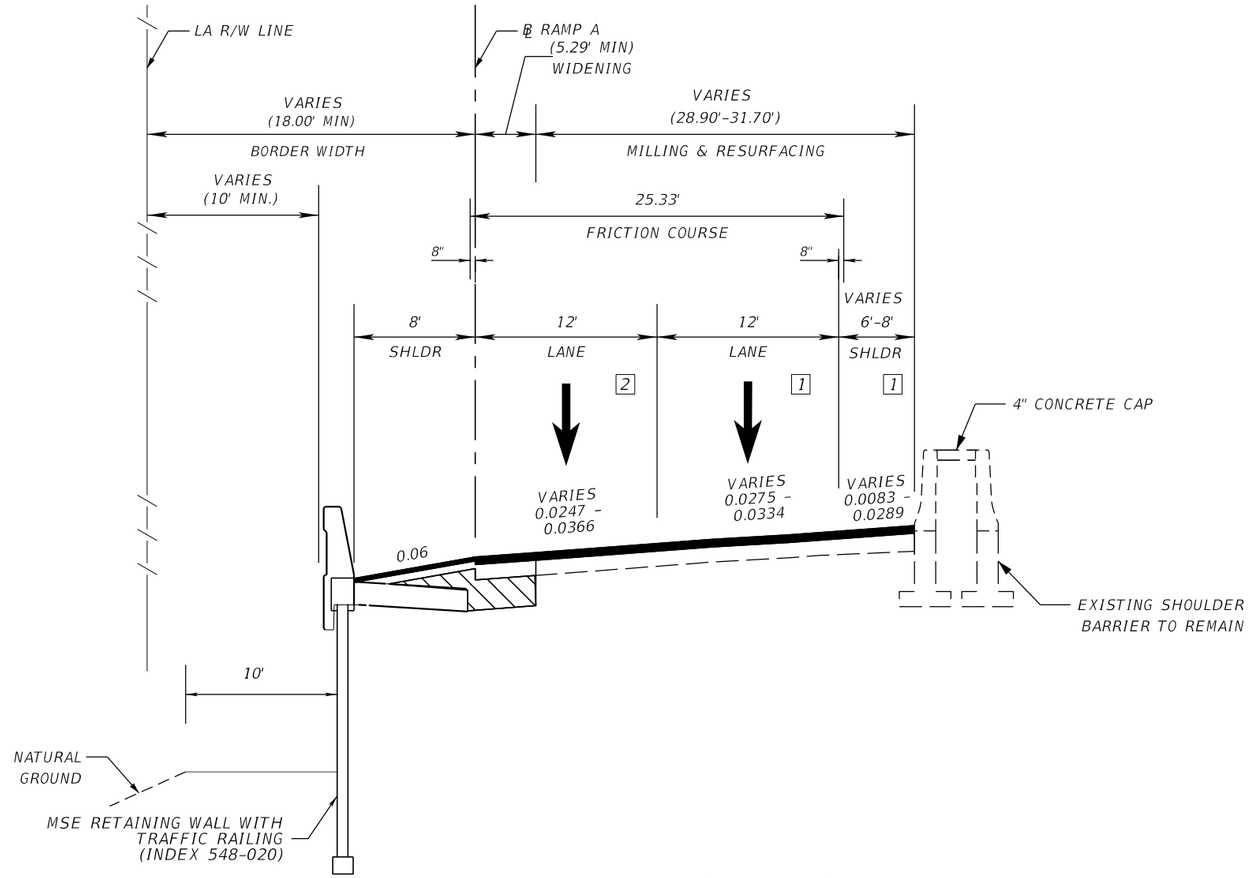
(X)	NEW CONSTRUCTION / RECONSTRUCTION
( )	RESURFACING (LA FACILITIES)
( )	RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION

1. BORDER WIDTH
2. SHOULDER WIDTH

TYPICAL SECTION No. 7



NW 74TH ST SB OFF-RAMP (87260399)

STA 3454+45.55 TO STA 3462+13.58

NOT TO SCALE

LEGEND:
EL = EXPRESS LANES
GUL = GENERAL USE LANES
AUX = AUXILARY LANES

NOTES;
1. MATCH EXISTING CROSS SLOPES (VALUE RANGE IS SHOWN)
2. MATCH ADJACENT LANE CROSS SLOPE. VALUE RANGE IS SHOWN

TRAFFIC DATA

CURRENT YEAR = 2020 AADT = 52,280 - 127,060
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = 6.6%
DESIGN SPEED = 40 MPH
POSTED SPEED = 30 MPH

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-01	8

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

(X) NATIONAL HIGHWAY SYSTEM
(X) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

CRITERIA

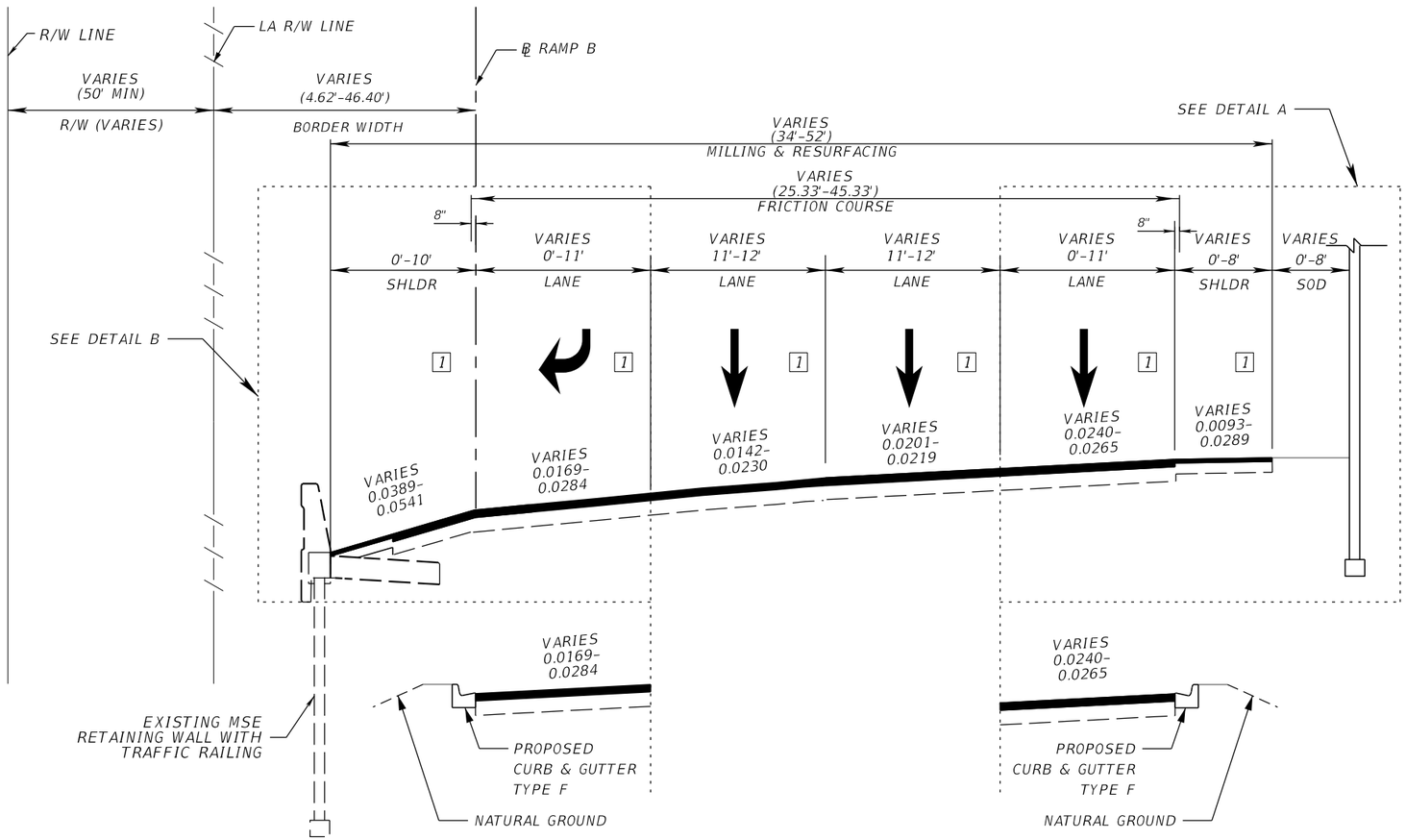
(X) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION

1. BORDER WIDTH

TYPICAL SECTION No. 8



*STA 6555+34.91 TO STA 6557+03.35
DETAIL B

*STA 6553+67.86 TO STA 6555+34.91
DETAIL A

NW 103RD ST. SB OFF-RAMP (87260355)

STA 6543+91.20 TO STA 6557+03.35

NOT TO SCALE

LEGEND:
EL = EXPRESS LANES
GUL = GENERAL USE LANES
AUX = AUXILARY LANES

NOTES;
1. MATCH EXISTING CROSS SLOPES (VALUE RANGE IS SHOWN)

TRAFFIC DATA

CURRENT YEAR = 2020 AADT = 52,280 - 127,060
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = 6.6%
DESIGN SPEED = 40 MPH
POSTED SPEED = 30 MPH

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-01	9

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- (X) NATIONAL HIGHWAY SYSTEM
- (X) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- (X) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

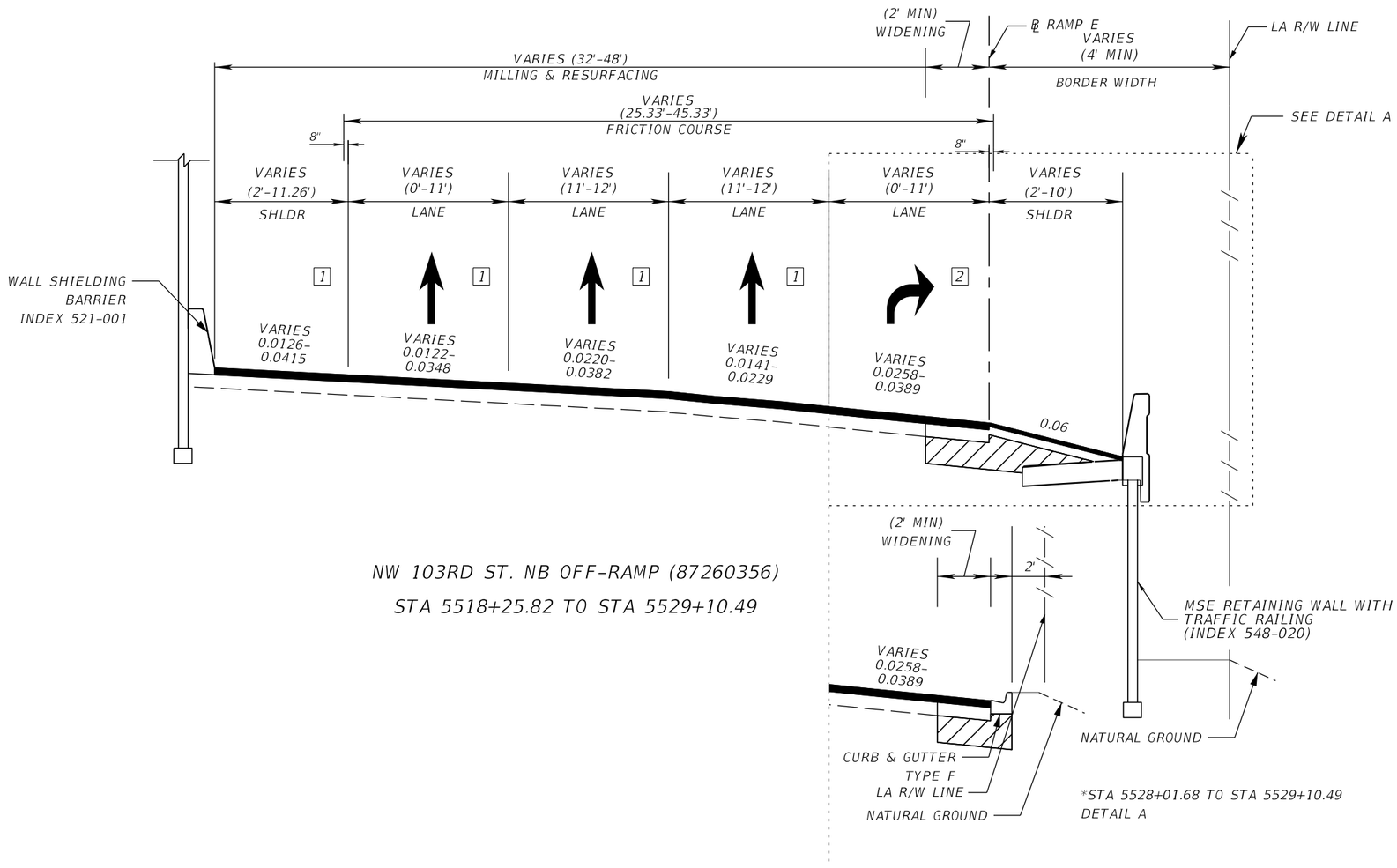
- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- ( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION

1. BORDER WIDTH
2. SHOULDER WIDTH

TYPICAL SECTION No. 9



NW 103RD ST. NB OFF-RAMP (87260356)

STA 5518+25.82 TO STA 5529+10.49

NOT TO SCALE

LEGEND:
EL = EXPRESS LANES
GUL = GENERAL USE LANES
AUX = AUXILARY LANES

NOTES;
1. MATCH EXISTING CROSS SLOPES (VALUE RANGE IS SHOWN)
2. MATCH ADJACENT LANE CROSS SLOPE. VALUE RANGE IS SHOWN

TRAFFIC DATA

CURRENT YEAR = 2020 AADT = 52,280 - 127,060
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = 6.6%
DESIGN SPEED = 40 MPH
POSTED SPEED = 30 MPH

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-01	10

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

(X)	NATIONAL HIGHWAY SYSTEM
(X)	STRATEGIC INTERMODAL SYSTEM
(X)	STATE HIGHWAY SYSTEM
( )	OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X)	1 - FREEWAY
( )	2 - RESTRICTIVE w/Service Roads
( )	3 - RESTRICTIVE w/660 ft. Connection Spacing
( )	4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( )	5 - RESTRICTIVE w/440 ft. Connection Spacing
( )	6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( )	7 - BOTH MEDIAN TYPES

CRITERIA

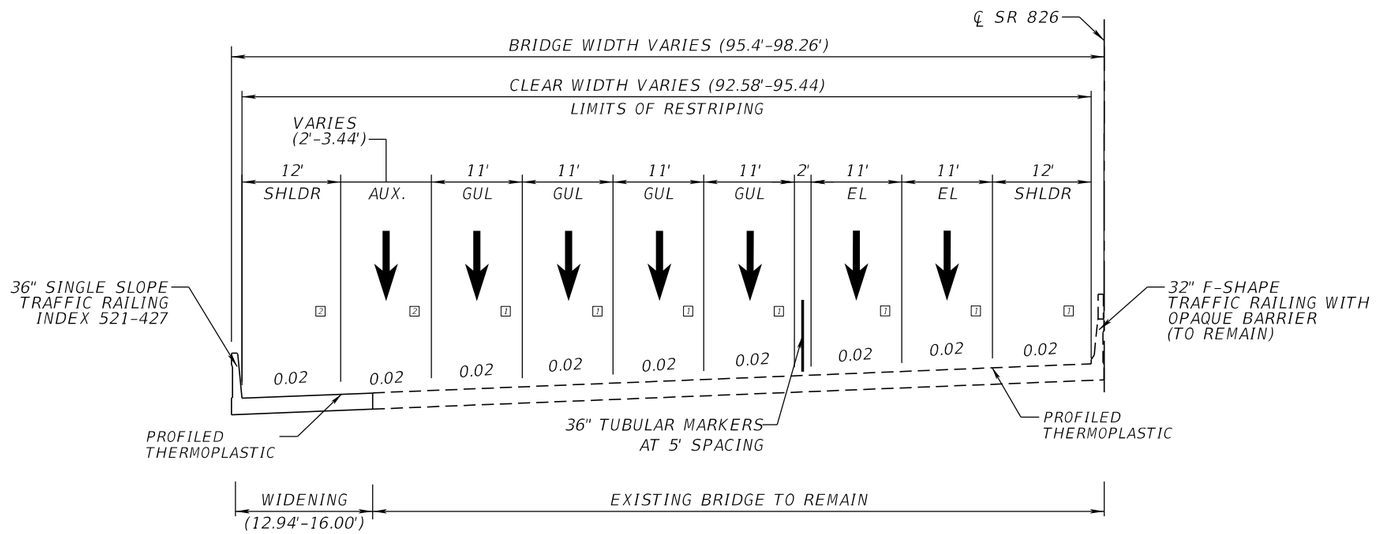
(X)	NEW CONSTRUCTION / RECONSTRUCTION
( )	RESURFACING (LA FACILITIES)
( )	RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN EXCEPTION:
1. LANE WIDTH

DESIGN VARIATION:
1. EXPRESS LANE BUFFER SEPARATION WIDTH
2. EXPRESS LANES TUBULAR MARKER COLOR

TYPICAL SECTION No. 10



SR 826 SB OVER NW 74TH STREET, BRIDGE NO. 870964

STA. 435+50.81 TO STA. 437+29.87

APPROACH SLABS
STA 435+20.55 TO STA 435+50.81
STA 437+29.87 TO STA 437+54.21

NOT TO SCALE

LEGEND:
EL = EXPRESS LANES
GUL = GENERAL USE LANES
AUX = AUXILARY LANES

NOTES;
1. MATCH EXISTING CROSS SLOPES. CROSS SLOPES OBTAINED FROM FPID 432687-1-52-01
2. MATCH ADJACENT LANE CROSS SLOPE. VALUE IS SHOWN

TRAFFIC DATA

CURRENT YEAR = 2020 AADT = 52,280 - 127,060
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = 6.6%
DESIGN SPEED = 60 MPH
POSTED SPEED = 55 MPH

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-01	11

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

(X) NATIONAL HIGHWAY SYSTEM
(X) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

CRITERIA

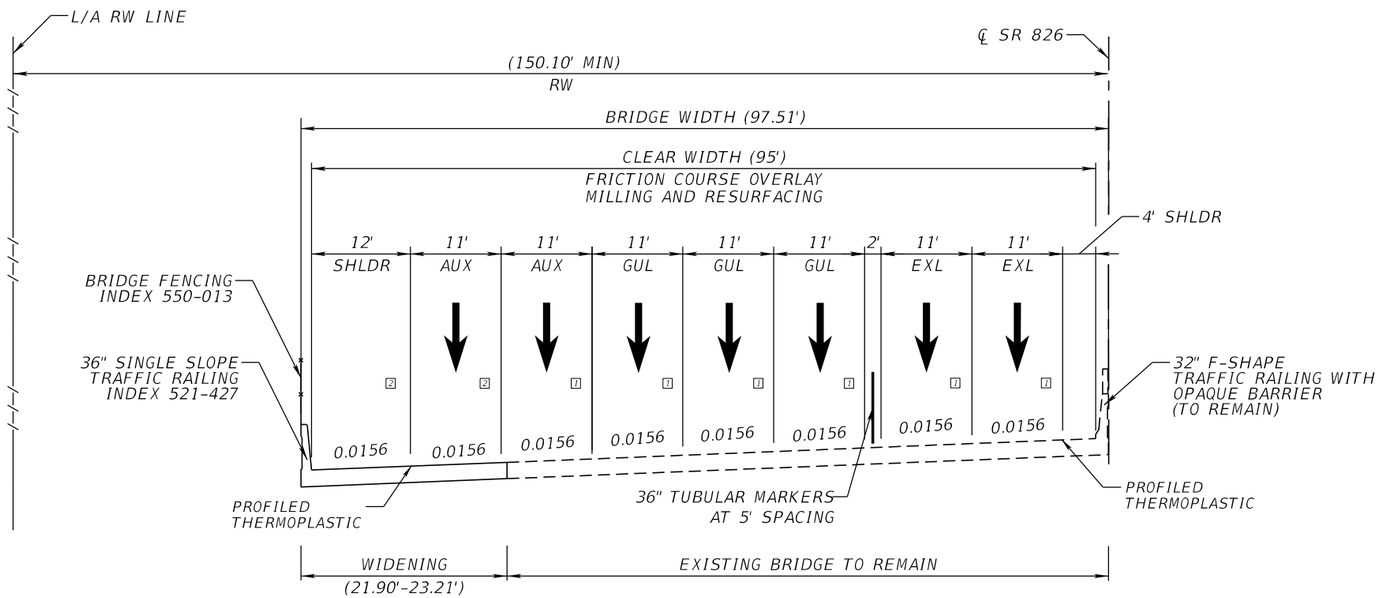
(X) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN EXCEPTION:
1. LANE WIDTH & SHOULDER WIDTH

DESIGN VARIATION:
1. VERTICAL CLEARNCE
2. EXPRESS LANE BUFFER SEPARATION WIDTH
3. EXPRESS LANES TUBULAR MARKER COLOR

TYPICAL SECTION No. 11



SR 826 SB OVER METRORAIL, BRIDGE NO. 870257

STA. 446+07.24 TO STA. 446+63.81

APPROACH SLABS
STA 445+72.21 TO STA 446+07.24
STA 446+63.81 TO STA 446+98.06

NOT TO SCALE

LEGEND:
EL = EXPRESS LANES
GUL = GENERAL USE LANES
AUX = AUXILARY LANES

NOTES;
1. MATCH EXISTING CROSS SLOPES. CROSS SLOPES OBTAINED FROM FPID 432687-1-52-01
2. MATCH ADJACENT LANE CROSS SLOPE. VALUE IS SHOWN

TRAFFIC DATA

CURRENT YEAR = 2020 AADT = 52,280 - 127,060
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = 6.6%
DESIGN SPEED = 60 MPH
POSTED SPEED = 55 MPH

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-01	12

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

(X) NATIONAL HIGHWAY SYSTEM
(X) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

CRITERIA

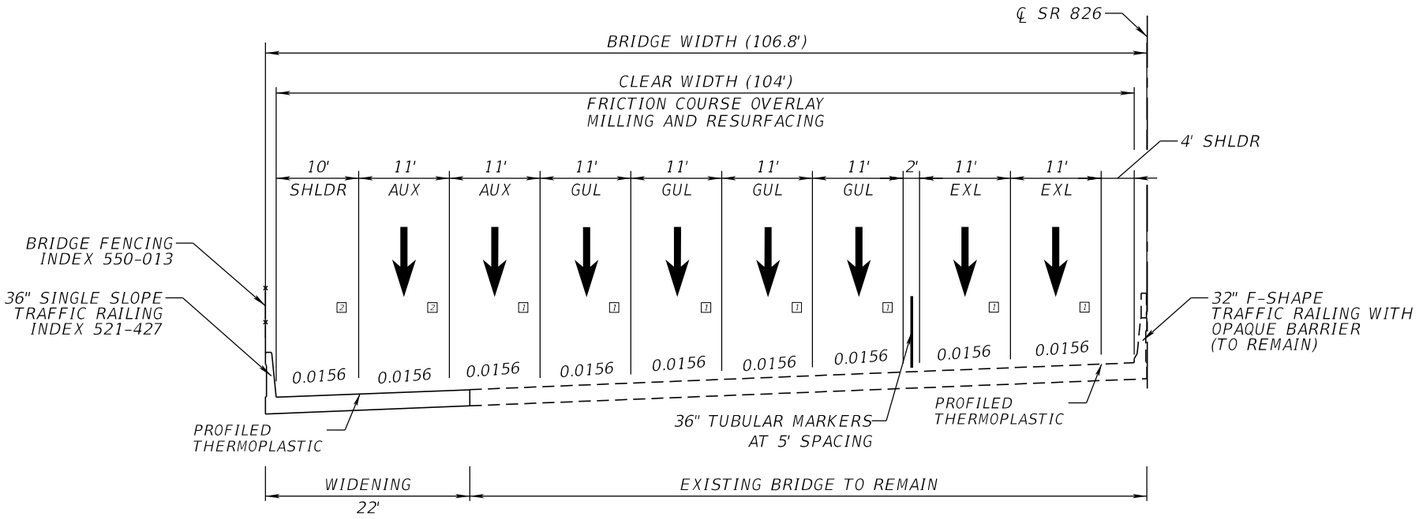
(X) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN EXCEPTION:
1. LANE WIDTH & SHOULDER WIDTH
2. VERTICAL CLERANCE

DESIGN VARIATION:
1. EXPRESS LANE BUFFER SEPARATION WIDTH
2. EXPRESS LANES TUBULAR MARKER COLOR

TYPICAL SECTION No. 12



SR 826 SB OVER FEC RR, BRIDGE NO. 870258

STA. 462+17.94 TO STA. 463+67.36

APPROACH SLABS
STA 461+91.73 TO STA 462+17.94
STA 463+67.36 TO STA 463+93.73

NOT TO SCALE

LEGEND:
EL = EXPRESS LANES
GUL = GENERAL USE LANES
AUX = AUXILARY LANES

NOTES;
1. MATCH EXISTING CROSS SLOPES. CROSS SLOPES OBTAINED FROM FPID 432687-1-52-01
2. MATCH ADJACENT LANE CROSS SLOPE. VALUE IS SHOWN

TRAFFIC DATA

CURRENT YEAR = 2020 AADT = 52,280 - 127,060
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = 6.6%
DESIGN SPEED = 60 MPH
POSTED SPEED = 55 MPH

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-01	13

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( ) C1 : NATURAL
( ) C2 : RURAL
( ) C2T : RURAL TOWN
( ) C3R : SUBURBAN RES.
( ) C3C : SUBURBAN COMM.
( ) C4 : URBAN GENERAL
( ) C5 : URBAN CENTER
( ) C6 : URBAN CORE
(X) N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

( ) INTERSTATE
(X) FREEWAY/EXPWY.
( ) PRINCIPAL ARTERIAL
( ) MINOR ARTERIAL
( ) MAJOR COLLECTOR
( ) MINOR COLLECTOR
( ) LOCAL

HIGHWAY SYSTEM

(X) NATIONAL HIGHWAY SYSTEM
(X) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

CRITERIA

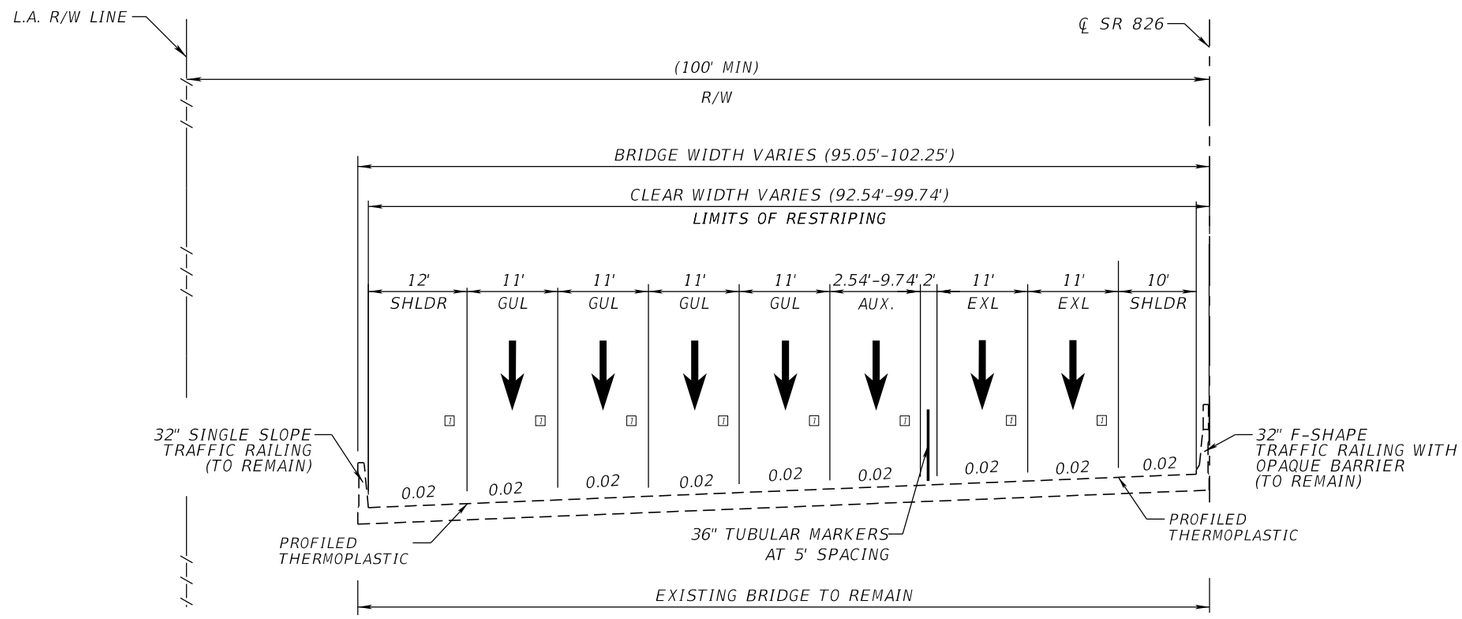
(X) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN EXCEPTION:
1. LANE WIDTH

DESIGN VARIATION:
1. EXPRESS LANE BUFFER SEPARATION WIDTH
2. EXPRESS LANES TUBULAR MARKER COLOR

TYPICAL SECTION No. 13



SR 826 SB OVER S. RIVER DR./MIAMI CANAL /OKEECHOBEE ROAD, BRIDGE NO. 870975

STA. 481+20.39 TO STA. 485+91.26

APPROACH SLABS
STA 481+20.25 TO STA 481+20.39
STA 485+91.26 TO STA 485+91.42

NOT TO SCALE

LEGEND:
EL = EXPRESS LANES
GUL = GENERAL USE LANES
AUX = AUXILARY LANES

NOTES;
1. MATCH EXISTING CROSS SLOPES. CROSS SLOPES OBTAINED FROM FPID 432687-1-52-01. VALUE IS SHOWN

TRAFFIC DATA

CURRENT YEAR = 2020 AADT = 52,280 - 127,060
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = 6.6%
DESIGN SPEED = 60 MPH
POSTED SPEED = 55 MPH

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-01	14

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( ) C1 : NATURAL
( ) C2 : RURAL
( ) C2T : RURAL TOWN
( ) C3R : SUBURBAN RES.
( ) C3C : SUBURBAN COMM.
( ) C4 : URBAN GENERAL
( ) C5 : URBAN CENTER
( ) C6 : URBAN CORE
(X) N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

( ) INTERSTATE
(X) FREEWAY/EXPWY.
( ) PRINCIPAL ARTERIAL
( ) MINOR ARTERIAL
( ) MAJOR COLLECTOR
( ) MINOR COLLECTOR
( ) LOCAL

HIGHWAY SYSTEM

(X) NATIONAL HIGHWAY SYSTEM
(X) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

CRITERIA

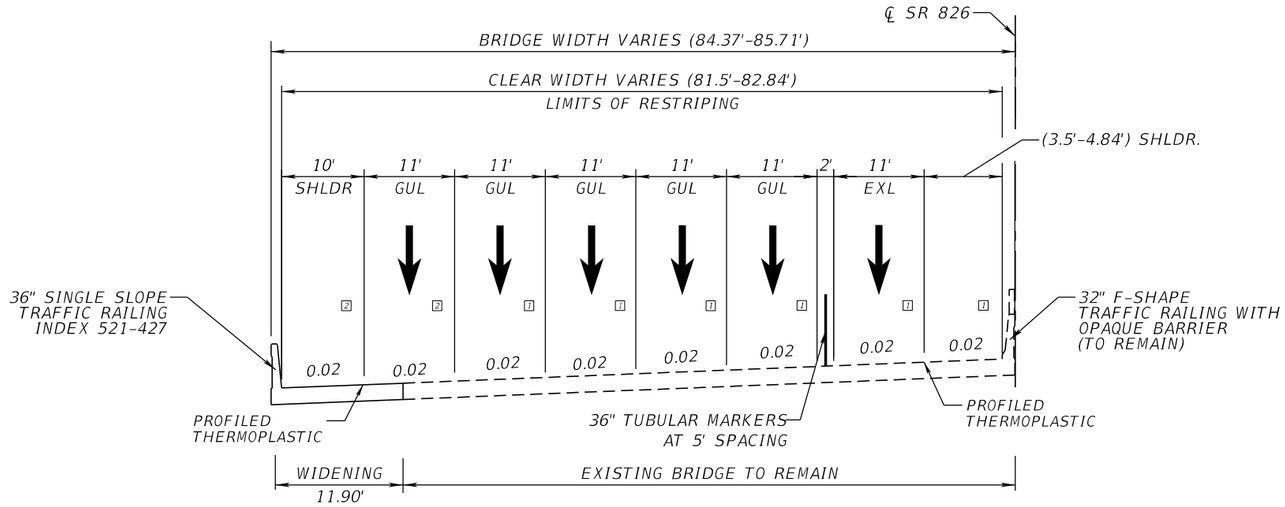
(X) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN EXCEPTION:
1. LANE WIDTH & SHOULDER WIDTH

DESIGN VARIATION:
1. SHOULDER WIDTH
2. EXPRESS LANE BUFFER SEPARATION WIDTH
3. EXPRESS LANES TUBULAR MARKER COLOR

TYPICAL SECTION No. 14



SR 826 SB OVER NW 103RD STREET, BRIDGE NO. 870757

STA. 529+96.72 TO STA. 532+28.78

APPROACH SLABS
STA 529+70.69 TO STA 529+96.72
STA 532+28.78 TO STA 532+48.86

NOT TO SCALE

LEGEND:
EL = EXPRESS LANES
GUL = GENERAL USE LANES
AUX = AUXILARY LANES

NOTES;
1. MATCH EXISTING CROSS SLOPES. CROSS SLOPES OBTAINED FROM FPID 432687-1-52-01
2. MATCH ADJACENT LANE CROSS SLOPE. VALUE IS SHOWN

TRAFFIC DATA

CURRENT YEAR = 2020 AADT = 52,280 - 127,060
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = 6.6%
DESIGN SPEED = 60 MPH
POSTED SPEED = 55 MPH

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-01	15

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

(X) NATIONAL HIGHWAY SYSTEM
(X) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

CRITERIA

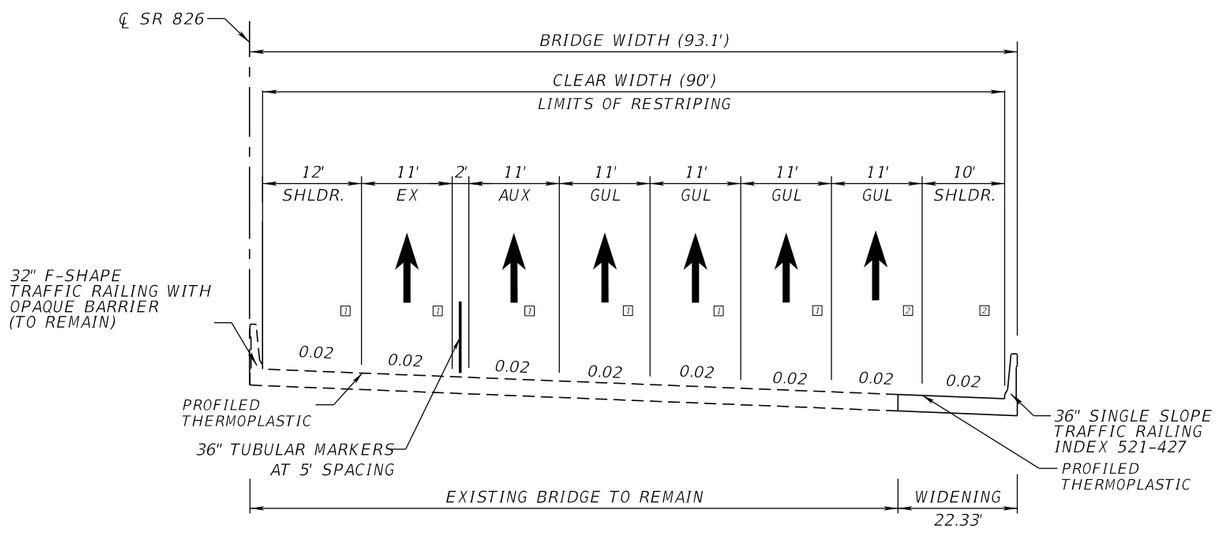
(X) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN EXCEPTION:
1. LANE WIDTH

DESIGN VARIATION:
1. EXPRESS LANE BUFFER SEPARATION WIDTH
2. EXPRESS LANES TUBULAR MARKER COLOR

TYPICAL SECTION No. 15



SR 826 NB OVER NW 103RD STREET, BRIDGE NO. 870995

STA. 529+96.72 TO STA. 532+28.78 ℄ SR 826

APPROACH SLABS
STA 529+70.69 TO STA 529+96.72
STA 532+28.78 TO STA 532+48.86

NOT TO SCALE

LEGEND:
EL = EXPRESS LANES
GUL = GENERAL USE LANES
AUX = AUXILARY LANES

NOTES;
1. MATCH EXISTING CROSS SLOPES. CROSS SLOPES OBTAINED FROM FPID 432687-1-52-01
2. MATCH ADJACENT LANE CROSS SLOPE. VALUE IS SHOWN

TRAFFIC DATA

CURRENT YEAR = 2020 AADT = 52,280 - 127,060
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = 6.6%
DESIGN SPEED = 60 MPH
POSTED SPEED = 55 MPH

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-01	16

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

(X)	NATIONAL HIGHWAY SYSTEM
(X)	STRATEGIC INTERMODAL SYSTEM
(X)	STATE HIGHWAY SYSTEM
( )	OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

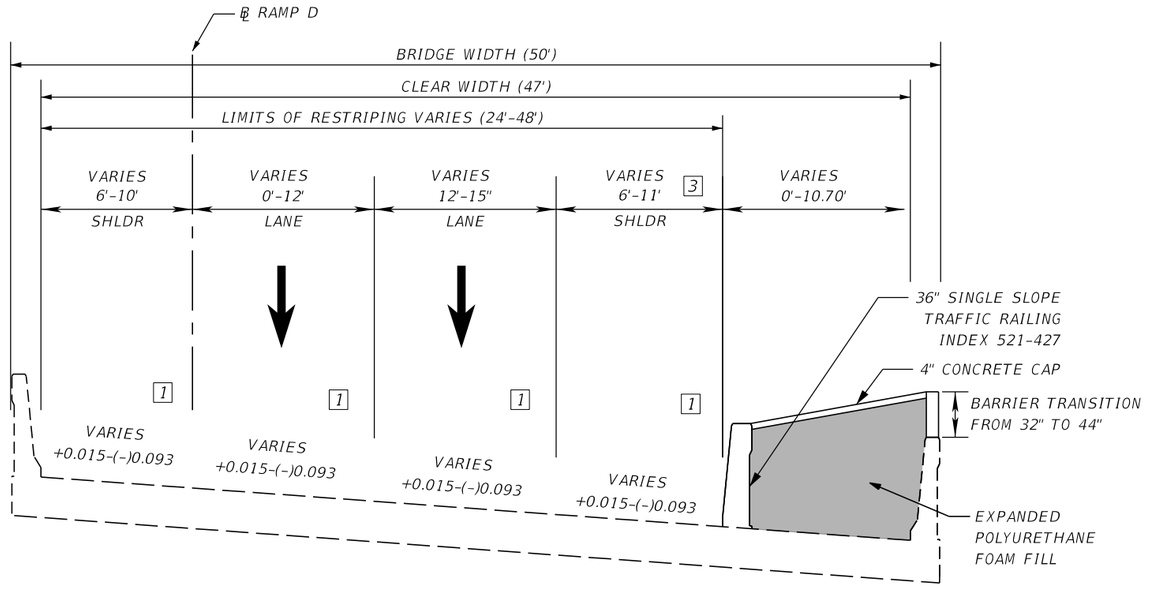
(X)	1 - FREEWAY
( )	2 - RESTRICTIVE w/Service Roads
( )	3 - RESTRICTIVE w/660 ft. Connection Spacing
( )	4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( )	5 - RESTRICTIVE w/440 ft. Connection Spacing
( )	6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( )	7 - BOTH MEDIAN TYPES

CRITERIA

(X)	NEW CONSTRUCTION / RECONSTRUCTION
( )	RESURFACING (LA FACILITIES)
( )	RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 16



NW 103RD ST. SB FLYOVER ON-RAMP, BRIDGE NO. 870757

STA 4534+72.37 TO STA 4538+08.15

NOT TO SCALE

NOTE:
1. MATCH EXISTING CROSS SLOPES. CROSS SLOPES OBTAINED FROM FPID 432687-1-52-01. VALUE RANGE IS SHOWN
2. BRIDGE IS SUPERELEVATED
3. SHOULDER WIDTH NEEDED TO MEET STOPPING SIGHT DISTANCE

TRAFFIC DATA

CURRENT YEAR = 2020 AADT = 52,280 - 127,060
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = 6.6%
DESIGN SPEED = 30 MPH
POSTED SPEED = 30 MPH (25 MPH ADVISORY)

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-01	17

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

(X)	NATIONAL HIGHWAY SYSTEM
(X)	STRATEGIC INTERMODAL SYSTEM
(X)	STATE HIGHWAY SYSTEM
( )	OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

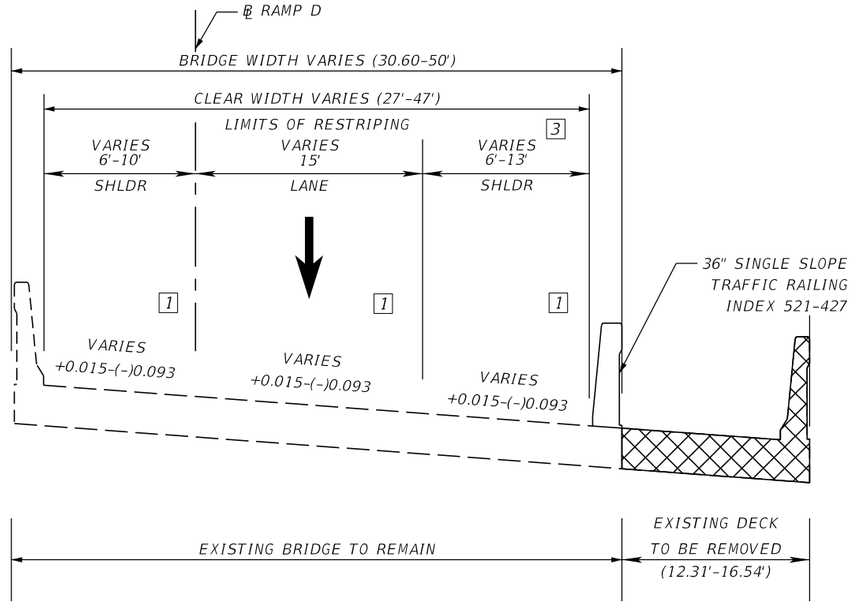
(X)	1 - FREEWAY
( )	2 - RESTRICTIVE w/Service Roads
( )	3 - RESTRICTIVE w/660 ft. Connection Spacing
( )	4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( )	5 - RESTRICTIVE w/440 ft. Connection Spacing
( )	6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( )	7 - BOTH MEDIAN TYPES

CRITERIA

(X)	NEW CONSTRUCTION / RECONSTRUCTION
( )	RESURFACING (LA FACILITIES)
( )	RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

TYPICAL SECTION No. 17



NW 103RD ST. SB FLYOVER ON-RAMP, BRIDGE NO. 870757

STA 4538+08.15 TO STA 4546+20.21

NOT TO SCALE

NOTE:
1. MATCH EXISTING CROSS SLOPES. CROSS SLOPES OBTAINED FROM FPID 432687-1-52-01. VALUE RANGE IS SHOWN
2. BRIDGE IS SUPERELEVATED
3. SHOULDER WIDTH NEEDED TO MEET STOPPING SIGHT DISTANCE

TRAFFIC DATA

CURRENT YEAR = 2020 AADT = 52,280 - 127,060
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = 6.6%
DESIGN SPEED = 30 MPH
POSTED SPEED = 30 MPH (25 MPH ADVISORY)

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-01	18

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( ) C1 : NATURAL
( ) C2 : RURAL
( ) C2T : RURAL TOWN
( ) C3R : SUBURBAN RES.
( ) C3C : SUBURBAN COMM.
( ) C4 : URBAN GENERAL
( ) C5 : URBAN CENTER
( ) C6 : URBAN CORE
(X) N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

( ) INTERSTATE
(X) FREEWAY/EXPWY.
( ) PRINCIPAL ARTERIAL
( ) MINOR ARTERIAL
( ) MAJOR COLLECTOR
( ) MINOR COLLECTOR
( ) LOCAL

HIGHWAY SYSTEM

(X) NATIONAL HIGHWAY SYSTEM
(X) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

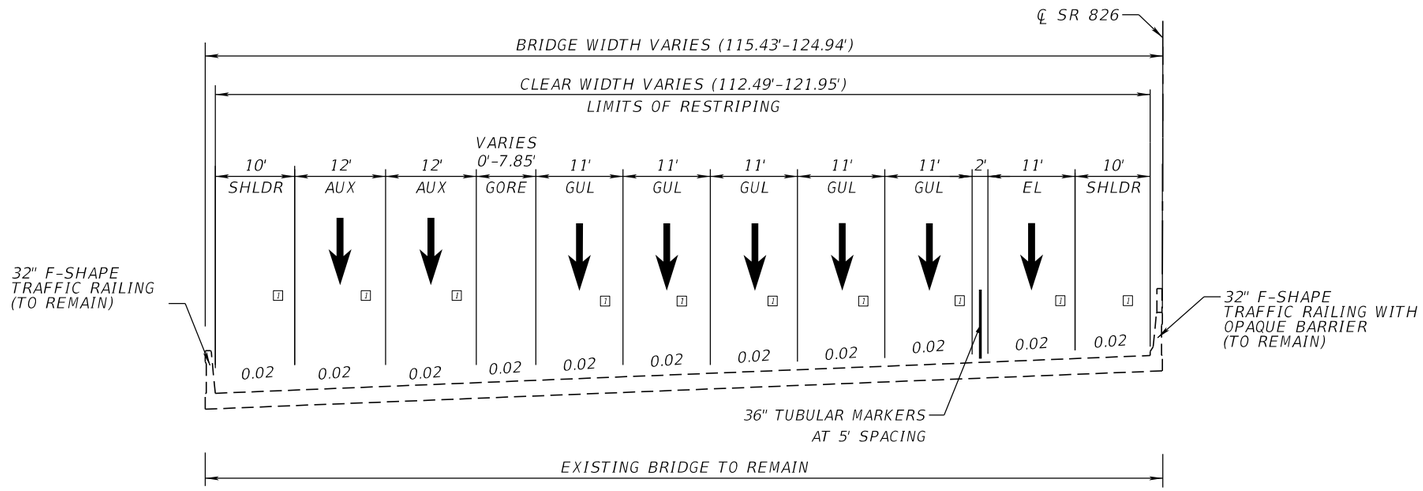
CRITERIA

(X) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN EXCEPTION
1. LANE WIDTH
DESIGN VARIATION
1. EXPRESS LANE BUFFER SEPARATION WIDTH
2. EXPRESS LANES TUBULAR MARKER COLOR

TYPICAL SECTION No. 18



SR 826 SB OVER LITTLE RIVER CANAL, BRIDGE NO. 870758

STA. 540+84.25 TO STA. 541+69.15

APPROACH SLABS
STA 540+64.30 TO STA 540+84.25
STA 541+69.15 TO STA 541+89.18

NOT TO SCALE

LEGEND:
EL = EXPRESS LANES
GUL = GENERAL USE LANES
AUX = AUXILARY LANES

NOTES;
[1.] MATCH EXISTING CROSS SLOPES. CROSS SLOPES OBTAINED FROM FPID 432687-1-52-01. VALUE IS SHOWN

TRAFFIC DATA

CURRENT YEAR = 2020 AADT = 52,280 - 127,060
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = 6.6%
DESIGN SPEED = 60 MPH
POSTED SPEED = 55 MPH

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-01	19

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( ) C1 : NATURAL
( ) C2 : RURAL
( ) C2T : RURAL TOWN
( ) C3R : SUBURBAN RES.
( ) C3C : SUBURBAN COMM.
( ) C4 : URBAN GENERAL
( ) C5 : URBAN CENTER
( ) C6 : URBAN CORE
(X) N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

( ) INTERSTATE
(X) FREEWAY/EXPWY.
( ) PRINCIPAL ARTERIAL
( ) MINOR ARTERIAL
( ) MAJOR COLLECTOR
( ) MINOR COLLECTOR
( ) LOCAL

HIGHWAY SYSTEM

(X) NATIONAL HIGHWAY SYSTEM
(X) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

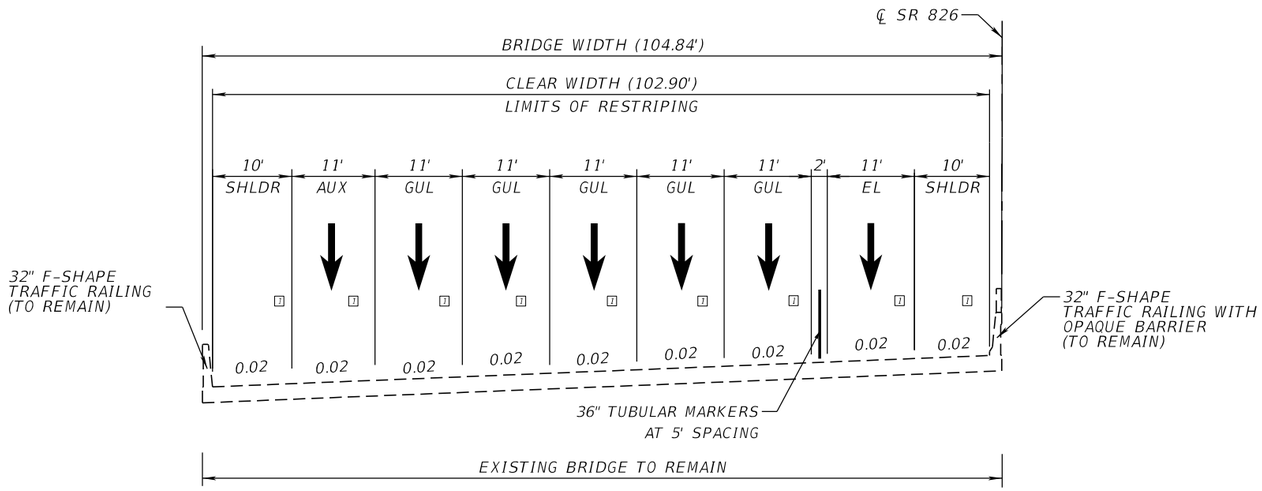
CRITERIA

(X) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN EXCEPTION
1. LANE WIDTH
DESIGN VARIATION
1. EXPRESS LANE BUFFER SEPARATION WIDTH
2. EXPRESS LANES TUBULAR MARKER COLOR

TYPICAL SECTION No. 19



SR 826 SB OVER W 60TH STREET, BRIDGE NO. 870957

STA. 567+82.06 TO STA. 568+87.97

APPROACH SLABS
STA 567+62.08 TO STA 567+82.06
STA 568+87.97 TO STA 569+07.96

NOT TO SCALE

LEGEND:
EL = EXPRESS LANES
GUL = GENERAL USE LANES
AUX = AUXILARY LANES

NOTES;
1. MATCH EXISTING CROSS SLOPES. CROSS SLOPES OBTAINED FROM FPID 432687-1-52-01. VALUE IS SHOWN

TRAFFIC DATA

CURRENT YEAR = 2020 AADT = 52,280 - 127,060
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = 6.6%
DESIGN SPEED = 60 MPH
POSTED SPEED = 55 MPH

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-01	20

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

(X)	NATIONAL HIGHWAY SYSTEM
(X)	STRATEGIC INTERMODAL SYSTEM
(X)	STATE HIGHWAY SYSTEM
( )	OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X)	1 - FREEWAY
( )	2 - RESTRICTIVE w/Service Roads
( )	3 - RESTRICTIVE w/660 ft. Connection Spacing
( )	4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( )	5 - RESTRICTIVE w/440 ft. Connection Spacing
( )	6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( )	7 - BOTH MEDIAN TYPES

CRITERIA

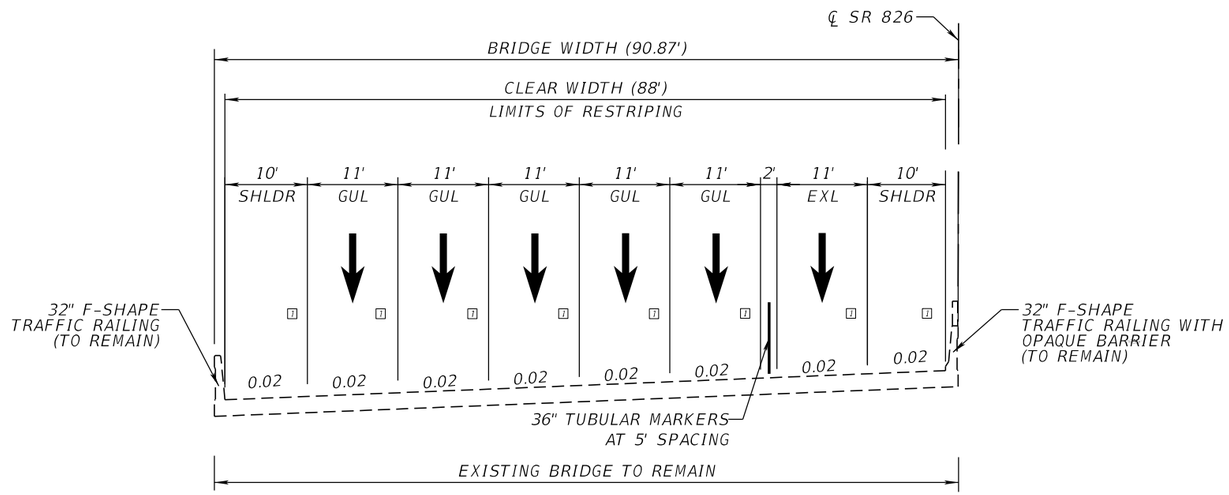
(X)	NEW CONSTRUCTION / RECONSTRUCTION
( )	RESURFACING (LA FACILITIES)
( )	RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN EXCEPTION:
1. LANE WIDTH

DESIGN VARIATION:
1. EXPRESS LANE BUFFER SEPARATION WIDTH
2. EXPRESS LANES TUBULAR MARKER COLOR

TYPICAL SECTION No. 20



SR 826 SB OVER NW 122ND STREET, BRIDGE NO. 870766

STA. 593+16.24 TO STA. 594+71.22

APPROACH SLABS
STA 592+96.23 TO STA 593+16.24
STA 594+71.22 TO STA 594+91.41

NOT TO SCALE

LEGEND:
EL = EXPRESS LANES
GUL = GENERAL USE LANES
AUX = AUXILARY LANES

NOTES;
1. MATCH EXISTING CROSS SLOPES. CROSS SLOPES OBTAINED FROM FPID 432687-1-52-01. VALUE IS SHOWN

TRAFFIC DATA

CURRENT YEAR = 2020 AADT = 52,280 - 127,060
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = 6.6%
DESIGN SPEED = 60 MPH
POSTED SPEED = 55 MPH

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-01	21

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

(X)	NATIONAL HIGHWAY SYSTEM
(X)	STRATEGIC INTERMODAL SYSTEM
(X)	STATE HIGHWAY SYSTEM
( )	OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X)	1 - FREEWAY
( )	2 - RESTRICTIVE w/Service Roads
( )	3 - RESTRICTIVE w/660 ft. Connection Spacing
( )	4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( )	5 - RESTRICTIVE w/440 ft. Connection Spacing
( )	6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( )	7 - BOTH MEDIAN TYPES

CRITERIA

(X)	NEW CONSTRUCTION / RECONSTRUCTION
( )	RESURFACING (LA FACILITIES)
( )	RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

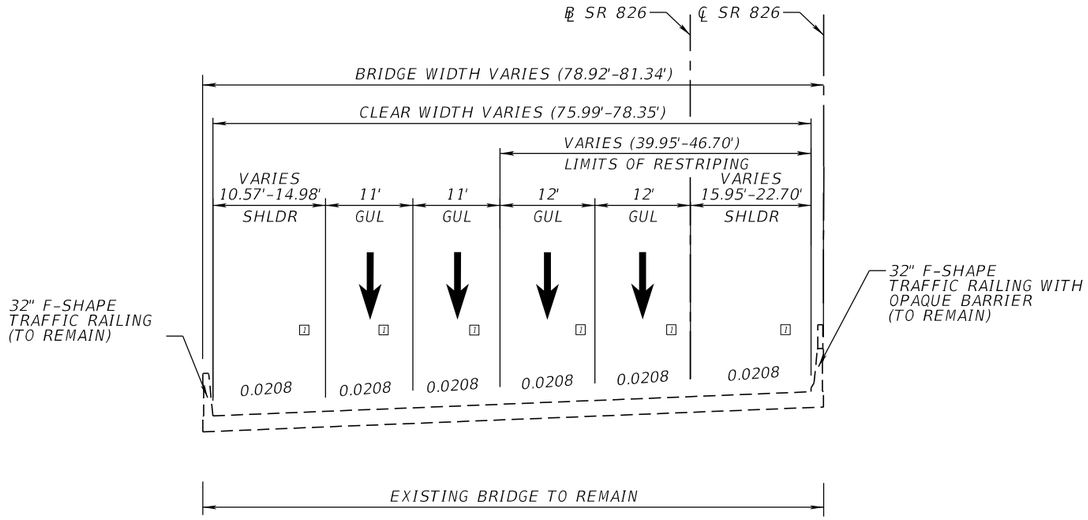
DESIGN EXCEPTION

1. LANE WIDTH

DESIGN VARIATION

1. EXPRESS LANE BUFFER SEPARATION WIDTH

TYPICAL SECTION No. 21



SR 826 SB OVER NW 138TH STREET, BRIDGE NO. 870467

STA. 757+71.93 TO STA. 758+67.78 ℄ SR 826 SB

APPROACH SLABS

STA 757+36.72 TO STA 757+71.93 ℄ SR 826 SB

STA 758+67.78 TO STA 759+02.99 ℄ SR 826 SB

NOT TO SCALE

LEGEND:
EL = EXPRESS LANES
GUL = GENERAL USE LANES
AUX = AUXILARY LANES

NOTES;
1. MATCH EXISTING CROSS SLOPES. CROSS SLOPES OBTAINED FROM FPID 432687-1-52-01. VALUE IS SHOWN

TRAFFIC DATA

CURRENT YEAR = 2020 AADT = 52,280 - 127,060
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = 6.6%
DESIGN SPEED = 60 MPH
POSTED SPEED = 55 MPH

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-01	22

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	(X)	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
( )	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
( )	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	(X)	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- ( ) NATIONAL HIGHWAY SYSTEM
- ( ) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- ( ) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

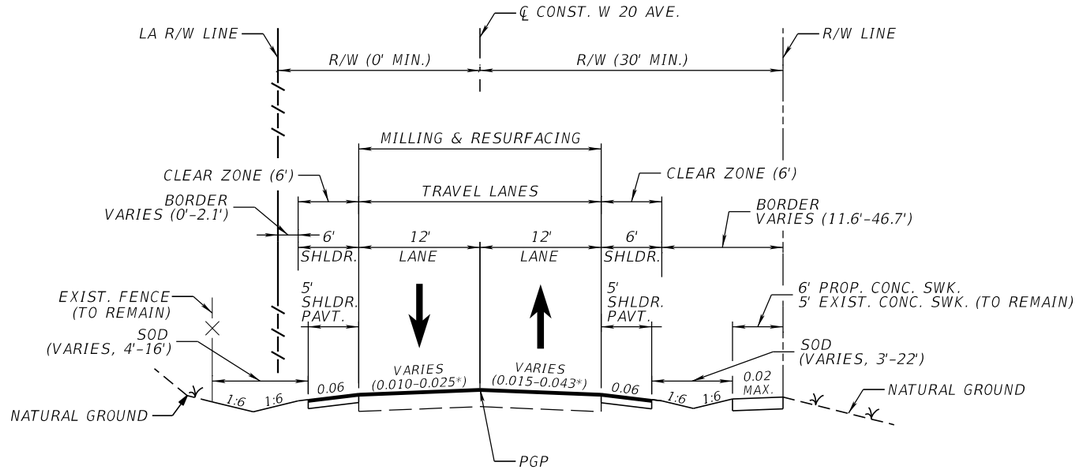
- ( ) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION

1. CROSS SLOPE
2. BORDER WIDTH
3. HORIZONTAL CURVE RADIUS, HORIZONTAL CURVE LENGTH AND SUPERELEVATION
4. GUARDRAIL LATERAL OFFSET

TYPICAL SECTION No. 22



EAST FRONTAGE ROAD/W 20TH AVENUE (SECTION 87260151)
STA. 200+12.23 TO STA. 214+41.08

* MATCH EXISTING CROSS SLOPE; APPROX. VALUE RANGE IS SHOWN. MAX. CROSS SLOPE AT SUPERELEVATED SECTIONS:
- 0.091 (RIGHT LANE)
- 0.095 (LEFT LANE)

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 2,028
ESTIMATED OPENING YEAR = 2024 AADT = 2,100
ESTIMATED DESIGN YEAR = 2044 AADT = 2,500
K = 10.21% D = 64.5% T = 5.47% (24 HOUR)
DESIGN HOUR T = 5.47%
DESIGN SPEED = 30 MPH
POSTED SPEED = 30 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
441830-1-52-01	23

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	(X)	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
( )	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
( )	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	(X)	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

( )	NATIONAL HIGHWAY SYSTEM
( )	STRATEGIC INTERMODAL SYSTEM
(X)	STATE HIGHWAY SYSTEM
( )	OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

( )	1 - FREEWAY
( )	2 - RESTRICTIVE w/Service Roads
( )	3 - RESTRICTIVE w/660 ft. Connection Spacing
( )	4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( )	5 - RESTRICTIVE w/440 ft. Connection Spacing
( )	6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( )	7 - BOTH MEDIAN TYPES

CRITERIA

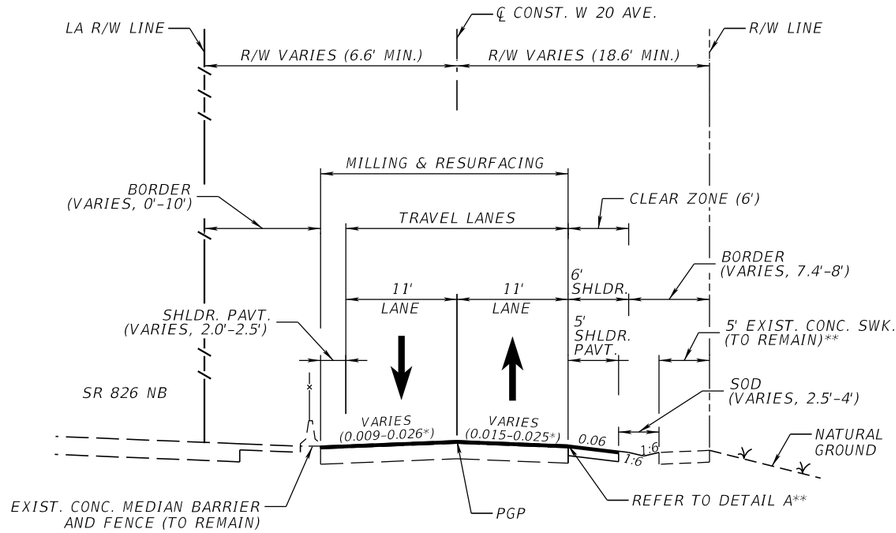
( )	NEW CONSTRUCTION / RECONSTRUCTION
( )	RESURFACING (LA FACILITIES)
(X)	RRR (ARTERIALS & COLLECTORS)

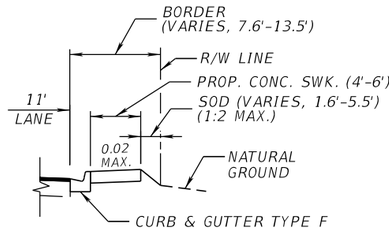
POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION

1. LANE WIDTH
2. CROSS SLOPE
3. SHOULDER WIDTH
4. BORDER WIDTH
5. HORIZONTAL CURVE RADIUS, HORIZONTAL CURVE LENGTH AND SUPERELEVATION
6. BICYCLE FACILITIES
7. SIDEWALK WIDTH

TYPICAL SECTION No. 23





** DETAIL A
STA. 214+80.19 TO STA. 216+84.87 RT

EAST FRONTAGE ROAD/W 20TH AVENUE (SECTION 87260151)
STA. 214+41.08 TO STA. 220+88.21 LT,
STA. 214+41.08 TO STA. 223+61.91 RT

* MATCH EXISTING CROSS SLOPE; APPROX. VALUE RANGE SHOWN. MAX. CROSS SLOPE AT SUPERELEVATED SECTIONS:
- 0.088 (RIGHT LANE)
- 0.096 (LEFT LANE)

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 2,028
ESTIMATED OPENING YEAR = 2024 AADT = 2,100
ESTIMATED DESIGN YEAR = 2044 AADT = 2,500
K = 10.21% D = 64.5% T = 5.47% (24 HOUR)
DESIGN HOUR T = 5.47%
DESIGN SPEED = 30 MPH
POSTED SPEED = 30 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
441830-1-52-01	24

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	(X)	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
( )	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
( )	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	(X)	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

( )	NATIONAL HIGHWAY SYSTEM
( )	STRATEGIC INTERMODAL SYSTEM
(X)	STATE HIGHWAY SYSTEM
( )	OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

( )	1 - FREEWAY
( )	2 - RESTRICTIVE w/Service Roads
( )	3 - RESTRICTIVE w/660 ft. Connection Spacing
( )	4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( )	5 - RESTRICTIVE w/440 ft. Connection Spacing
( )	6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( )	7 - BOTH MEDIAN TYPES

CRITERIA

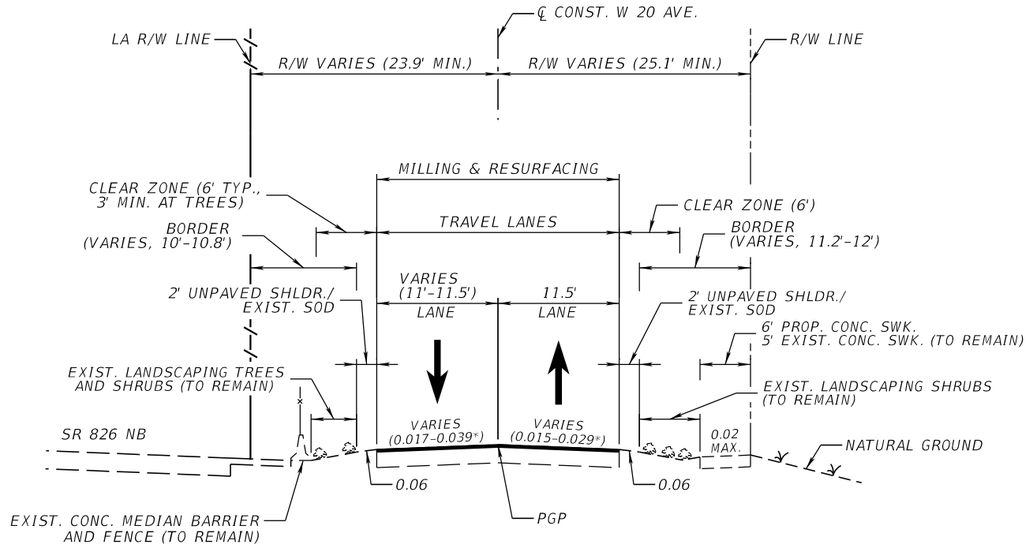
( )	NEW CONSTRUCTION / RECONSTRUCTION
( )	RESURFACING (LA FACILITIES)
(X)	RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION

1. LANE WIDTH
2. CROSS SLOPE
3. SHOULDER WIDTH
4. BICYCLE FACILITIES
5. LATERAL OFFSET

TYPICAL SECTION No. 24



EAST FRONTAGE ROAD/W 20TH AVENUE (SECTION 87260151)
STA. 220+88.21 TO STA. 237+40.00 LT,
STA. 223+61.91 TO STA. 237+40.00 RT

* MATCH EXISTING CROSS SLOPE; APPROX. VALUE RANGE SHOWN.

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 2,028
ESTIMATED OPENING YEAR = 2024 AADT = 2,100
ESTIMATED DESIGN YEAR = 2044 AADT = 2,500
K = 10.21% D = 64.5% T = 5.47% (24 HOUR)
DESIGN HOUR T = 5.47%
DESIGN SPEED = 30 MPH
POSTED SPEED = 30 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
441830-1-52-01	25

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( ) C1 : NATURAL
( ) C2 : RURAL
( ) C2T : RURAL TOWN
( ) C3R : SUBURBAN RES.
(X) C3C : SUBURBAN COMM.
( ) C4 : URBAN GENERAL
( ) C5 : URBAN CENTER
( ) C6 : URBAN CORE
( ) N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

( ) INTERSTATE
( ) FREEWAY/EXPWY.
( ) PRINCIPAL ARTERIAL
( ) MINOR ARTERIAL
( ) MAJOR COLLECTOR
( ) MINOR COLLECTOR
(X) LOCAL

HIGHWAY SYSTEM

( ) NATIONAL HIGHWAY SYSTEM
( ) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

( ) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

CRITERIA

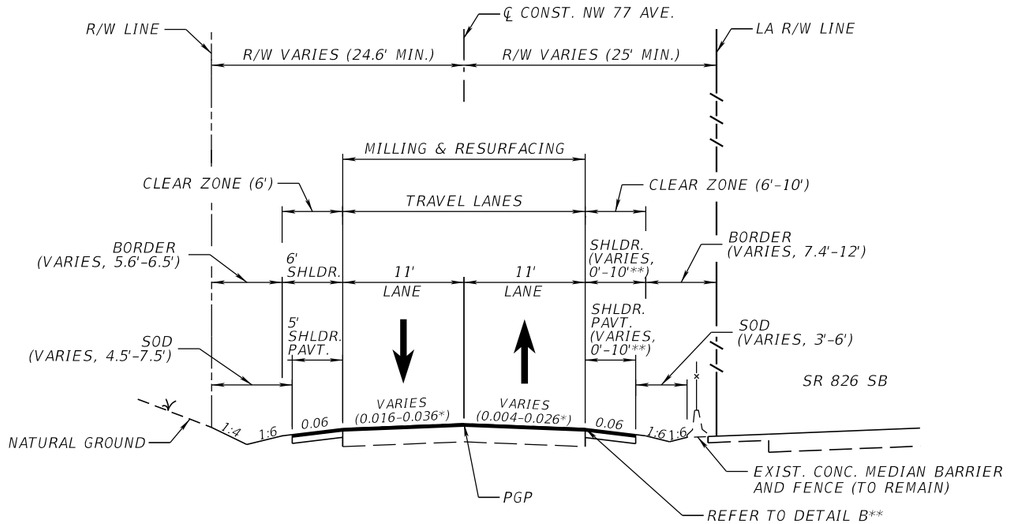
( ) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
(X) RRR (ARTERIALS & COLLECTORS)

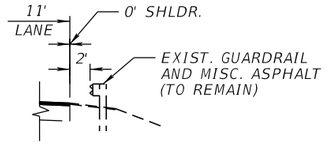
POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION

1. LANE WIDTH
2. SHOULDER WIDTH
3. CROSS SLOPE
4. BORDER WIDTH
5. HORIZONTAL CURVE RADIUS, HORIZONTAL CURVE LENGTH AND SUPERELEVATION
6. GUARDRAIL LATERAL OFFSET

TYPICAL SECTION No. 25





** DETAIL B
STA. 700+12.04 TO STA. 701+26.52 RT

WEST FRONTAGE ROAD/NW 77TH AVENUE (SECTION 87260152)
STA. 700+00.00 TO STA. 705+66.18 LT,
STA. 700+00.00 TO STA. 705+47.86 RT

*MATCH EXISTING CROSS SLOPE; APPROX. VALUE RANGE SHOWN. MAX. CROSS SLOPE AT SUPERELEVATED SECTIONS:
- 0.075 (RIGHT LANE)
- 0.093 (LEFT LANE)

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 3,621
ESTIMATED OPENING YEAR = 2024 AADT = 4,600
ESTIMATED DESIGN YEAR = 2044 AADT = 5,400
K = 8.38% D = 76.4% T = 4.64% (24 HOUR)
DESIGN HOUR T = 4.64%
DESIGN SPEED = 30 MPH
POSTED SPEED = 30 MPH***

*** NO EXISTING SPEED LIMIT SIGNS.

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
441830-1-52-01	26

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( ) C1 : NATURAL
( ) C2 : RURAL
( ) C2T : RURAL TOWN
( ) C3R : SUBURBAN RES.
(X) C3C : SUBURBAN COMM.
( ) C4 : URBAN GENERAL
( ) C5 : URBAN CENTER
( ) C6 : URBAN CORE
( ) N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

( ) INTERSTATE
( ) FREEWAY/EXPWY.
( ) PRINCIPAL ARTERIAL
( ) MINOR ARTERIAL
( ) MAJOR COLLECTOR
( ) MINOR COLLECTOR
(X) LOCAL

HIGHWAY SYSTEM

( ) NATIONAL HIGHWAY SYSTEM
( ) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

( ) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

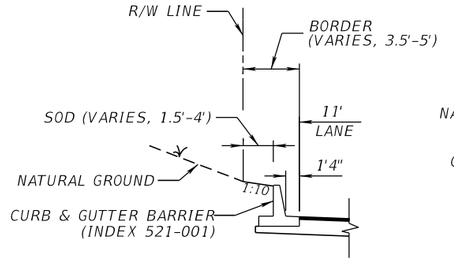
CRITERIA

( ) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
(X) RRR (ARTERIALS & COLLECTORS)

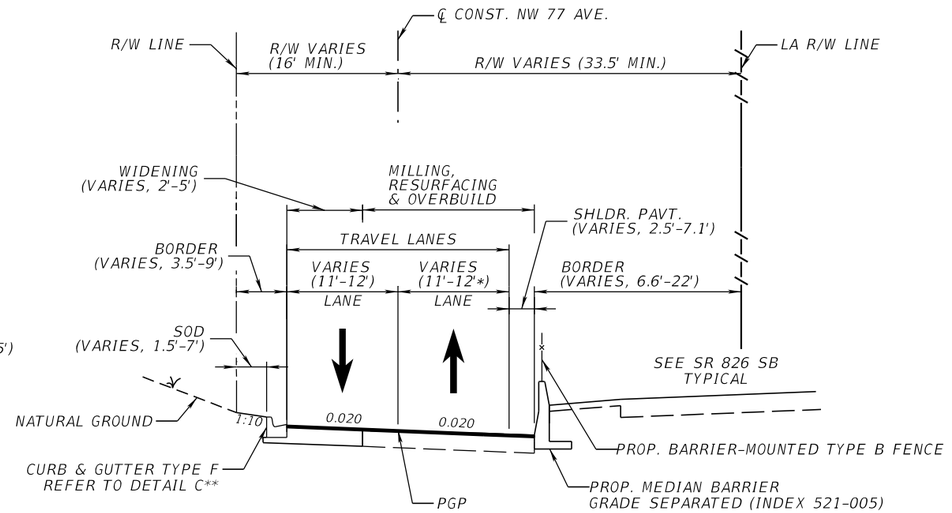
POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION
1. LANE WIDTH
2. SHOULDER WIDTH
3. BORDER WIDTH
4. BICYCLE FACILITIES
5. MINIMUM OFFSET TO HAZARD ON TOP OF BARRIER WALL

TYPICAL SECTION No. 26



** DETAIL C
STA. 710+43.71 TO STA. 712+12.28 LT



* RIGHT LANE 0'
FROM STA. 722+47.21 TO STA. 727+90.69

WEST FRONTAGE ROAD/NW 77TH AVENUE (SECTION 87260152)
STA. 705+66.18 TO STA. 730+58.27 LT,
STA. 705+47.86 TO STA. 727+87.77 RT

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 3,621
ESTIMATED OPENING YEAR = 2024 AADT = 4,600
ESTIMATED DESIGN YEAR = 2044 AADT = 5,400
K = 8.38% D = 76.4% T = 4.64% (24 HOUR)
DESIGN HOUR T = 4.64%
DESIGN SPEED = 30 MPH
POSTED SPEED = 30 MPH***

*** NO EXISTING SPEED LIMIT SIGNS.

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
441830-1-52-01	27

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	(X)	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
( )	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
( )	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	(X)	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

( )	NATIONAL HIGHWAY SYSTEM
( )	STRATEGIC INTERMODAL SYSTEM
(X)	STATE HIGHWAY SYSTEM
( )	OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

( )	1 - FREEWAY
( )	2 - RESTRICTIVE w/Service Roads
( )	3 - RESTRICTIVE w/660 ft. Connection Spacing
( )	4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( )	5 - RESTRICTIVE w/440 ft. Connection Spacing
( )	6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( )	7 - BOTH MEDIAN TYPES

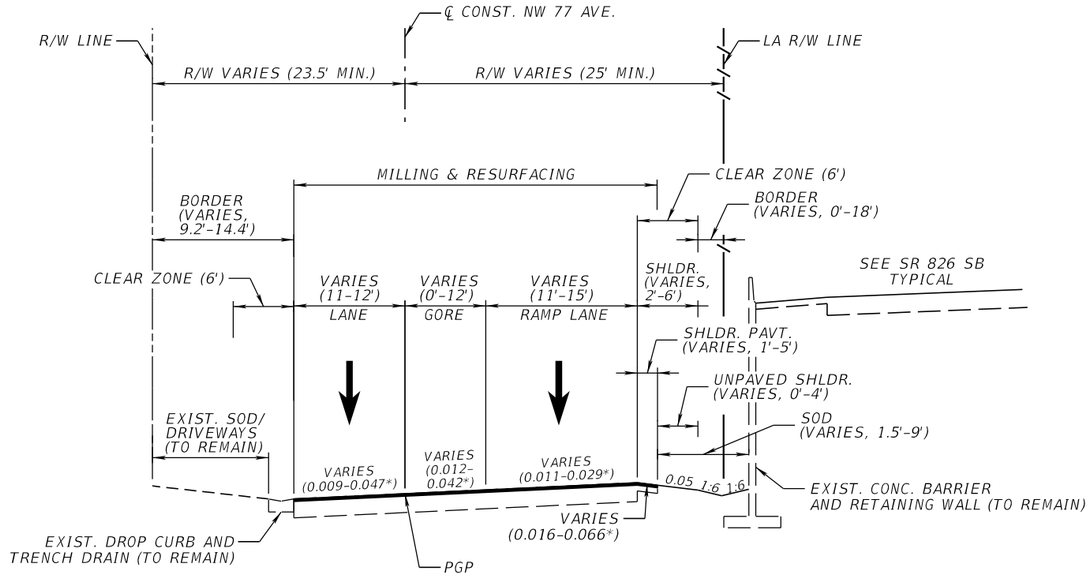
CRITERIA

( )	NEW CONSTRUCTION / RECONSTRUCTION
( )	RESURFACING (LA FACILITIES)
(X)	RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION
1. CROSS SLOPE
2. SHOULDER WIDTH
3. BORDER WIDTH
4. BICYCLE FACILITIES

TYPICAL SECTION No. 27



WEST FRONTAGE ROAD/NW 77TH AVENUE (SECTION 87260152)
STA. 727+87.77 TO STA. 737+12.00 RT,
STA. 730+58.27 TO STA. 737+12.00 LT

* MATCH EXISTING CROSS SLOPE; APPROX. VALUE RANGE SHOWN.

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 3,621
ESTIMATED OPENING YEAR = 2024 AADT = 4,600
ESTIMATED DESIGN YEAR = 2044 AADT = 5,400
K = 8.38% D = 76.4% T = 4.64% (24 HOUR)
DESIGN HOUR T = 4.64%
DESIGN SPEED = 40 MPH
POSTED SPEED = 30 MPH***

*** NO EXISTING SPEED LIMIT SIGNS.

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
441830-1-52-01	28

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( ) C1 : NATURAL
( ) C2 : RURAL
( ) C2T : RURAL TOWN
( ) C3R : SUBURBAN RES.
( ) N/A : L.A. FACILITY
(X) C3C : SUBURBAN COMM.
( ) C4 : URBAN GENERAL
( ) C5 : URBAN CENTER
( ) C6 : URBAN CORE

FUNCTIONAL CLASSIFICATION

( ) INTERSTATE
( ) FREEWAY/EXPWY.
( ) PRINCIPAL ARTERIAL
( ) MINOR ARTERIAL
( ) MAJOR COLLECTOR
( ) MINOR COLLECTOR
(X) LOCAL

HIGHWAY SYSTEM

( ) NATIONAL HIGHWAY SYSTEM
( ) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

( ) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

CRITERIA

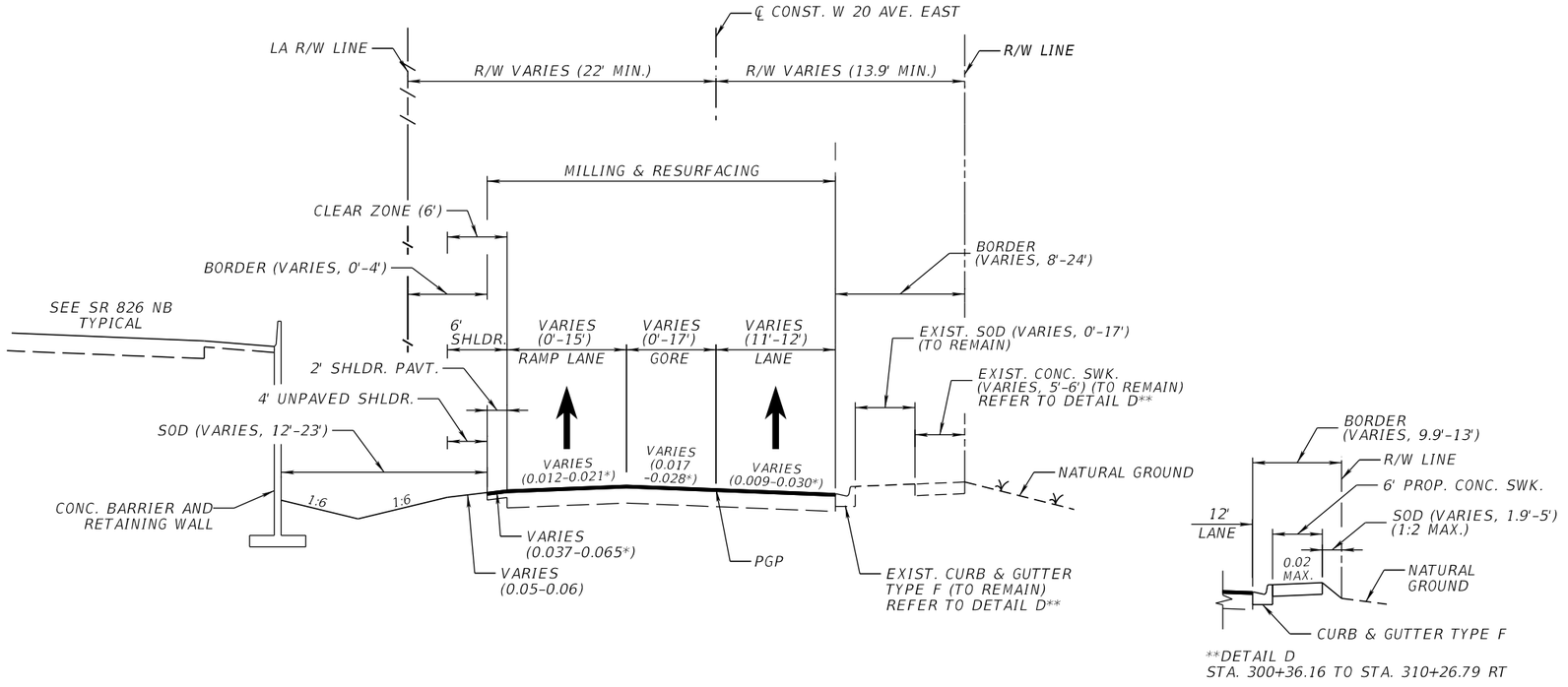
( ) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
(X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION

1. CROSS SLOPE
2. BORDER WIDTH
3. BICYCLE FACILITIES

TYPICAL SECTION No. 28



**DETAIL D
STA. 300+36.16 TO STA. 310+26.79 RT

EAST FRONTAGE ROAD/W 20TH AVENUE EAST (SECTION 87260298)
STA 300+65.28 TO STA. 308+00.00 LT,
STA 300+65.28 TO STA. 310+26.79 RT

* MATCH EXISTING CROSS SLOPE; APPROX. VALUE RANGE SHOWN.

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 13,422
ESTIMATED OPENING YEAR = 2024 AADT = 14,000
ESTIMATED DESIGN YEAR = 2044 AADT = 16,600
K = 7.61% D = 71.2% T = 1.30% (24 HOUR)
DESIGN HOUR T = 1.30%
DESIGN SPEED = 30 MPH
POSTED SPEED = 30 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
441831-1-52-01	29

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( ) C1 : NATURAL
( ) C2 : RURAL
( ) C2T : RURAL TOWN
( ) C3R : SUBURBAN RES.
( ) N/A : L.A. FACILITY
(X) C3C : SUBURBAN COMM.
( ) C4 : URBAN GENERAL
( ) C5 : URBAN CENTER
( ) C6 : URBAN CORE

FUNCTIONAL CLASSIFICATION

( ) INTERSTATE
( ) FREEWAY/EXPWY.
( ) PRINCIPAL ARTERIAL
( ) MINOR ARTERIAL
( ) MAJOR COLLECTOR
( ) MINOR COLLECTOR
(X) LOCAL

HIGHWAY SYSTEM

( ) NATIONAL HIGHWAY SYSTEM
( ) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

( ) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

CRITERIA

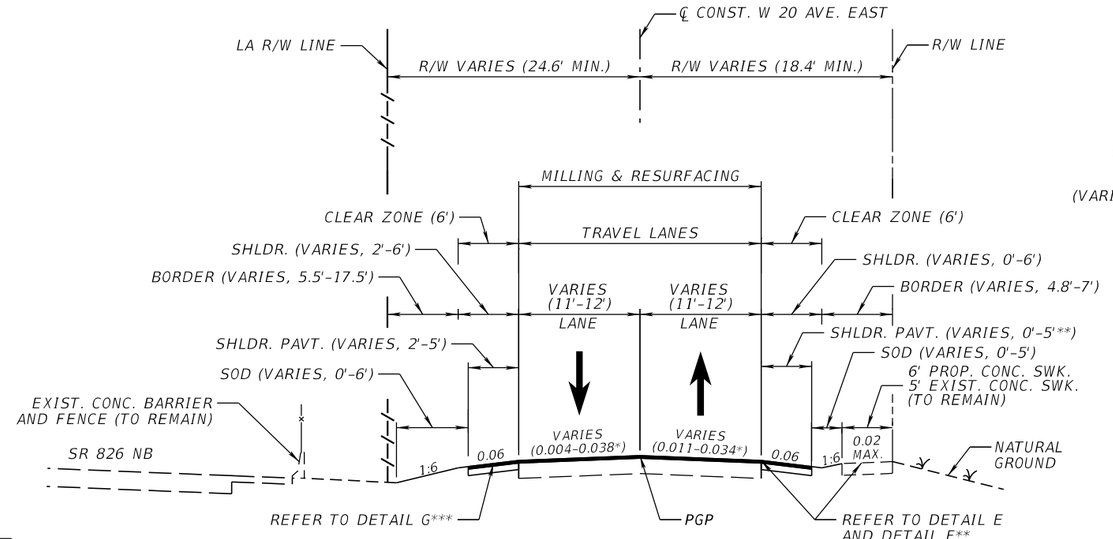
( ) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
(X) RRR (ARTERIALS & COLLECTORS)

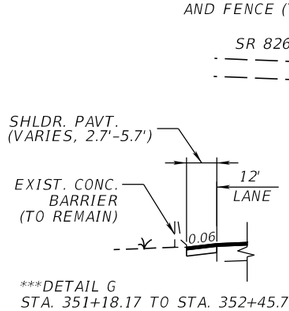
POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION

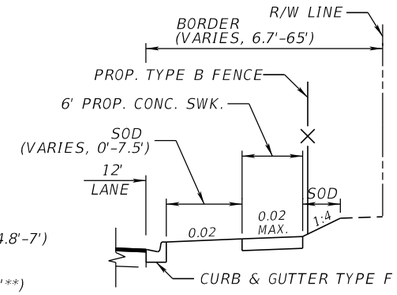
1. LANE WIDTH
2. CROSS SLOPE
3. SHOULDER WIDTH
4. BORDER WIDTH
5. HORIZONTAL CURVE RADIUS, HORIZONTAL CURVE LENGTH AND SUPERELEVATION
6. BICYCLE FACILITIES
7. LATERAL OFFSET
8. GUARDRAIL LATERAL OFFSET
9. SIDEWALK WIDTH

TYPICAL SECTION No. 29

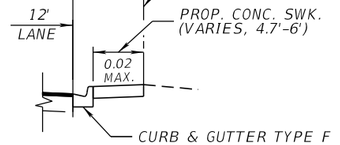




***DETAIL G
STA. 351+18.17 TO STA. 352+45.76 LT



**DETAIL E
STA. 354+62.91 TO STA. 355+83.22 RT



**DETAIL F
STA. 355+83.22 TO STA. 356+88.09 RT

EAST FRONTAGE ROAD/W 20TH AVENUE EAST (SECTION 87260298)
STA. 308+00.00 TO STA. 310+26.79 LT,
STA. 311+36.42 TO STA. 336+06.51,
STA. 339+47.22 TO STA. 363+26.20

* MATCH EXISTING CROSS SLOPE; APPROX. VALUE RANGE SHOWN. MAX. CROSS SLOPE AT SUPERELEVATED SECTIONS:
- 0.070 (RIGHT LANE)
- 0.067 (LEFT LANE)

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 13,422
ESTIMATED OPENING YEAR = 2024 AADT = 14,000
ESTIMATED DESIGN YEAR = 2044 AADT = 16,600
K = 7.61% D = 71.2% T = 1.30% (24 HOUR)
DESIGN HOUR T = 1.30%
DESIGN SPEED = 30 MPH
POSTED SPEED = 30 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
441831-1-52-01	30

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	(X)	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
( )	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
( )	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	(X)	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- ( ) NATIONAL HIGHWAY SYSTEM
- ( ) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- ( ) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

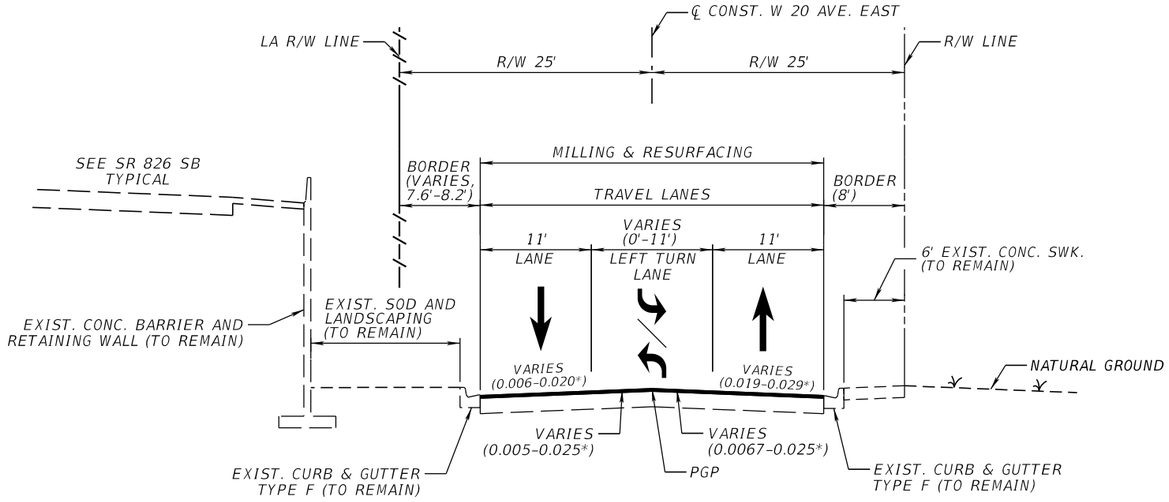
- ( ) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION

1. CROSS SLOPE
2. BICYCLE FACILITIES

TYPICAL SECTION No. 30



EAST FRONTAGE ROAD/W 20TH AVENUE EAST (SECTION 87260298)
STA. 336+06.51 TO STA. 339+47.22

* MATCH EXISTING CROSS SLOPE; APPROX. VALUE RANGE SHOWN.

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 13,422
ESTIMATED OPENING YEAR = 2024 AADT = 14,000
ESTIMATED DESIGN YEAR = 2044 AADT = 16,600
K = 7.61% D = 71.2% T = 1.30% (24 HOUR)
DESIGN HOUR T = 1.30%
DESIGN SPEED = 30 MPH
POSTED SPEED = 30 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
441831-1-52-01	31

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	(X)	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
( )	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
( )	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	(X)	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- ( ) NATIONAL HIGHWAY SYSTEM
- ( ) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- ( ) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

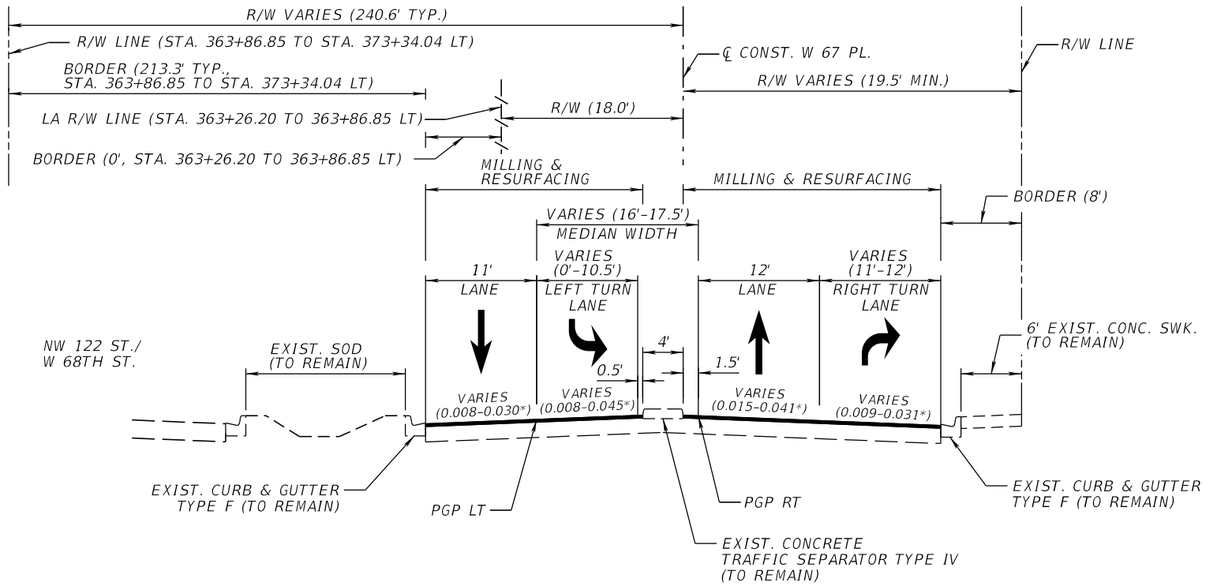
- ( ) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION

1. LANE WIDTH
2. CROSS SLOPE
3. HORIZONTAL CURVE RADIUS, HORIZONTAL CURVE LENGTH AND SUPERELEVATION
4. BICYCLE FACILITIES

TYPICAL SECTION No. 31



EAST FRONTAGE ROAD/W 67TH PLACE (SECTION 87260298)
STA. 363+26.20 TO STA. 373+34.04

* MATCH EXISTING CROSS SLOPE; APPROX. VALUE RANGE SHOWN.

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 13,422
ESTIMATED OPENING YEAR = 2024 AADT = 14,000
ESTIMATED DESIGN YEAR = 2044 AADT = 16,600
K = 7.61% D = 71.2% T = 1.30% (24 HOUR)
DESIGN HOUR T = 1.30%
DESIGN SPEED = 30 MPH
POSTED SPEED = 30 MPH***

*** NO EXISTING SPEED LIMIT SIGNS. ADVISORY SPEED 20 MPH.

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
441831-1-52-01	32

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	(X)	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
( )	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
( )	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	(X)	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- ( ) NATIONAL HIGHWAY SYSTEM
- ( ) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- ( ) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

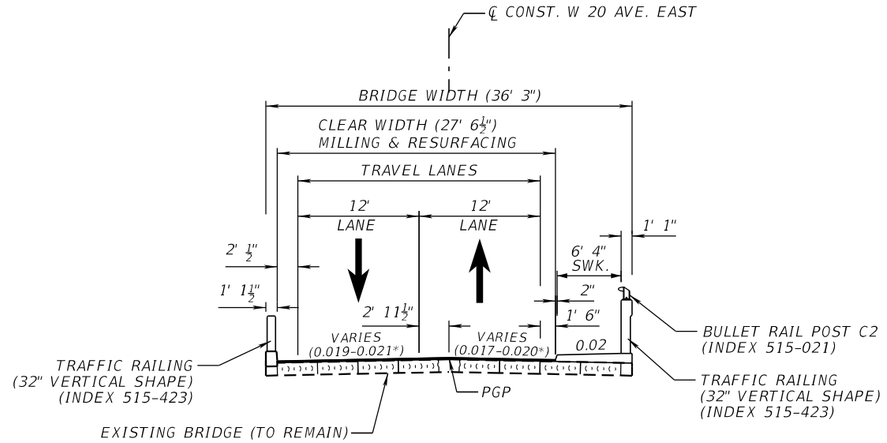
- ( ) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION

1. SHOULDER WIDTH
2. BICYCLE FACILITIES
3. BRIDGE WIDTH

TYPICAL SECTION No. 32



EAST FRONTAGE ROAD/W 20TH AVENUE EAST (SECTION 87260298)
BRIDGE NO. 870570 OVER LITTLE RIVER CANAL (C-7)
STA. 310+26.79 TO STA. 311+36.42

* MATCH EXISTING CROSS SLOPE; APPROX. VALUE RANGE SHOWN.

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 13,422
ESTIMATED OPENING YEAR = 2024 AADT = 14,000
ESTIMATED DESIGN YEAR = 2044 AADT = 16,600
K = 7.61% D = 71.2% T = 1.30% (24 HOUR)
DESIGN HOUR T = 1.30%
DESIGN SPEED = 30 MPH
POSTED SPEED = 30 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
441831-1-52-01	33

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	(X)	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
( )	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
( )	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	(X)	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- ( ) NATIONAL HIGHWAY SYSTEM
- ( ) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- ( ) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

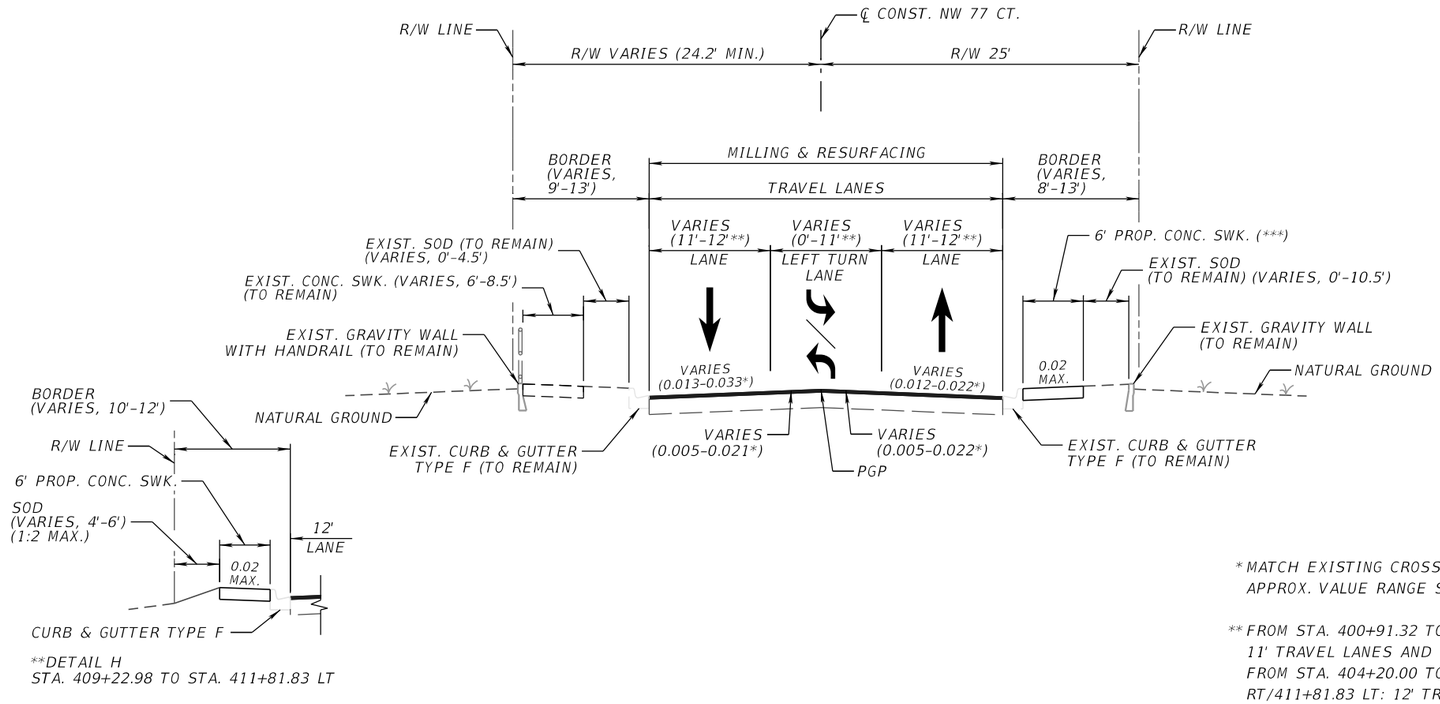
- ( ) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION

1. CROSS SLOPE
2. HORIZONTAL CURVE RADIUS, HORIZONTAL CURVE LENGTH AND SUPERELEVATION
3. BICYCLE FACILITIES

TYPICAL SECTION No. 33



**DETAIL H
STA. 409+22.98 TO STA. 411+81.83 LT

*MATCH EXISTING CROSS SLOPE; APPROX. VALUE RANGE SHOWN.

**FROM STA. 400+91.32 TO STA. 404+20.00: 11' TRAVEL LANES AND 11' LEFT TURN LANES . FROM STA. 404+20.00 TO STA. 409+55.73 RT/411+81.83 LT: 12' TRAVEL LANES.

***6' PROP. SWK. FROM STA. 400+91.32 TO STA. 403+86.95 RT, AND NO SWK. FROM STA. 403+86.95 TO STA. 409+55.73 RT.

WEST FRONTAGE ROAD/NW 77TH COURT (SECTION 87260506)
STA. 400+91.32 TO STA. 411+81.83 LT,
STA. 400+91.32 TO STA. 409+55.73 RT

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 9,322
ESTIMATED OPENING YEAR = 2024 AADT = 10,100
ESTIMATED DESIGN YEAR = 2044 AADT = 13,800
K = 8.30% D = 61.6% T = 2.54% (24 HOUR)
DESIGN HOUR T = 2.54%
DESIGN SPEED = 30 MPH
POSTED SPEED = 20 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
441831-1-52-01	34

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( ) C1 : NATURAL
( ) C2 : RURAL
( ) C2T : RURAL TOWN
( ) C3R : SUBURBAN RES.
(X) C3C : SUBURBAN COMM.
( ) C4 : URBAN GENERAL
( ) C5 : URBAN CENTER
( ) C6 : URBAN CORE
( ) N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

( ) INTERSTATE
( ) FREEWAY/EXPWY.
( ) PRINCIPAL ARTERIAL
( ) MINOR ARTERIAL
( ) MAJOR COLLECTOR
( ) MINOR COLLECTOR
(X) LOCAL

HIGHWAY SYSTEM

( ) NATIONAL HIGHWAY SYSTEM
( ) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

( ) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

CRITERIA

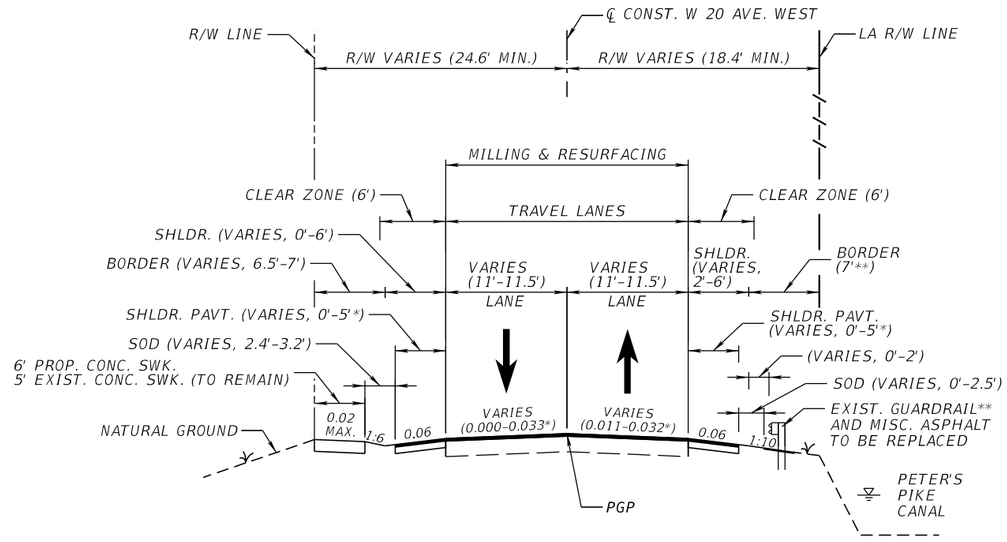
( ) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
(X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION

1. LANE WIDTH
2. CROSS SLOPE
3. SHOULDER WIDTH
4. BORDER WIDTH
5. HORIZONTAL CURVE RADIUS, HORIZONTAL CURVE LENGTH AND SUPERELEVATION
6. BICYCLE FACILITIES
7. GUARDRAIL LATERAL OFFSET

TYPICAL SECTION No. 34



* MATCH EXISTING CROSS SLOPE; APPROX. VALUE RANGE SHOWN.

** STA. 464+90 TO STA. 471+38.24, NO GUARDRAIL AND BORDER WIDTH VARIES 33'-55' RT

WEST FRONTAGE ROAD/W 20TH AVENUE WEST (SECTION 87260521)
STA. 409+55.73 TO STA. 411+81.83 RT,
STA. 412+71.84 TO STA. 436+30.54,
STA. 442+32.45 TO STA. 471+38.24

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 9,322
ESTIMATED OPENING YEAR = 2024 AADT = 10,100
ESTIMATED DESIGN YEAR = 2044 AADT = 13,800
K = 8.30% D = 61.6% T = 2.54% (24 HOUR)
DESIGN HOUR T = 2.54%
DESIGN SPEED = 35 MPH
POSTED SPEED = 35 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
441831-1-52-01	35

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	(X)	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
( )	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
( )	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	(X)	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

- ( ) NATIONAL HIGHWAY SYSTEM
- ( ) STRATEGIC INTERMODAL SYSTEM
- (X) STATE HIGHWAY SYSTEM
- ( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

- ( ) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

CRITERIA

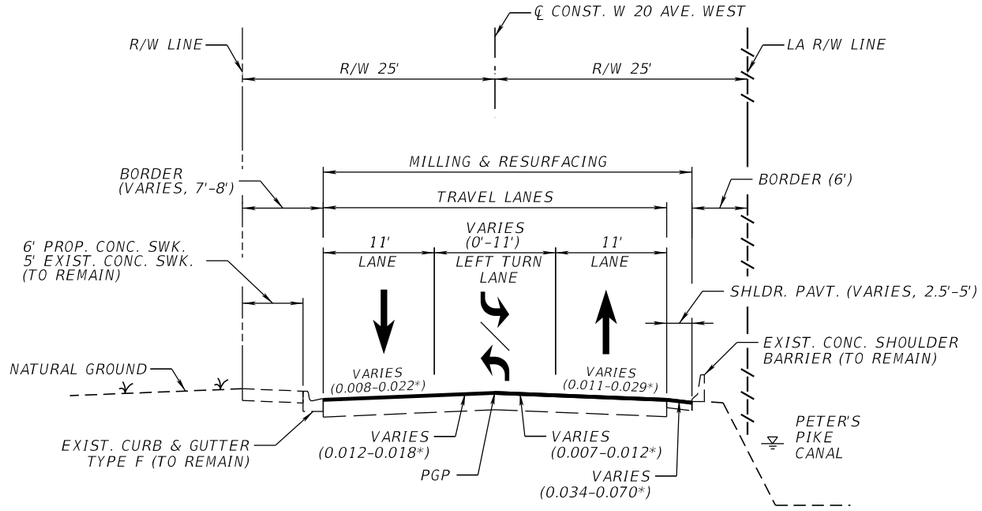
- ( ) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RESURFACING (LA FACILITIES)
- (X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION

1. CROSS SLOPE
2. SHOULDER WIDTH
3. BORDER WIDTH
4. BICYCLE FACILITIES
5. LATERAL OFFSET

TYPICAL SECTION No. 35



WEST FRONTAGE ROAD/W 20TH AVENUE WEST (SECTION 87260521)
STA. 436+30.54 TO STA. 442+32.45

* MATCH EXISTING CROSS SLOPE; APPROX. VALUE RANGE SHOWN.

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 9,322
ESTIMATED OPENING YEAR = 2024 AADT = 10,100
ESTIMATED DESIGN YEAR = 2044 AADT = 13,800
K = 8.30% D = 61.6% T = 2.54% (24 HOUR)
DESIGN HOUR T = 2.54%
DESIGN SPEED = 35 MPH
POSTED SPEED = 35 MPH

NOT TO SCALE

FINANCIAL PROJECT ID	SHEET NO.
441831-1-52-01	36

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	(X)	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
( )	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
( )	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	(X)	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

( ) NATIONAL HIGHWAY SYSTEM
( ) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

( ) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

CRITERIA

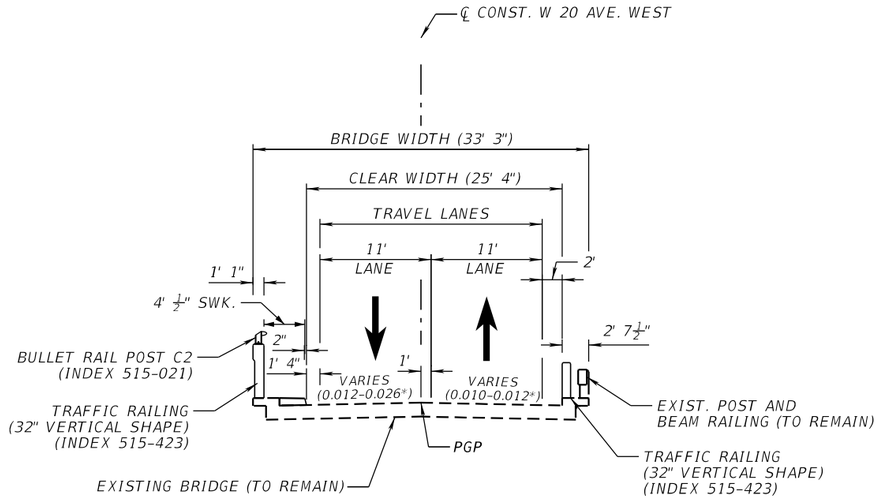
( ) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
(X) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN VARIATION

1. LANE WIDTH
2. CROSS SLOPE
3. SHOULDER WIDTH
4. BICYCLE FACILITIES
5. BRIDGE WIDTH
6. SIDEWALK WIDTH

TYPICAL SECTION No. 36



WEST FRONTAGE ROAD/W 20TH AVENUE WEST (SECTION 87260521)
BRIDGE NO. 870569 OVER LITTLE RIVER CANAL (C-7)
STA. 411+81.83 TO STA. 412+71.84

* MATCH EXISTING CROSS SLOPE; APPROX. VALUE RANGE SHOWN.

TRAFFIC DATA

CURRENT YEAR = 2019 AADT = 9,322
ESTIMATED OPENING YEAR = 2024 AADT = 10,100
ESTIMATED DESIGN YEAR = 2044 AADT = 13,800
K = 8.30% D = 61.6% T = 2.54% (24 HOUR)
DESIGN HOUR T = 2.54%
DESIGN SPEED = 35 MPH
POSTED SPEED = 35 MPH

NOT TO SCALE

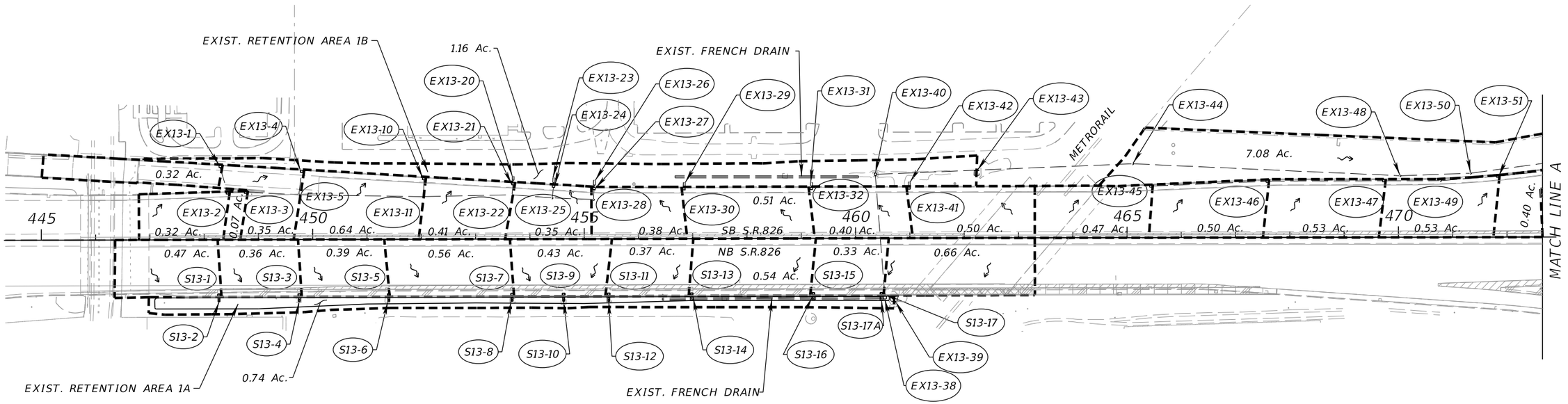
FINANCIAL PROJECT ID	SHEET NO.
441831-1-52-01	37

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

APPENDIX F
Pre-Development Conditions – Curve Number Calcs
Ad-ICPR Report

Basin 13

PRE-DEVELOPMENT CONDITIONS



BASIN 13 TOTAL AREA = 25.56 ACRES
SUB-BASIN 13A TOTAL AREA = 4.85 ACRES
SUB-BASIN 13B TOTAL AREA = 5.41 ACRES
SUB-BASIN 13C TOTAL AREA = 15.30 ACRES

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
826	MIAMI-DADE	432687-1-52-01

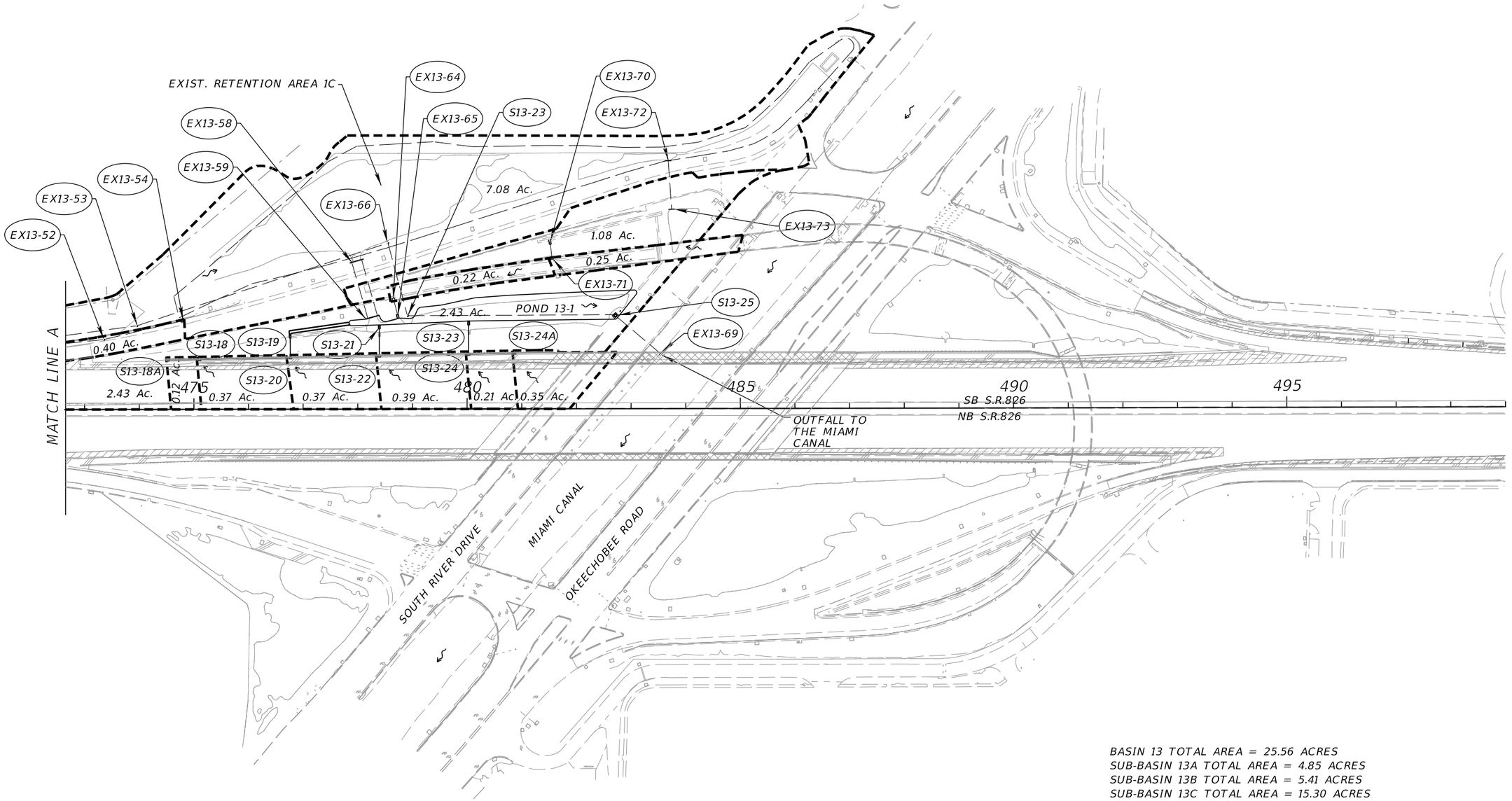
DRAINAGE MAP (BASIN 13)

SHEET NO. J-893

malfonso 5/6/2019 3:14:27 PM P:\432687152\01 SR-826-I-75 Express Lanes\drainage\Post-Development Conditions\drmprdl3.dgn

PRE-DEVELOPMENT CONDITIONS

0 50 200
Feet



BASIN 13 TOTAL AREA = 25.56 ACRES
SUB-BASIN 13A TOTAL AREA = 4.85 ACRES
SUB-BASIN 13B TOTAL AREA = 5.41 ACRES
SUB-BASIN 13C TOTAL AREA = 15.30 ACRES

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
826	MIAMI-DADE	432687-1-52-01

DRAINAGE MAP (BASIN 13)

SHEET NO.
J-894

malfonso 5/6/2019 3:14:28 PM P:\432687152\01 SR-826-I-75 Express Lanes\drainage\Post-Development Conditions\drmprdl3.dgn

Curve Number Calculations

PRE-DEVELOPMENT CONDITIONS
AREA BREAKDOWN (BASIN B-13)

SUB-BASIN	TOTAL DRAINAGE AREA (ACRES)	PERVIOUS DRAINAGE AREA (ACRES)	PERVIOUS AREA CURVE NUMBER	IMPERVIOUS DRAINAGE AREA (ACRES)	IMPERVIOUS AREA CURVE NUMBER	COMPOSITE CURVE NUMBER
B13-1	0.47	0.00	61	0.47	96	96
B13-3	0.36	0.00	61	0.36	96	96
B13-5	0.39	0.00	61	0.39	96	96
B13-7	0.56	0.00	61	0.56	96	96
B13-9	0.43	0.00	61	0.43	96	96
B13-11	0.37	0.00	61	0.37	96	96
B13-13	0.54	0.00	61	0.54	96	96
B13-15	0.33	0.00	61	0.33	96	96
B13-17	0.66	0.00	61	0.66	96	96
BX13-39	0.74	0.74	61	0.00	96	61
Total Sub-Basin B-13A	**4.85**	**0.74**	**61**	**4.11**	**96**	**91**
BX13-1	0.32	0.00	61	0.32	96	96
BX13-2	0.32	0.00	61	0.32	96	96
BX13-3	0.07	0.00	61	0.07	96	96
BX13-4	0.35	0.00	61	0.35	96	96
BX13-10	0.64	0.00	61	0.64	96	96
BX13-21	0.41	0.00	61	0.41	96	96
BX13-24	0.35	0.00	61	0.35	96	96
BX13-27	0.38	0.00	61	0.38	96	96
BX13-30	0.51	0.00	61	0.51	96	96
BX13-32	0.40	0.00	61	0.40	96	96
BX13-41	0.50	0.00	61	0.50	96	96
BX13-43	1.16	1.16	61	0.00	96	61
Total Sub-Basin B-13B	**5.41**	**1.16**	**61**	**4.25**	**96**	**88**
B13-18	0.37	0.00	61	0.37	96	96
B13-18A	0.12	0.00	61	0.12	96	96
B13-20	0.37	0.00	61	0.37	96	96
B13-22	0.39	0.00	61	0.39	96	96
B13-24	0.21	0.00	61	0.21	96	96
B13-24A	0.35	0.00	61	0.35	96	96
BX13-45	0.47	0.00	61	0.47	96	96
BX13-46	0.50	0.00	61	0.50	96	96
BX13-47	0.53	0.00	61	0.53	96	96
BX13-51	0.53	0.00	61	0.53	96	96
BX13-54	0.40	0.00	61	0.40	96	96
BX13-58	7.08	5.95	61	1.13	96	67
BX13-64	0.22	0.00	61	0.22	96	96
BPOND13-1	2.43	2.43	61	0.00	96	61
BX13-71	0.25	0.00	61	0.25	96	96
BX13-73	1.08	1.08	61	0.00	96	61
Total Sub-Basin B-13C	**15.30**	**9.46**	**61**	**5.84**	**96**	**74**
Total Basin B-13	**25.56**	**11.36**	**61**	**14.20**	**96**	**80**

Average Hydraulic Conductivity

Average Hydraulic Conductivity

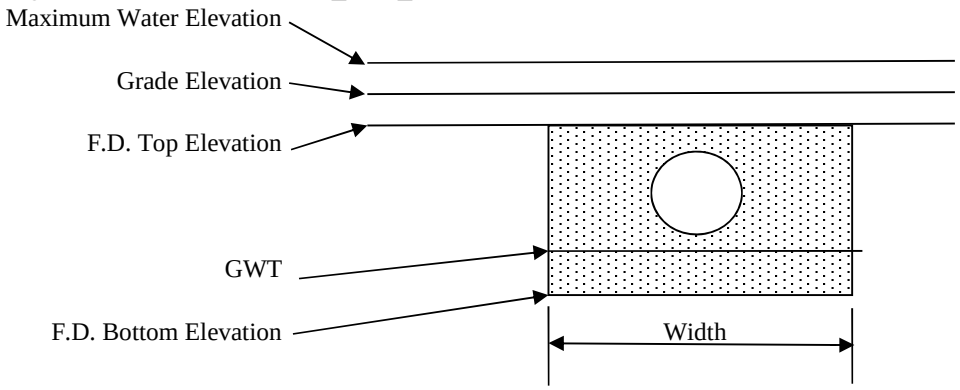
Basin B-13	
Percolation Test	P-26
Average Flow to 10 ft. depth (gpm)	18.40
Depth to Water Table (ft)	0.90
Head Maintained (ft)	0.50
Borehole Diameter (ft)	0.604
Borehole Depth (ft)	10.00
Du (ft)	0.50
Average Flow (cfs)	0.0410
Ds (ft)	9.10
Hydraulic Conductivity K (cfs/ft2-ft head)	**4.55E-03**

Rating Curve Calculations

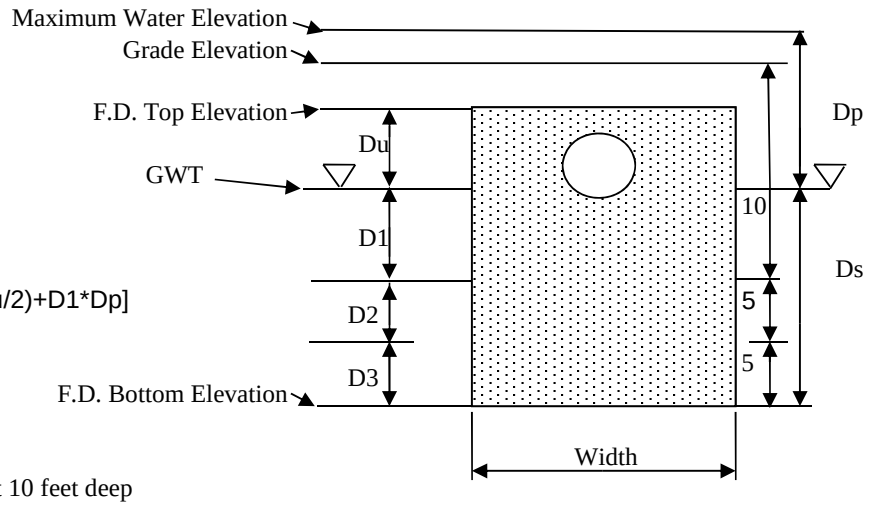
Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT_13



Maximum Water Elevation =	**6.00**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**3.00**	ft.NAVD	
F.D.Top Elevation =	**1.45**	ft.NAVD	
Ground Water Table =	**0.95**	ft.NAVD	
F.D. Bottom Elevation =	**-4.56**	ft.NAVD	
Width =	**4.00**	feet.	
Pipe Diameter =	**24**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**4.55E-03**	cfs/ft^2-ft head	(P-26)
Hydraulic Conductivity K15 =	**4.55E-03**	cfs/ft^2-ft head	(P-26)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____
Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT_13

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	0.95	***2.20***
(ft)	(cfs/ft)	(cfs/ft)
0.95	0.000	0.000
1.95	0.054	0.000
2.20	0.067	0.000
6.00	0.275	0.205

Rating Curve (Q)

Headwater	***Water Table Elev. (ft)***	
	0.95	***2.20***
(ft)	(cfs)	(cfs)
0.95	0.00	0.00
1.95	0.05	0.00
2.20	0.07	0.00
6.00	0.28	0.21

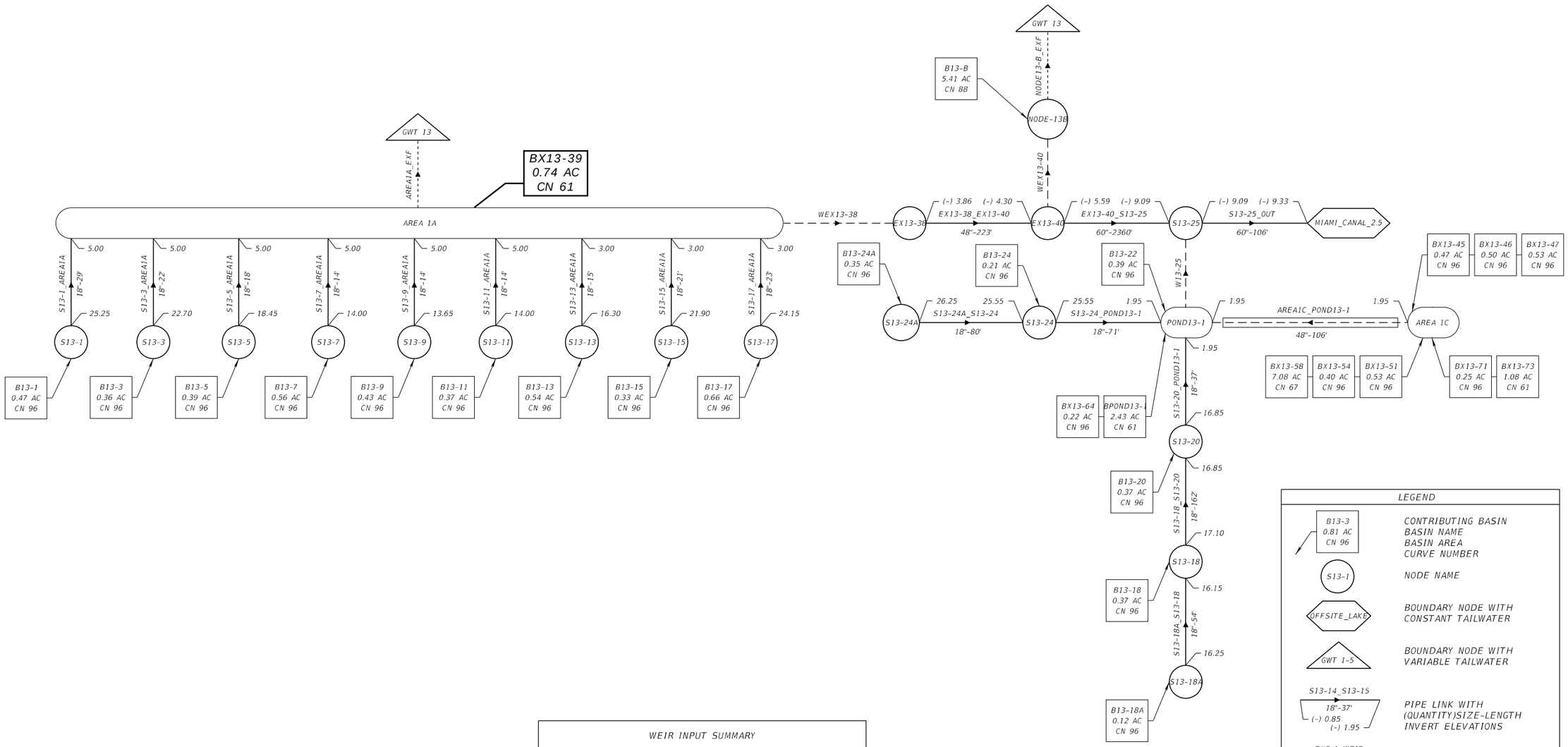
Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

Rating Curve Adjusted (Q)

Tailwater (ft)	Headwater (ft)	Discharge (cfs)
0.95	0.95	0.00
0.95	1.95	0.05
0.95	2.20	0.07
0.95	6.00	0.10
2.20	2.20	0.00
2.20	6.00	0.10

Nodal Diagram

PRE-DEVELOPMENT CONDITIONS



WEIR INPUT SUMMARY							
WEIR	VERT. TYPE	HORIZ.	CIRC.	RECT.	INV.	SPAN	RISE
WEX13-40	-	X	-	X	3.70'	54"	36"
WEX13-25	-	X	-	X	2.65'	54"	36"
WEX13-38	-	X	-	X	3.95'	42"	47"

LEGEND

B13-3 0.81 AC CN 96	CONTRIBUTING BASIN BASIN NAME BASIN AREA CURVE NUMBER
S13-1	NODE NAME
OFFSITE_LAKE	BOUNDARY NODE WITH CONSTANT TAILWATER
GWT 1-5	BOUNDARY NODE WITH VARIABLE TAILWATER
S13-14_S13-15 18"-37' (-) 0.85 (-) 1.95	PIPE LINK WITH (QUANTITY)SIZE-LENGTH INVERT ELEVATIONS
EX2-1_WEIR	WEIR LINK
S13-12_EXF	RATING CURVE LINK
S13-15_S13-17 24"x38"-126' 0.64 0.64	EXFILTRATION TRENCH LINK WITH LENGTH AND INVERT ELEVATIONS

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
826	MIAMI-DADE	447165-1-52-01 441830-1-52-01 441831-1-52-01

NODAL DIAGRAM BASIN 13

SHEET NO.

AMATHURA 11/10/2020 2:10:47 PM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\44716515201\zz_working\AM's Work

SR-826 / I-75 MANAGED LANES - BASIN 13
PRE-DEVELOPMENT CONDITIONS

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
AREA1A	Basin 13	25YR-72HR	60.08	4.26	6.00	-0.0144	11469	60.02	29.13	60.08	26.94
AREA1C	Basin 13	25YR-72HR	93.19	3.62	6.00	0.0008	129595	60.02	59.59	60.85	16.81
EX13-38	Basin 13	25YR-72HR	60.10	1.24	6.00	-0.0053	135	60.08	7.51	60.07	8.91
EX13-40	Basin 13	25YR-72HR	60.09	1.23	6.00	0.0021	430	60.07	26.28	60.09	25.35
GW1_13	Basin 13	25YR-72HR	72.00	2.20	99.00	0.0003	0	60.08	29.69	0.00	0.00
MIAMI_CANAL_2.5	Basin 13	25YR-72HR	0.00	0.95	99.00	0.0000	13	60.10	25.31	0.00	0.00
NODE-13B	Basin 13	25YR-72HR	60.11	4.23	6.00	0.0027	17618	60.02	33.00	60.11	28.17
POND13-1	Basin 13	25YR-72HR	96.00	3.62	6.00	0.0020	152613	60.05	34.52	0.00	0.00
S13-1	Basin 13	25YR-72HR	60.02	25.65	30.29	-0.0050	131	60.02	2.92	60.02	2.91
S13-11	Basin 13	25YR-72HR	60.02	14.32	19.03	-0.0048	121	60.02	2.29	60.02	2.29
S13-13	Basin 13	25YR-72HR	60.02	16.64	21.33	-0.0050	122	60.02	3.35	60.02	3.35
S13-15	Basin 13	25YR-72HR	60.02	21.98	26.92	0.0050	121	60.02	2.05	60.02	2.04
S13-17	Basin 13	25YR-72HR	60.02	24.59	29.18	-0.0048	128	60.02	4.09	60.02	4.09
S13-18	Basin 13	25YR-72HR	60.04	18.21	20.54	-0.0011	223	60.02	3.03	60.04	3.02
S13-18A	Basin 13	25YR-72HR	60.04	18.22	19.68	-0.0011	115	60.02	0.74	60.05	0.74
S13-20	Basin 13	25YR-72HR	60.04	17.89	24.32	-0.0042	248	60.02	5.30	60.03	5.29
S13-24	Basin 13	25YR-72HR	60.03	26.32	28.96	-0.0045	219	60.02	3.47	60.03	3.46
S13-24A	Basin 13	25YR-72HR	60.02	27.02	29.64	-0.0008	172	60.02	2.17	60.02	2.17
S13-25	Basin 13	25YR-72HR	60.10	1.00	6.00	0.0027	421	60.09	25.35	60.10	25.31
S13-3	Basin 13	25YR-72HR	60.02	22.89	27.71	0.0049	124	60.02	2.23	60.02	2.23
S13-5	Basin 13	25YR-72HR	60.02	18.72	23.49	-0.0050	123	60.02	2.42	60.02	2.42
S13-7	Basin 13	25YR-72HR	60.02	14.54	19.06	-0.0048	122	60.02	3.47	60.02	3.47
S13-9	Basin 13	25YR-72HR	60.02	14.06	18.68	-0.0050	122	60.02	2.67	60.02	2.67

Qpre = 25.31 cfs

```
================================================================================
==== Basins ====================================================================
================================================================================

         Name: B-13B                   Node: NODE-13B              Status: Onsite
        Group: Basin 13                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 5.410                 Time Shift(hrs): 0.00
          Curve Number: 88.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------
         Name: B13-1                   Node: S13-1                 Status: Onsite
        Group: Basin 13                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.470                 Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------
         Name: B13-11                  Node: S13-11                Status: Onsite
        Group: Basin 13                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.370                 Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------
         Name: B13-13                  Node: S13-13                Status: Onsite
        Group: Basin 13                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.540                 Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------
         Name: B13-15                  Node: S13-15                Status: Onsite
        Group: Basin 13                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.330                 Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------
         Name: B13-17                  Node: S13-17                Status: Onsite
        Group: Basin 13                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
```

Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.660 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B13-18 Node: S13-18 Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.370 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B13-18A Node: S13-18A Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.120 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B13-20 Node: S13-20 Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.370 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B13-22 Node: POND13-1 Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.390 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B13-24 Node: S13-24 Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.210 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B13-24A Node: S13-24A Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

```
        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.350                   Time Shift(hrs): 0.00
            Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: B13-3                    Node: S13-3                  Status: Onsite
        Group: Basin 13                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.360                   Time Shift(hrs): 0.00
            Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: B13-5                    Node: S13-5                  Status: Onsite
        Group: Basin 13                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.390                   Time Shift(hrs): 0.00
            Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: B13-7                    Node: S13-7                  Status: Onsite
        Group: Basin 13                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.560                   Time Shift(hrs): 0.00
            Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: B13-9                    Node: S13-9                  Status: Onsite
        Group: Basin 13                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.430                   Time Shift(hrs): 0.00
            Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: BPOND13-1                Node: POND13-1               Status: Onsite
        Group: Basin 13                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 2.430                   Time Shift(hrs): 0.00
            Curve Number: 61.00               Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
-------------------------------------------------------------------------------------------------
        Name: BX13-39                 Node: AREA1A                Status: Onsite
       Group: Basin 13                Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                  Peaking Factor: 256.0
         Rainfall File:                 Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
            Area(ac): 0.740                Time Shift(hrs): 0.00
        Curve Number: 61.00            Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
        Name: BX13-45                 Node: AREA1C                Status: Onsite
       Group: Basin 13                Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                  Peaking Factor: 256.0
         Rainfall File:                 Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
            Area(ac): 0.470                Time Shift(hrs): 0.00
        Curve Number: 96.00            Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
        Name: BX13-46                 Node: AREA1C                Status: Onsite
       Group: Basin 13                Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                  Peaking Factor: 256.0
         Rainfall File:                 Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
            Area(ac): 0.500                Time Shift(hrs): 0.00
        Curve Number: 96.00            Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
        Name: BX13-47                 Node: AREA1C                Status: Onsite
       Group: Basin 13                Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                  Peaking Factor: 256.0
         Rainfall File:                 Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
            Area(ac): 0.530                Time Shift(hrs): 0.00
        Curve Number: 96.00            Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
        Name: BX13-51                 Node: AREA1C                Status: Onsite
       Group: Basin 13                Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                  Peaking Factor: 256.0
         Rainfall File:                 Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
            Area(ac): 0.530                Time Shift(hrs): 0.00
        Curve Number: 96.00            Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
        Name: BX13-54                 Node: AREA1C                Status: Onsite
       Group: Basin 13                Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                  Peaking Factor: 256.0
         Rainfall File:                 Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
            Area(ac): 0.400                Time Shift(hrs): 0.00
        Curve Number: 96.00            Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00
```

Name: BX13-58 Node: AREA1C Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 7.080 Time Shift(hrs): 0.00
Curve Number: 67.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX13-64 Node: POND13-1 Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.220 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX13-71 Node: AREA1C Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.250 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX13-73 Node: AREA1C Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 1.080 Time Shift(hrs): 0.00
Curve Number: 61.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

==========
==== Nodes ==========
==========

Name: AREA1A Base Flow(cfs): 0.000 Init Stage(ft): 0.950
Group: Basin 13 Warn Stage(ft): 6.000
Type: Stage/Area

Stage(ft)	Area(ac)
0.950	0.0004
2.990	0.0004
3.000	0.0600
5.000	0.3800
6.000	0.5000

Name: AREA1C Base Flow(cfs): 0.000 Init Stage(ft): 0.950

Group: Basin 13 Warn Stage(ft): 6.000
Type: Stage/Area

Stage(ft)	Area(ac)
0.950	0.0004
1.950	2.7500
3.650	2.9700
5.000	3.1500
6.000	3.2800

Name: EX13-38 Base Flow(cfs): 0.000 Init Stage(ft): 0.950
Group: Basin 13 Warn Stage(ft): 6.000
Type: Stage/Area

Stage(ft)	Area(ac)
0.950	0.0004
3.950	0.0004

Name: EX13-40 Base Flow(cfs): 0.000 Init Stage(ft): 0.950
Group: Basin 13 Warn Stage(ft): 6.000
Type: Stage/Area

Stage(ft)	Area(ac)
0.950	0.0004
3.700	0.0004

Name: GWT_13 Base Flow(cfs): 0.000 Init Stage(ft): 0.950
Group: Basin 13 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	0.950
108.00	0.950

Name: MIAMI_CANAL_2.5 Base Flow(cfs): 0.000 Init Stage(ft): 0.950
Group: Basin 13 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	0.950
108.00	0.950

Name: NODE-13B Base Flow(cfs): 0.000 Init Stage(ft): 0.950
Group: Basin 13 Warn Stage(ft): 6.000
Type: Stage/Area

Stage(ft)	Area(ac)
0.950	0.0004
1.940	0.0004
1.950	0.2304
3.700	0.3604
3.950	0.3804

4.450	0.4240
5.000	0.4600
6.000	0.5300

Name: POND13-1 Base Flow(cfs): 0.000 Init Stage(ft): 0.950
Group: Basin 13 Warn Stage(ft): 6.000
Type: Stage/Area

Stage(ft)	Area(ac)
0.950	0.0004
1.950	3.2000
3.650	3.5000
5.000	3.7500
6.000	3.9400

Name: S13-1 Base Flow(cfs): 0.000 Init Stage(ft): 25.250
Group: Basin 13 Warn Stage(ft): 30.290
Type: Stage/Area

Stage(ft)	Area(ac)
25.200	0.0004
30.290	0.0004

Name: S13-11 Base Flow(cfs): 0.000 Init Stage(ft): 14.000
Group: Basin 13 Warn Stage(ft): 19.030
Type: Stage/Area

Stage(ft)	Area(ac)
13.000	0.0004
19.030	0.0004

Name: S13-13 Base Flow(cfs): 0.000 Init Stage(ft): 16.300
Group: Basin 13 Warn Stage(ft): 21.330
Type: Stage/Area

Stage(ft)	Area(ac)
15.300	0.0004
21.330	0.0004

Name: S13-15 Base Flow(cfs): 0.000 Init Stage(ft): 21.900
Group: Basin 13 Warn Stage(ft): 26.920
Type: Stage/Area

Stage(ft)	Area(ac)
20.900	0.0004
26.920	0.0004

Name: S13-17 Base Flow(cfs): 0.000 Init Stage(ft): 24.150
Group: Basin 13 Warn Stage(ft): 29.180
Type: Stage/Area

Stage(ft)	Area(ac)

23.000	0.0004
29.180	0.0004

Name: S13-18 Base Flow(cfs): 0.000 Init Stage(ft): 16.150
Group: Basin 13 Warn Stage(ft): 20.540
Type: Stage/Area

Stage(ft)	Area(ac)
14.150	0.0004
20.540	0.0004

Name: S13-18A Base Flow(cfs): 0.000 Init Stage(ft): 16.250
Group: Basin 13 Warn Stage(ft): 19.680
Type: Stage/Area

Stage(ft)	Area(ac)
14.250	0.0004
19.680	0.0004

Name: S13-20 Base Flow(cfs): 0.000 Init Stage(ft): 16.850
Group: Basin 13 Warn Stage(ft): 24.320
Type: Stage/Area

Stage(ft)	Area(ac)
14.850	0.0004
24.320	0.0004

Name: S13-24 Base Flow(cfs): 0.000 Init Stage(ft): 25.550
Group: Basin 13 Warn Stage(ft): 28.960
Type: Stage/Area

Stage(ft)	Area(ac)
23.550	0.0004
28.960	0.0004

Name: S13-24A Base Flow(cfs): 0.000 Init Stage(ft): 26.250
Group: Basin 13 Warn Stage(ft): 29.640
Type: Stage/Area

Stage(ft)	Area(ac)
24.250	0.0004
29.640	0.0004

Name: S13-25 Base Flow(cfs): 0.000 Init Stage(ft): 0.950
Group: Basin 13 Warn Stage(ft): 6.000
Type: Stage/Area

Stage(ft)	Area(ac)
0.950	0.0004
3.650	0.0004

Name: S13-3 Base Flow(cfs): 0.000 Init Stage(ft): 22.700
Group: Basin 13 Warn Stage(ft): 27.710
Type: Stage/Area

Stage(ft)	Area(ac)
21.700	0.0004
27.710	0.0004

Name: S13-5 Base Flow(cfs): 0.000 Init Stage(ft): 18.450
Group: Basin 13 Warn Stage(ft): 23.490
Type: Stage/Area

Stage(ft)	Area(ac)
17.450	0.0004
23.490	0.0004

Name: S13-7 Base Flow(cfs): 0.000 Init Stage(ft): 14.000
Group: Basin 13 Warn Stage(ft): 19.060
Type: Stage/Area

Stage(ft)	Area(ac)
13.000	0.0004
19.060	0.0004

Name: S13-9 Base Flow(cfs): 0.000 Init Stage(ft): 13.650
Group: Basin 13 Warn Stage(ft): 18.680
Type: Stage/Area

Stage(ft)	Area(ac)
12.650	0.0004
18.680	0.0004

Operating Tables

Name: E_OPT_13 Group: Basin 13
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
0.950	0.95	0.00
0.950	1.95	0.05
0.950	2.20	0.07
0.950	6.00	0.10
2.200	2.20	0.00
2.200	6.00	0.10

Pipes

Name: AREA1C_POND13-1 From Node: AREA1C Length(ft): 106.00
Group: Basin 13 To Node: POND13-1 Count: 2
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	48.00	48.00	Flow:	Both
Rise(in):	48.00	48.00	Entrance Loss Coef:	0.50
Invert(ft):	1.950	1.950	Exit Loss Coef:	1.00
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX13-38_EX13-40	From Node:	EX13-38	Length(ft):	223.00
Group:	Basin 13	To Node:	EX13-40	Count:	1
				Friction Equation:	Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	48.00	48.00	Flow:	Both
Rise(in):	48.00	48.00	Entrance Loss Coef:	0.50
Invert(ft):	-3.860	-4.300	Exit Loss Coef:	1.46
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX13-40_S13-25	From Node:	EX13-40	Length(ft):	2360.00
Group:	Basin 13	To Node:	S13-25	Count:	1
				Friction Equation:	Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	60.00	60.00	Flow:	Both
Rise(in):	60.00	60.00	Entrance Loss Coef:	0.50
Invert(ft):	-5.590	-9.090	Exit Loss Coef:	1.00
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	P13-25_OUT	From Node:	S13-25	Length(ft):	106.00
Group:	Basin 13	To Node:	MIAMI_CANAL_2.5	Count:	1
				Friction Equation:	Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	60.00	60.00	Flow:	Both
Rise(in):	60.00	60.00	Entrance Loss Coef:	0.50
Invert(ft):	-9.090	-9.330	Exit Loss Coef:	1.00
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
			Outlet Ctrl Spec:	Use dc or tw

Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S13-11_AREA1A	From Node: S13-11	Length(ft): 14.00
Group:	Basin 13	To Node: AREA1A	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 1.00
Invert(ft):	14.000	5.000	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S13-13_AREA1A	From Node: S13-13	Length(ft): 15.00
Group:	Basin 13	To Node: AREA1A	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 1.00
Invert(ft):	16.300	3.000	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S13-15_AREA1A	From Node: S13-15	Length(ft): 21.00
Group:	Basin 13	To Node: AREA1A	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 1.00
Invert(ft):	21.900	3.000	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:

Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S13-17_AREA1A	From Node: S13-17	Length(ft):	23.00
Group:	Basin 13	To Node: AREA1A	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.00
Invert(ft):	24.150	3.000	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S13-18_S13-20	From Node: S13-18	Length(ft):	162.00
Group:	Basin 13	To Node: S13-20	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	17.100	16.850	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S13-18A_S13-18	From Node: S13-18A	Length(ft):	54.00
Group:	Basin 13	To Node: S13-18	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	0.10
Invert(ft):	16.250	16.150	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

```
-------------------------------------------------------------------------------------------------
         Name: S13-1_AREA1A        From Node: S13-1              Length(ft): 29.00
        Group: Basin 13              To Node: AREA1A                 Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 18.00          18.00                    Entrance Loss Coef: 0.50
     Rise(in): 18.00          18.00                        Exit Loss Coef: 1.00
   Invert(ft): 25.250         5.000                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                    Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall



-------------------------------------------------------------------------------------------------
         Name: S13-20_POND13-1     From Node: S13-20             Length(ft): 37.00
        Group: Basin 13              To Node: POND13-1               Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 18.00          18.00                    Entrance Loss Coef: 0.50
     Rise(in): 18.00          18.00                        Exit Loss Coef: 1.00
   Invert(ft): 16.850         1.950                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                    Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall



-------------------------------------------------------------------------------------------------
         Name: S13-24_POND13-1     From Node: S13-24             Length(ft): 71.00
        Group: Basin 13              To Node: POND13-1               Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 18.00          18.00                    Entrance Loss Coef: 0.50
     Rise(in): 18.00          18.00                        Exit Loss Coef: 1.00
   Invert(ft): 25.550         1.950                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                    Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall



-------------------------------------------------------------------------------------------------
         Name: S13-24A_S13-24      From Node: S13-24A            Length(ft): 80.00
        Group: Basin 13              To Node: S13-24                 Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
```

Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	26.250	25.550	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S13-3_AREA1A	From Node: S13-3	Length(ft):	22.00
Group:	Basin 13	To Node: AREA1A	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.00
Invert(ft):	22.700	5.000	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S13-5_AREA1A	From Node: S13-5	Length(ft):	18.00
Group:	Basin 13	To Node: AREA1A	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.00
Invert(ft):	18.450	5.000	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S13-7_AREA1A	From Node: S13-7	Length(ft):	14.00
Group:	Basin 13	To Node: AREA1A	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.00
Invert(ft):	14.000	5.000	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn

```
 Bot Clip(in): 0.000          0.000                      Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: S13-9_AREA1A        From Node: S13-9              Length(ft): 14.00
        Group: Basin 13              To Node: AREA1A                Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                             Flow: Both
     Span(in): 18.00          18.00                     Entrance Loss Coef: 0.50
     Rise(in): 18.00          18.00                         Exit Loss Coef: 1.00
   Invert(ft): 13.650         5.000                         Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


===============================================================================================
==== Weirs ====================================================================================
===============================================================================================

         Name: W13-25              From Node: POND13-1
        Group: Basin 13              To Node: S13-25
         Flow: Both                    Count: 1
         Type: Horizontal          Geometry: Rectangular

                    Span(in): 54.00
                    Rise(in): 36.00
                  Invert(ft): 3.650
       Control Elevation(ft): 3.650
                                          TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 3.130
      Orifice Discharge Coef: 0.600


-------------------------------------------------------------------------------------------------
         Name: WEX13-38            From Node: AREA1A
        Group: Basin 13              To Node: EX13-38
         Flow: Both                    Count: 1
         Type: Horizontal          Geometry: Rectangular

                    Span(in): 42.00
                    Rise(in): 42.00
                  Invert(ft): 3.950
       Control Elevation(ft): 3.950
                                          TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 3.130
      Orifice Discharge Coef: 0.600


-------------------------------------------------------------------------------------------------
```

```
         Name: WEX13-40            From Node: NODE-13B
        Group: Basin 13              To Node: EX13-40
         Flow: Both                    Count: 1
         Type: Horizontal           Geometry: Rectangular

                   Span(in): 54.00
                   Rise(in): 36.00
                 Invert(ft): 3.700
       Control Elevation(ft): 3.700
                                         TABLE
              Bottom Clip(in): 0.000
                 Top Clip(in): 0.000
          Weir Discharge Coef: 3.130
      Orifice Discharge Coef: 0.600



================================================================================
==== Rating Curves =============================================================
================================================================================

         Name: AREA1A_EXF          From Node: AREA1A                  Count: 274
        Group: Basin 13              To Node: GWT_13                   Flow: Both

              TABLE           ELEV ON(ft)     ELEV OFF(ft)
           #1: E_OPT_13       0.950           0.950
           #2:                0.000           0.000
           #3:                0.000           0.000
           #4:                0.000           0.000


--------------------------------------------------------------------------------------------------
         Name: NODE-13B_EXF        From Node: NODE-13B                Count: 146
        Group: Basin 13              To Node: GWT_13                   Flow: Both

              TABLE           ELEV ON(ft)     ELEV OFF(ft)
           #1: E_OPT_13       0.950           0.950
           #2:                0.000           0.000
           #3:                0.000           0.000
           #4:                0.000           0.000


================================================================================
==== Hydrology Simulations =====================================================
================================================================================

         Name: 100YR-1HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 1.00
          Rainfall File: Fdot-1
    Rainfall Amount(in): 5.00

Time(hrs)       Print Inc(min)
--------------- ---------------
1.000           1.00
1.330           1.00

--------------------------------------------------------------------------------------------------
         Name: 100YR-24HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Fdot-24
    Rainfall Amount(in): 13.44

Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.00
16.000          1.00
24.000          5.00
```

24.330 5.00

Name: 100YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 9.60

Time(hrs)	Print Inc(min)
2.000	5.00
6.000	1.00
8.000	5.00
8.330	5.00

Name: 10YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 3.50

Time(hrs)	Print Inc(min)
1.000	1.00
1.330	1.00

Name: 10YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 8.88

Time(hrs)	Print Inc(min)
8.000	5.00
16.000	1.00
24.000	5.00
24.330	5.00

Name: 10YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 6.40

Time(hrs)	Print Inc(min)
2.000	5.00
6.000	1.00
8.000	5.00
8.330	5.00

Name: 25YR-72HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Sfwmd72
Rainfall Amount(in): 14.00

Time(hrs)	Print Inc(min)

48.000 15.00
56.000 5.00
64.000 1.00
72.000 5.00
72.330 5.00

==========
==== Routing Simulations ==========
==========

Name: 100YR-1HR Hydrology Sim: 100YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.01000
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 25.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
1.000	1.000
25.000	15.000

Group	Run
Basin 13	Yes

Name: 100YR-24HR Hydrology Sim: 100YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 48.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 24HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
48.000	15.000

Group	Run
Basin 13	Yes

Name: 100YR-8HR Hydrology Sim: 100YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 36.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 8HR Boundary Flows:

Time(hrs)	Print Inc(min)
2.000	5.000
6.000	1.000
8.000	5.000
36.000	15.000

Group	Run
Basin 13	Yes

Name: 10YR-1HR Hydrology Sim: 10YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 25.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
1.000	1.000
25.000	15.000

Group	Run
Basin 13	Yes

Name: 10YR-24HR Hydrology Sim: 10YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 48.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 24HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
48.000	5.000

Group	Run
Basin 13	Yes

Name: 10YR-8HR Hydrology Sim: 10YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 36.00

Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 8HR Boundary Flows:

Time(hrs)	Print Inc(min)
2.000	5.000
6.000	1.000
8.000	5.000
36.000	15.000

Group	Run
Basin 13	Yes

Name: 25YR-72HR Hydrology Sim: 25YR-72HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 96.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 72HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
96.000	15.000

Group	Run
Basin 13	Yes

==========
==== Boundary Conditions ====
==========

Name: 8HR Node: GWT_13 Type: Stage

Time(hrs)	Stage(ft)
0.000	0.950
1.000	0.980
2.000	1.110
3.000	1.300
4.000	1.830
5.000	2.030
6.000	2.100
7.000	2.160
8.000	2.200
12.000	0.950
36.000	0.950

Name: 24HR Node: GWT_13 Type: Stage

Time(hrs)	Stage(ft)
0.000	0.950
1.000	0.960
2.000	0.990
3.000	1.030
4.000	1.060
5.000	1.100

6.000	1.150
7.000	1.200
8.000	1.250
9.000	1.330
10.000	1.400
11.000	1.500
12.000	1.630
13.000	1.710
14.000	1.790
15.000	1.860
16.000	1.930
17.000	1.980
18.000	2.030
19.000	2.080
20.000	2.110
21.000	2.150
22.000	2.180
23.000	2.190
24.000	2.200
36.000	0.950
48.000	0.950

Name: 72HR Node: GWT_13 Type: Stage

Time(hrs)	Stage(ft)
0.000	0.950
24.000	1.080
36.000	1.180
48.000	1.280
49.000	1.290
50.000	1.300
51.000	1.310
52.000	1.320
53.000	1.340
54.000	1.360
55.000	1.380
56.000	1.410
57.000	1.440
57.500	1.460
58.000	1.480
58.500	1.500
59.000	1.530
59.500	1.570
60.000	1.880
60.500	1.950
61.000	1.990
61.500	2.010
62.000	2.030
62.500	2.050
63.000	2.060
64.000	2.090
65.000	2.110
66.000	2.120
68.000	2.160
70.000	2.180
72.000	2.200
96.000	0.950

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	0.00	0.0	0.0	0.0	0.0	0.00
25YR-72HR	0.08	0.0	-0.1	0.1	0.0	0.00
25YR-72HR	0.18	0.0	-0.2	0.2	0.0	0.00
25YR-72HR	0.26	0.0	-0.3	0.3	-0.0	-0.00
25YR-72HR	0.34	0.0	-0.5	0.5	-0.0	-0.00
25YR-72HR	0.43	0.0	-0.5	0.5	-0.0	-0.00
25YR-72HR	0.51	0.0	-0.6	0.6	-0.0	-0.00
25YR-72HR	0.59	0.0	-0.7	0.7	-0.0	-0.00
25YR-72HR	0.67	0.0	-0.8	0.8	-0.0	-0.00
25YR-72HR	0.75	0.0	-0.9	0.9	-0.0	-0.00
25YR-72HR	0.83	0.0	-1.0	1.0	-0.0	-0.00
25YR-72HR	0.92	0.0	-1.2	1.2	-0.0	-0.00
25YR-72HR	1.01	0.0	-1.3	1.3	-0.0	-0.00
25YR-72HR	1.08	0.0	-1.4	1.4	-0.0	-0.00
25YR-72HR	1.18	0.0	-1.5	1.5	-0.0	-0.00
25YR-72HR	1.26	0.0	-1.6	1.6	-0.0	-0.00
25YR-72HR	1.34	0.3	-1.7	2.0	-0.0	-0.00
25YR-72HR	1.42	1.0	-1.3	2.2	0.0	0.00
25YR-72HR	1.50	2.2	2.4	-0.2	0.0	-0.00
25YR-72HR	1.58	4.9	2.3	2.6	-0.0	-0.00
25YR-72HR	1.67	10.1	3.9	6.2	-0.0	-0.00
25YR-72HR	1.75	17.9	7.6	10.3	0.0	0.00
25YR-72HR	1.83	28.6	12.6	16.0	0.0	0.00
25YR-72HR	1.92	42.5	18.3	24.1	0.0	0.00
25YR-72HR	2.00	59.5	25.6	33.9	0.0	0.00
25YR-72HR	2.08	79.9	35.7	44.2	0.0	0.00
25YR-72HR	2.17	103.4	46.0	57.4	0.0	0.00
25YR-72HR	2.25	130.2	58.0	72.2	0.0	0.00
25YR-72HR	2.33	160.1	71.7	88.5	0.0	0.00
25YR-72HR	2.42	193.1	86.5	106.6	0.0	0.00
25YR-72HR	2.50	229.0	102.7	126.3	0.0	0.00
25YR-72HR	2.58	267.9	120.9	147.0	0.0	0.00
25YR-72HR	2.67	309.5	139.4	170.1	0.0	0.00
25YR-72HR	2.75	353.7	159.8	194.0	0.0	0.00
25YR-72HR	2.83	400.6	181.2	219.4	0.0	0.00
25YR-72HR	2.92	450.0	203.7	246.3	0.0	0.00
25YR-72HR	3.00	501.8	227.6	274.1	0.0	0.00
25YR-72HR	3.08	556.0	251.9	304.2	0.0	0.00
25YR-72HR	3.17	612.5	278.0	334.6	0.0	0.00
25YR-72HR	3.25	671.3	304.9	366.3	0.0	0.00
25YR-72HR	3.33	732.1	332.5	399.7	0.0	0.00
25YR-72HR	3.42	795.1	361.1	433.9	0.0	0.00
25YR-72HR	3.50	860.2	391.2	469.0	-0.0	-0.00
25YR-72HR	3.58	927.0	422.1	504.9	0.0	0.00
25YR-72HR	3.67	995.9	453.3	542.6	-0.0	-0.00
25YR-72HR	3.75	1066.6	485.7	580.9	-0.0	-0.00
25YR-72HR	3.83	1139.3	519.3	620.0	-0.0	-0.00
25YR-72HR	3.92	1213.6	553.4	660.2	-0.0	-0.00
25YR-72HR	4.00	1289.6	588.2	701.5	-0.0	-0.00
25YR-72HR	4.08	1367.4	623.7	743.7	-0.0	-0.00
25YR-72HR	4.17	1446.6	659.9	786.7	-0.0	-0.00
25YR-72HR	4.25	1527.6	697.2	830.4	-0.0	-0.00
25YR-72HR	4.33	1609.9	735.0	875.0	-0.0	-0.00
25YR-72HR	4.42	1694.0	773.6	920.3	-0.0	-0.00
25YR-72HR	4.50	1779.4	812.4	967.0	-0.0	-0.00
25YR-72HR	4.58	1866.7	853.1	1013.6	-0.0	-0.00
25YR-72HR	4.67	1955.8	894.5	1061.3	-0.0	-0.00
25YR-72HR	4.75	2046.6	936.5	1110.1	-0.0	-0.00
25YR-72HR	4.83	2139.5	979.8	1159.7	-0.0	-0.00
25YR-72HR	4.92	2234.1	1024.7	1209.4	-0.0	-0.00
25YR-72HR	5.00	2330.7	1070.9	1259.8	-0.0	-0.00
25YR-72HR	5.08	2429.1	1118.0	1311.0	-0.0	-0.00
25YR-72HR	5.17	2529.5	1166.2	1363.3	0.0	0.00
25YR-72HR	5.25	2631.8	1216.0	1415.8	-0.0	-0.00
25YR-72HR	5.33	2735.8	1267.1	1468.8	0.0	0.00
25YR-72HR	5.42	2841.7	1319.0	1522.6	-0.0	-0.00
25YR-72HR	5.50	2949.4	1372.8	1576.6	-0.0	-0.00
25YR-72HR	5.58	3058.8	1427.1	1631.7	-0.0	-0.00
25YR-72HR	5.67	3170.1	1483.0	1687.1	-0.0	-0.00
25YR-72HR	5.75	3282.8	1539.6	1743.1	-0.0	-0.00
25YR-72HR	5.83	3397.3	1597.9	1799.4	-0.0	-0.00
25YR-72HR	5.92	3513.4	1656.6	1856.8	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	6.00	3631.0	1717.2	1913.8	-0.0	-0.00
25YR-72HR	6.08	3750.3	1778.4	1971.9	-0.0	-0.00
25YR-72HR	6.17	3871.1	1840.5	2030.6	-0.0	-0.00
25YR-72HR	6.25	3993.5	1904.1	2089.4	-0.0	-0.00
25YR-72HR	6.33	4117.2	1968.3	2148.9	-0.0	-0.00
25YR-72HR	6.42	4242.5	2033.5	2209.0	-0.0	-0.00
25YR-72HR	6.50	4369.1	2100.1	2269.0	-0.0	-0.00
25YR-72HR	6.58	4497.2	2167.0	2330.2	-0.0	-0.00
25YR-72HR	6.67	4626.7	2235.7	2391.0	-0.0	-0.00
25YR-72HR	6.75	4757.6	2304.7	2452.9	-0.0	-0.00
25YR-72HR	6.83	4889.7	2375.3	2514.4	-0.0	-0.00
25YR-72HR	6.92	5023.4	2446.3	2577.1	-0.0	-0.00
25YR-72HR	7.00	5158.1	2518.2	2639.9	-0.0	-0.00
25YR-72HR	7.08	5294.3	2591.1	2703.3	-0.0	-0.00
25YR-72HR	7.17	5431.7	2665.1	2766.6	-0.0	-0.00
25YR-72HR	7.25	5570.2	2740.1	2830.0	-0.0	-0.00
25YR-72HR	7.33	5710.1	2815.5	2894.6	-0.0	-0.00
25YR-72HR	7.42	5851.1	2892.3	2958.8	-0.0	-0.00
25YR-72HR	7.50	5993.1	2969.0	3024.0	-0.0	-0.00
25YR-72HR	7.58	6136.5	3047.2	3089.2	-0.0	-0.00
25YR-72HR	7.67	6281.1	3126.0	3155.1	-0.0	-0.00
25YR-72HR	7.75	6426.8	3206.0	3220.7	-0.0	-0.00
25YR-72HR	7.83	6573.4	3286.4	3287.0	-0.0	-0.00
25YR-72HR	7.92	6721.3	3367.2	3354.0	-0.0	-0.00
25YR-72HR	8.00	6870.3	3449.5	3420.8	-0.0	-0.00
25YR-72HR	8.08	7020.3	3532.5	3487.8	-0.0	-0.00
25YR-72HR	8.10	7050.2	3549.3	3500.9	-0.0	-0.00
25YR-72HR	8.12	7080.4	3565.8	3514.6	-0.0	-0.00
25YR-72HR	8.13	7110.7	3582.8	3527.9	-0.0	-0.00
25YR-72HR	8.15	7140.9	3599.4	3541.5	-0.0	-0.00
25YR-72HR	8.17	7171.4	3616.3	3555.1	-0.0	-0.00
25YR-72HR	8.18	7201.6	3632.9	3568.7	-0.0	-0.00
25YR-72HR	8.20	7232.1	3649.9	3582.1	-0.0	-0.00
25YR-72HR	8.22	7262.3	3667.0	3595.3	-0.0	-0.00
25YR-72HR	8.23	7292.9	3683.8	3609.1	-0.0	-0.00
25YR-72HR	8.25	7323.3	3700.4	3622.9	-0.0	-0.00
25YR-72HR	8.27	7353.8	3717.3	3636.5	-0.0	-0.00
25YR-72HR	8.28	7384.5	3734.3	3650.2	-0.0	-0.00
25YR-72HR	8.30	7415.1	3751.4	3663.6	-0.0	-0.00
25YR-72HR	8.32	7445.8	3768.4	3677.4	-0.0	-0.00
25YR-72HR	8.33	7476.4	3785.4	3691.0	-0.0	-0.00
25YR-72HR	8.35	7507.1	3802.9	3704.1	-0.0	-0.00
25YR-72HR	8.37	7537.8	3820.0	3717.8	-0.0	-0.00
25YR-72HR	8.38	7568.8	3836.9	3731.9	-0.0	-0.00
25YR-72HR	8.40	7599.7	3854.4	3745.3	-0.0	-0.00
25YR-72HR	8.42	7630.4	3871.1	3759.2	-0.0	-0.00
25YR-72HR	8.43	7661.6	3888.7	3772.8	-0.0	-0.00
25YR-72HR	8.45	7692.2	3906.1	3786.2	-0.0	-0.00
25YR-72HR	8.47	7723.6	3923.5	3800.2	-0.0	-0.00
25YR-72HR	8.48	7754.5	3940.5	3814.0	-0.0	-0.00
25YR-72HR	8.50	7785.6	3958.2	3827.4	-0.0	-0.00
25YR-72HR	8.52	7816.7	3975.2	3841.5	-0.0	-0.00
25YR-72HR	8.53	7848.1	3993.0	3855.1	-0.0	-0.00
25YR-72HR	8.55	7879.0	4010.0	3869.1	-0.0	-0.00
25YR-72HR	8.57	7910.3	4027.3	3883.0	-0.0	-0.00
25YR-72HR	8.58	7941.4	4045.0	3896.4	-0.0	-0.00
25YR-72HR	8.60	7972.9	4062.3	3910.6	-0.0	-0.00
25YR-72HR	8.62	8004.2	4079.9	3924.2	-0.0	-0.00
25YR-72HR	8.63	8035.6	4097.7	3938.0	-0.0	-0.00
25YR-72HR	8.65	8067.3	4115.2	3952.1	-0.0	-0.00
25YR-72HR	8.67	8098.7	4133.0	3965.8	-0.0	-0.00
25YR-72HR	8.68	8130.1	4150.6	3979.5	-0.0	-0.00
25YR-72HR	8.70	8161.8	4168.3	3993.5	-0.0	-0.00
25YR-72HR	8.72	8193.2	4185.8	4007.4	-0.0	-0.00
25YR-72HR	8.73	8224.8	4203.7	4021.1	-0.0	-0.00
25YR-72HR	8.75	8256.7	4221.9	4034.8	-0.0	-0.00
25YR-72HR	8.77	8288.3	4239.2	4049.1	-0.0	-0.00
25YR-72HR	8.78	8320.0	4257.2	4062.8	-0.0	-0.00
25YR-72HR	8.80	8351.7	4275.0	4076.7	-0.0	-0.00
25YR-72HR	8.82	8383.6	4293.0	4090.6	-0.0	-0.00
25YR-72HR	8.83	8415.6	4311.0	4104.6	-0.0	-0.00
25YR-72HR	8.85	8447.3	4328.6	4118.7	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	8.87	8479.2	4346.5	4132.8	-0.0	-0.00
25YR-72HR	8.88	8511.2	4364.7	4146.5	-0.0	-0.00
25YR-72HR	8.90	8543.2	4382.7	4160.5	-0.0	-0.00
25YR-72HR	8.92	8575.3	4401.0	4174.3	-0.0	-0.00
25YR-72HR	8.93	8607.2	4418.9	4188.3	-0.0	-0.00
25YR-72HR	8.95	8639.5	4437.1	4202.4	-0.0	-0.00
25YR-72HR	8.97	8671.7	4455.0	4216.6	-0.0	-0.00
25YR-72HR	8.98	8703.8	4473.1	4230.7	-0.0	-0.00
25YR-72HR	9.00	8736.1	4491.2	4244.9	-0.0	-0.00
25YR-72HR	9.02	8768.1	4509.3	4258.7	-0.0	-0.00
25YR-72HR	9.03	8800.6	4527.7	4272.9	-0.0	-0.00
25YR-72HR	9.05	8832.9	4545.9	4286.9	-0.0	-0.00
25YR-72HR	9.07	8865.3	4564.7	4300.6	-0.0	-0.00
25YR-72HR	9.08	8897.7	4582.6	4315.1	-0.0	-0.00
25YR-72HR	9.10	8930.0	4601.1	4328.9	-0.0	-0.00
25YR-72HR	9.12	8962.5	4619.0	4343.4	-0.0	-0.00
25YR-72HR	9.13	8995.0	4638.1	4356.9	-0.0	-0.00
25YR-72HR	9.15	9027.5	4656.2	4371.3	-0.0	-0.00
25YR-72HR	9.17	9060.0	4674.3	4385.7	-0.0	-0.00
25YR-72HR	9.18	9092.8	4693.3	4399.5	-0.0	-0.00
25YR-72HR	9.20	9125.4	4711.8	4413.5	-0.0	-0.00
25YR-72HR	9.22	9158.1	4730.0	4428.1	-0.0	-0.00
25YR-72HR	9.23	9190.7	4748.4	4442.3	-0.0	-0.00
25YR-72HR	9.25	9223.5	4767.2	4456.3	-0.0	-0.00
25YR-72HR	9.27	9256.2	4785.6	4470.6	-0.0	-0.00
25YR-72HR	9.28	9289.2	4804.5	4484.7	-0.0	-0.00
25YR-72HR	9.30	9321.9	4822.7	4499.1	-0.0	-0.00
25YR-72HR	9.32	9354.8	4841.7	4513.1	-0.0	-0.00
25YR-72HR	9.33	9387.8	4860.7	4527.1	-0.0	-0.00
25YR-72HR	9.35	9420.7	4879.0	4541.7	-0.0	-0.00
25YR-72HR	9.37	9453.8	4898.2	4555.6	-0.0	-0.00
25YR-72HR	9.38	9486.8	4916.5	4570.3	-0.0	-0.00
25YR-72HR	9.40	9519.6	4935.3	4584.3	-0.0	-0.00
25YR-72HR	9.42	9552.7	4954.1	4598.6	-0.0	-0.00
25YR-72HR	9.43	9585.9	4972.9	4613.1	-0.0	-0.00
25YR-72HR	9.45	9619.2	4991.9	4627.3	-0.0	-0.00
25YR-72HR	9.47	9652.3	5010.7	4641.6	-0.0	-0.00
25YR-72HR	9.48	9685.6	5030.1	4655.5	-0.0	-0.00
25YR-72HR	9.50	9718.9	5048.5	4670.3	-0.0	-0.00
25YR-72HR	9.52	9751.9	5067.3	4684.6	-0.0	-0.00
25YR-72HR	9.53	9785.3	5086.7	4698.6	-0.0	-0.00
25YR-72HR	9.55	9818.5	5105.4	4713.1	-0.0	-0.00
25YR-72HR	9.57	9851.9	5124.8	4727.1	-0.0	-0.00
25YR-72HR	9.58	9885.5	5143.6	4741.9	-0.0	-0.00
25YR-72HR	9.60	9919.0	5163.0	4756.0	-0.0	-0.00
25YR-72HR	9.62	9952.5	5181.8	4770.7	-0.0	-0.00
25YR-72HR	9.63	9985.9	5200.8	4785.1	-0.0	-0.00
25YR-72HR	9.65	10019.4	5220.2	4799.2	-0.0	-0.00
25YR-72HR	9.67	10053.2	5239.4	4813.8	-0.0	-0.00
25YR-72HR	9.68	10086.5	5258.6	4827.9	-0.0	-0.00
25YR-72HR	9.70	10120.4	5277.9	4842.5	-0.0	-0.00
25YR-72HR	9.72	10154.0	5296.9	4857.1	-0.0	-0.00
25YR-72HR	9.73	10187.7	5316.6	4871.1	-0.0	-0.00
25YR-72HR	9.75	10221.3	5335.6	4885.7	-0.0	-0.00
25YR-72HR	9.77	10255.1	5354.9	4900.2	-0.0	-0.00
25YR-72HR	9.78	10288.9	5374.2	4914.7	-0.0	-0.00
25YR-72HR	9.80	10322.7	5393.6	4929.1	-0.0	-0.00
25YR-72HR	9.82	10356.7	5413.2	4943.6	-0.0	-0.00
25YR-72HR	9.83	10390.6	5432.5	4958.1	-0.0	-0.00
25YR-72HR	9.85	10424.6	5452.2	4972.4	-0.0	-0.00
25YR-72HR	9.87	10458.6	5471.4	4987.1	-0.0	-0.00
25YR-72HR	9.88	10492.5	5491.0	5001.5	-0.0	-0.00
25YR-72HR	9.90	10526.4	5510.7	5015.7	-0.0	-0.00
25YR-72HR	9.92	10560.7	5530.3	5030.4	-0.0	-0.00
25YR-72HR	9.93	10594.6	5549.7	5044.9	-0.0	-0.00
25YR-72HR	9.95	10628.7	5569.3	5059.4	-0.0	-0.00
25YR-72HR	9.97	10662.8	5588.8	5074.0	-0.0	-0.00
25YR-72HR	9.98	10696.9	5608.4	5088.5	-0.0	-0.00
25YR-72HR	10.00	10731.2	5628.1	5103.1	-0.0	-0.00
25YR-72HR	10.02	10765.4	5647.9	5117.5	-0.0	-0.00
25YR-72HR	10.03	10799.8	5667.6	5132.3	-0.0	-0.00
25YR-72HR	10.05	10834.2	5687.1	5147.1	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	10.07	10868.3	5706.5	5161.8	-0.0	-0.00
25YR-72HR	10.08	10902.7	5726.5	5176.2	-0.0	-0.00
25YR-72HR	10.10	10937.2	5746.5	5190.7	-0.0	-0.00
25YR-72HR	10.12	10971.6	5765.9	5205.7	-0.0	-0.00
25YR-72HR	10.13	11006.1	5785.9	5220.2	-0.0	-0.00
25YR-72HR	10.15	11040.5	5805.8	5234.6	-0.0	-0.00
25YR-72HR	10.17	11075.1	5826.0	5249.1	-0.0	-0.00
25YR-72HR	10.18	11109.6	5845.6	5264.1	-0.0	-0.00
25YR-72HR	10.20	11144.2	5865.6	5278.6	-0.0	-0.00
25YR-72HR	10.22	11178.6	5885.3	5293.3	-0.0	-0.00
25YR-72HR	10.23	11213.4	5905.3	5308.1	-0.0	-0.00
25YR-72HR	10.25	11247.9	5925.4	5322.6	-0.0	-0.00
25YR-72HR	10.27	11282.6	5945.3	5337.3	-0.0	-0.00
25YR-72HR	10.28	11317.3	5965.5	5351.8	-0.0	-0.00
25YR-72HR	10.30	11352.3	5985.7	5366.6	-0.0	-0.00
25YR-72HR	10.32	11387.0	6005.8	5381.3	-0.0	-0.00
25YR-72HR	10.33	11421.7	6025.7	5396.0	-0.0	-0.00
25YR-72HR	10.35	11456.6	6045.9	5410.7	-0.0	-0.00
25YR-72HR	10.37	11491.3	6065.8	5425.6	-0.0	-0.00
25YR-72HR	10.38	11526.4	6086.0	5440.4	-0.0	-0.00
25YR-72HR	10.40	11561.2	6106.3	5454.9	-0.0	-0.00
25YR-72HR	10.42	11596.2	6126.6	5469.6	-0.0	-0.00
25YR-72HR	10.43	11631.1	6146.7	5484.4	-0.0	-0.00
25YR-72HR	10.45	11666.2	6167.2	5499.1	-0.0	-0.00
25YR-72HR	10.47	11701.5	6187.4	5514.0	-0.0	-0.00
25YR-72HR	10.48	11736.4	6207.5	5528.9	-0.0	-0.00
25YR-72HR	10.50	11771.3	6227.7	5543.7	-0.0	-0.00
25YR-72HR	10.52	11806.6	6248.0	5558.6	-0.0	-0.00
25YR-72HR	10.53	11841.7	6268.6	5573.1	-0.0	-0.00
25YR-72HR	10.55	11876.8	6288.6	5588.1	-0.0	-0.00
25YR-72HR	10.57	11912.0	6309.1	5602.9	-0.0	-0.00
25YR-72HR	10.58	11947.4	6329.5	5617.9	-0.0	-0.00
25YR-72HR	10.60	11982.7	6350.1	5632.6	-0.0	-0.00
25YR-72HR	10.62	12017.8	6370.3	5647.5	-0.0	-0.00
25YR-72HR	10.63	12053.1	6390.6	5662.5	-0.0	-0.00
25YR-72HR	10.65	12088.7	6411.4	5677.3	-0.0	-0.00
25YR-72HR	10.67	12123.9	6431.9	5691.9	-0.0	-0.00
25YR-72HR	10.68	12159.4	6452.3	5707.1	-0.0	-0.00
25YR-72HR	10.70	12194.7	6473.3	5721.4	-0.0	-0.00
25YR-72HR	10.72	12230.1	6493.5	5736.6	-0.0	-0.00
25YR-72HR	10.73	12265.7	6514.3	5751.4	-0.0	-0.00
25YR-72HR	10.75	12301.4	6534.9	5766.5	-0.0	-0.00
25YR-72HR	10.77	12336.8	6555.4	5781.4	-0.0	-0.00
25YR-72HR	10.78	12372.2	6576.2	5796.0	-0.0	-0.00
25YR-72HR	10.80	12407.8	6596.8	5811.0	-0.0	-0.00
25YR-72HR	10.82	12443.7	6617.6	5826.1	-0.0	-0.00
25YR-72HR	10.83	12479.2	6638.4	5840.8	-0.0	-0.00
25YR-72HR	10.85	12514.8	6659.0	5855.7	-0.0	-0.00
25YR-72HR	10.87	12550.6	6679.8	5870.8	-0.0	-0.00
25YR-72HR	10.88	12586.4	6700.8	5885.7	-0.0	-0.00
25YR-72HR	10.90	12622.2	6721.6	5900.6	-0.0	-0.00
25YR-72HR	10.92	12657.7	6742.3	5915.4	-0.0	-0.00
25YR-72HR	10.93	12693.5	6763.0	5930.5	-0.0	-0.00
25YR-72HR	10.95	12729.8	6784.4	5945.3	-0.0	-0.00
25YR-72HR	10.97	12765.4	6805.0	5960.4	-0.0	-0.00
25YR-72HR	10.98	12801.3	6826.0	5975.3	-0.0	-0.00
25YR-72HR	11.00	12837.3	6846.8	5990.5	-0.0	-0.00
25YR-72HR	11.02	12873.0	6867.7	6005.3	-0.0	-0.00
25YR-72HR	11.03	12909.3	6888.8	6020.5	-0.0	-0.00
25YR-72HR	11.05	12944.9	6909.6	6035.3	-0.0	-0.00
25YR-72HR	11.07	12981.1	6930.6	6050.5	-0.0	-0.00
25YR-72HR	11.08	13017.0	6951.8	6065.3	-0.0	-0.00
25YR-72HR	11.10	13053.2	6972.9	6080.3	-0.0	-0.00
25YR-72HR	11.12	13089.4	6993.9	6095.5	-0.0	-0.00
25YR-72HR	11.13	13125.5	7015.0	6110.5	-0.0	-0.00
25YR-72HR	11.15	13161.5	7036.4	6125.1	-0.0	-0.00
25YR-72HR	11.17	13197.9	7057.4	6140.5	-0.0	-0.00
25YR-72HR	11.18	13233.9	7078.5	6155.4	-0.0	-0.00
25YR-72HR	11.20	13270.2	7099.8	6170.4	-0.0	-0.00
25YR-72HR	11.22	13306.6	7120.9	6185.7	-0.0	-0.00
25YR-72HR	11.23	13342.7	7142.0	6200.7	-0.0	-0.00
25YR-72HR	11.25	13379.1	7163.3	6215.7	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	11.27	13415.7	7184.7	6230.9	-0.0	-0.00
25YR-72HR	11.28	13452.1	7205.9	6246.1	-0.0	-0.00
25YR-72HR	11.30	13488.0	7226.9	6261.0	-0.0	-0.00
25YR-72HR	11.32	13524.8	7248.6	6276.2	-0.0	-0.00
25YR-72HR	11.33	13561.0	7269.8	6291.2	-0.0	-0.00
25YR-72HR	11.35	13597.4	7291.3	6306.1	-0.0	-0.00
25YR-72HR	11.37	13634.0	7312.8	6321.2	-0.0	-0.00
25YR-72HR	11.38	13670.3	7333.6	6336.7	-0.0	-0.00
25YR-72HR	11.40	13706.9	7355.2	6351.7	-0.0	-0.00
25YR-72HR	11.42	13743.5	7376.5	6366.9	-0.0	-0.00
25YR-72HR	11.43	13780.3	7398.3	6382.0	-0.0	-0.00
25YR-72HR	11.45	13816.6	7419.5	6397.1	-0.0	-0.00
25YR-72HR	11.47	13853.6	7441.1	6412.5	-0.0	-0.00
25YR-72HR	11.48	13889.9	7462.6	6427.3	-0.0	-0.00
25YR-72HR	11.50	13926.8	7484.0	6442.8	-0.0	-0.00
25YR-72HR	11.52	13963.3	7505.6	6457.8	-0.0	-0.00
25YR-72HR	11.53	14000.0	7527.2	6472.8	-0.0	-0.00
25YR-72HR	11.55	14036.8	7548.7	6488.2	-0.0	-0.00
25YR-72HR	11.57	14073.8	7570.4	6503.4	-0.0	-0.00
25YR-72HR	11.58	14110.4	7591.9	6518.5	-0.0	-0.00
25YR-72HR	11.60	14147.2	7613.4	6533.9	-0.0	-0.00
25YR-72HR	11.62	14184.2	7635.2	6549.0	-0.0	-0.00
25YR-72HR	11.63	14221.2	7657.1	6564.1	-0.0	-0.00
25YR-72HR	11.65	14257.9	7678.5	6579.4	-0.0	-0.00
25YR-72HR	11.67	14295.0	7700.4	6594.6	-0.0	-0.00
25YR-72HR	11.68	14331.7	7722.0	6609.6	-0.0	-0.00
25YR-72HR	11.70	14368.8	7744.0	6624.8	-0.0	-0.00
25YR-72HR	11.72	14405.7	7765.4	6640.3	-0.0	-0.00
25YR-72HR	11.73	14443.0	7787.5	6655.5	-0.0	-0.00
25YR-72HR	11.75	14480.1	7809.2	6670.9	-0.0	-0.00
25YR-72HR	11.77	14517.0	7830.9	6686.1	-0.0	-0.00
25YR-72HR	11.78	14554.1	7852.9	6701.2	-0.0	-0.00
25YR-72HR	11.80	14591.2	7874.6	6716.6	-0.0	-0.00
25YR-72HR	11.82	14628.3	7896.6	6731.7	-0.0	-0.00
25YR-72HR	11.83	14665.4	7918.2	6747.2	-0.0	-0.00
25YR-72HR	11.85	14702.8	7940.5	6762.3	-0.0	-0.00
25YR-72HR	11.87	14739.8	7962.0	6777.8	-0.0	-0.00
25YR-72HR	11.88	14777.3	7984.2	6793.0	-0.0	-0.00
25YR-72HR	11.90	14814.3	8005.8	6808.5	-0.0	-0.00
25YR-72HR	11.92	14851.7	8028.0	6823.8	-0.0	-0.00
25YR-72HR	11.93	14889.1	8050.2	6838.9	-0.0	-0.00
25YR-72HR	11.95	14926.3	8072.0	6854.3	-0.0	-0.00
25YR-72HR	11.97	14963.9	8094.3	6869.5	-0.0	-0.00
25YR-72HR	11.98	15000.9	8115.9	6885.0	-0.0	-0.00
25YR-72HR	12.00	15038.6	8138.3	6900.3	-0.0	-0.00
25YR-72HR	12.02	15076.0	8160.1	6915.8	-0.0	-0.00
25YR-72HR	12.03	15113.2	8182.2	6931.0	-0.0	-0.00
25YR-72HR	12.05	15150.9	8204.7	6946.2	-0.0	-0.00
25YR-72HR	12.07	15188.1	8226.4	6961.7	-0.0	-0.00
25YR-72HR	12.08	15225.7	8248.7	6977.0	-0.0	-0.00
25YR-72HR	12.10	15263.4	8271.2	6992.2	-0.0	-0.00
25YR-72HR	12.12	15301.0	8293.1	7008.0	-0.0	-0.00
25YR-72HR	12.13	15338.7	8315.3	7023.4	-0.0	-0.00
25YR-72HR	12.15	15376.0	8337.3	7038.7	-0.0	-0.00
25YR-72HR	12.17	15413.5	8359.4	7054.2	-0.0	-0.00
25YR-72HR	12.18	15451.3	8381.8	7069.6	-0.0	-0.00
25YR-72HR	12.20	15488.9	8404.3	7084.6	-0.0	-0.00
25YR-72HR	12.22	15526.6	8426.5	7100.1	-0.0	-0.00
25YR-72HR	12.23	15564.4	8448.7	7115.7	-0.0	-0.00
25YR-72HR	12.25	15602.3	8471.3	7131.0	-0.0	-0.00
25YR-72HR	12.27	15639.9	8493.7	7146.2	-0.0	-0.00
25YR-72HR	12.28	15677.6	8516.0	7161.6	-0.0	-0.00
25YR-72HR	12.30	15715.6	8538.3	7177.2	-0.0	-0.00
25YR-72HR	12.32	15753.3	8560.8	7192.5	-0.0	-0.00
25YR-72HR	12.33	15791.3	8583.2	7208.1	-0.0	-0.00
25YR-72HR	12.35	15828.9	8605.8	7223.1	-0.0	-0.00
25YR-72HR	12.37	15867.0	8628.0	7239.0	-0.0	-0.00
25YR-72HR	12.38	15905.0	8650.3	7254.6	-0.0	-0.00
25YR-72HR	12.40	15942.9	8673.2	7269.7	-0.0	-0.00
25YR-72HR	12.42	15980.8	8695.3	7285.5	-0.0	-0.00
25YR-72HR	12.43	16018.8	8718.0	7300.8	-0.0	-0.00
25YR-72HR	12.45	16056.7	8740.3	7316.4	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	12.47	16094.8	8762.8	7331.9	-0.0	-0.00
25YR-72HR	12.48	16133.1	8785.7	7347.4	-0.0	-0.00
25YR-72HR	12.50	16170.9	8808.1	7362.8	-0.0	-0.00
25YR-72HR	12.52	16208.8	8830.8	7378.1	-0.0	-0.00
25YR-72HR	12.53	16247.4	8853.4	7393.9	-0.0	-0.00
25YR-72HR	12.55	16285.4	8876.2	7409.3	-0.0	-0.00
25YR-72HR	12.57	16323.2	8898.6	7424.6	-0.0	-0.00
25YR-72HR	12.58	16361.7	8921.6	7440.1	-0.0	-0.00
25YR-72HR	12.60	16399.8	8944.0	7455.7	-0.0	-0.00
25YR-72HR	12.62	16438.1	8966.8	7471.3	-0.0	-0.00
25YR-72HR	12.63	16476.4	8989.7	7486.7	-0.0	-0.00
25YR-72HR	12.65	16514.5	9012.4	7502.2	-0.0	-0.00
25YR-72HR	12.67	16553.0	9035.0	7517.9	-0.0	-0.00
25YR-72HR	12.68	16591.1	9057.9	7533.2	-0.0	-0.00
25YR-72HR	12.70	16629.4	9080.6	7548.8	-0.0	-0.00
25YR-72HR	12.72	16667.9	9103.5	7564.5	-0.0	-0.00
25YR-72HR	12.73	16706.2	9126.4	7579.8	-0.0	-0.00
25YR-72HR	12.75	16744.5	9149.0	7595.4	-0.0	-0.00
25YR-72HR	12.77	16782.9	9172.2	7610.7	-0.0	-0.00
25YR-72HR	12.78	16821.3	9195.1	7626.2	-0.0	-0.00
25YR-72HR	12.80	16859.9	9217.6	7642.3	-0.0	-0.00
25YR-72HR	12.82	16898.1	9240.2	7657.9	-0.0	-0.00
25YR-72HR	12.83	16936.7	9263.4	7673.4	-0.0	-0.00
25YR-72HR	12.85	16975.3	9286.4	7688.9	-0.0	-0.00
25YR-72HR	12.87	17013.6	9309.0	7704.6	-0.0	-0.00
25YR-72HR	12.88	17052.3	9332.0	7720.2	-0.0	-0.00
25YR-72HR	12.90	17090.8	9355.5	7735.4	-0.0	-0.00
25YR-72HR	12.92	17129.6	9378.5	7751.1	-0.0	-0.00
25YR-72HR	12.93	17168.0	9401.4	7766.7	-0.0	-0.00
25YR-72HR	12.95	17206.9	9424.3	7782.5	-0.0	-0.00
25YR-72HR	12.97	17245.4	9447.4	7797.9	-0.0	-0.00
25YR-72HR	12.98	17284.0	9470.5	7813.5	-0.0	-0.00
25YR-72HR	13.00	17322.6	9493.3	7829.3	-0.0	-0.00
25YR-72HR	13.02	17361.4	9516.5	7844.8	-0.0	-0.00
25YR-72HR	13.03	17400.0	9539.8	7860.3	-0.0	-0.00
25YR-72HR	13.05	17439.1	9562.7	7876.4	-0.0	-0.00
25YR-72HR	13.07	17478.0	9585.9	7892.1	-0.0	-0.00
25YR-72HR	13.08	17516.7	9609.1	7907.6	-0.0	-0.00
25YR-72HR	13.10	17555.3	9632.5	7922.8	-0.0	-0.00
25YR-72HR	13.12	17594.2	9655.4	7938.8	-0.0	-0.00
25YR-72HR	13.13	17632.9	9678.3	7954.5	-0.0	-0.00
25YR-72HR	13.15	17672.0	9701.7	7970.2	-0.0	-0.00
25YR-72HR	13.17	17710.7	9724.9	7985.8	-0.0	-0.00
25YR-72HR	13.18	17749.5	9748.3	8001.2	-0.0	-0.00
25YR-72HR	13.20	17788.5	9771.3	8017.2	-0.0	-0.00
25YR-72HR	13.22	17827.5	9794.4	8033.1	-0.0	-0.00
25YR-72HR	13.23	17866.8	9818.0	8048.8	-0.0	-0.00
25YR-72HR	13.25	17905.4	9841.1	8064.3	-0.0	-0.00
25YR-72HR	13.27	17944.4	9864.6	8079.8	-0.0	-0.00
25YR-72HR	13.28	17983.7	9887.9	8095.9	-0.0	-0.00
25YR-72HR	13.30	18022.5	9911.0	8111.5	-0.0	-0.00
25YR-72HR	13.32	18061.7	9934.5	8127.3	-0.0	-0.00
25YR-72HR	13.33	18100.7	9958.1	8142.6	-0.0	-0.00
25YR-72HR	13.35	18139.8	9981.3	8158.5	-0.0	-0.00
25YR-72HR	13.37	18179.0	10004.6	8174.4	-0.0	-0.00
25YR-72HR	13.38	18218.3	10028.3	8190.0	-0.0	-0.00
25YR-72HR	13.40	18257.4	10051.8	8205.6	-0.0	-0.00
25YR-72HR	13.42	18296.4	10075.1	8221.2	-0.0	-0.00
25YR-72HR	13.43	18335.6	10098.5	8237.1	-0.0	-0.00
25YR-72HR	13.45	18374.9	10122.0	8252.9	-0.0	-0.00
25YR-72HR	13.47	18414.3	10145.5	8268.8	-0.0	-0.00
25YR-72HR	13.48	18453.4	10169.1	8284.4	-0.0	-0.00
25YR-72HR	13.50	18492.7	10192.8	8299.9	-0.0	-0.00
25YR-72HR	13.52	18532.0	10216.0	8316.0	-0.0	-0.00
25YR-72HR	13.53	18571.6	10239.8	8331.8	-0.0	-0.00
25YR-72HR	13.55	18610.6	10262.9	8347.6	-0.0	-0.00
25YR-72HR	13.57	18649.9	10286.8	8363.1	-0.0	-0.00
25YR-72HR	13.58	18689.7	10310.5	8379.1	-0.0	-0.00
25YR-72HR	13.60	18729.1	10334.3	8394.8	-0.0	-0.00
25YR-72HR	13.62	18768.1	10357.4	8410.7	-0.0	-0.00
25YR-72HR	13.63	18807.6	10381.0	8426.5	-0.0	-0.00
25YR-72HR	13.65	18847.2	10404.8	8442.4	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	13.67	18886.7	10428.4	8458.3	-0.0	-0.00
25YR-72HR	13.68	18926.1	10452.1	8474.0	-0.0	-0.00
25YR-72HR	13.70	18965.7	10475.9	8489.8	-0.0	-0.00
25YR-72HR	13.72	19005.3	10499.4	8505.8	-0.0	-0.00
25YR-72HR	13.73	19044.7	10523.4	8521.3	-0.0	-0.00
25YR-72HR	13.75	19084.4	10547.1	8537.3	-0.0	-0.00
25YR-72HR	13.77	19123.8	10570.7	8553.1	-0.0	-0.00
25YR-72HR	13.78	19163.6	10594.6	8569.0	-0.0	-0.00
25YR-72HR	13.80	19203.0	10618.2	8584.8	-0.0	-0.00
25YR-72HR	13.82	19242.8	10642.5	8600.3	-0.0	-0.00
25YR-72HR	13.83	19282.4	10666.1	8616.4	-0.0	-0.00
25YR-72HR	13.85	19322.3	10690.0	8632.3	-0.0	-0.00
25YR-72HR	13.87	19361.9	10714.0	8647.9	-0.0	-0.00
25YR-72HR	13.88	19401.4	10737.6	8663.8	-0.0	-0.00
25YR-72HR	13.90	19441.1	10761.0	8680.0	-0.0	-0.00
25YR-72HR	13.92	19481.0	10785.2	8695.8	-0.0	-0.00
25YR-72HR	13.93	19520.5	10809.0	8711.5	-0.0	-0.00
25YR-72HR	13.95	19560.5	10832.9	8727.6	-0.0	-0.00
25YR-72HR	13.97	19600.4	10856.9	8743.5	-0.0	-0.00
25YR-72HR	13.98	19640.3	10881.0	8759.2	-0.0	-0.00
25YR-72HR	14.00	19679.7	10904.6	8775.1	-0.0	-0.00
25YR-72HR	14.02	19719.6	10928.5	8791.1	-0.0	-0.00
25YR-72HR	14.03	19759.8	10952.6	8807.1	-0.0	-0.00
25YR-72HR	14.05	19799.4	10976.5	8822.9	-0.0	-0.00
25YR-72HR	14.07	19839.4	11000.6	8838.8	-0.0	-0.00
25YR-72HR	14.08	19879.4	11024.6	8854.8	-0.0	-0.00
25YR-72HR	14.10	19919.2	11048.9	8870.4	-0.0	-0.00
25YR-72HR	14.12	19959.2	11072.9	8886.3	-0.0	-0.00
25YR-72HR	14.13	19999.0	11096.6	8902.4	-0.0	-0.00
25YR-72HR	14.15	20039.1	11120.9	8918.2	-0.0	-0.00
25YR-72HR	14.17	20079.1	11144.8	8934.3	-0.0	-0.00
25YR-72HR	14.18	20119.2	11169.0	8950.1	-0.0	-0.00
25YR-72HR	14.20	20159.4	11193.6	8965.7	-0.0	-0.00
25YR-72HR	14.22	20199.3	11217.2	8982.1	-0.0	-0.00
25YR-72HR	14.23	20239.4	11241.5	8997.9	-0.0	-0.00
25YR-72HR	14.25	20279.3	11265.3	9014.0	-0.0	-0.00
25YR-72HR	14.27	20319.9	11289.9	9030.0	-0.0	-0.00
25YR-72HR	14.28	20359.7	11313.6	9046.1	-0.0	-0.00
25YR-72HR	14.30	20400.0	11338.4	9061.6	-0.0	-0.00
25YR-72HR	14.32	20440.1	11362.6	9077.5	-0.0	-0.00
25YR-72HR	14.33	20480.3	11387.0	9093.4	-0.0	-0.00
25YR-72HR	14.35	20520.4	11410.9	9109.5	-0.0	-0.00
25YR-72HR	14.37	20560.8	11435.5	9125.3	-0.0	-0.00
25YR-72HR	14.38	20601.0	11459.6	9141.4	-0.0	-0.00
25YR-72HR	14.40	20641.1	11483.7	9157.4	-0.0	-0.00
25YR-72HR	14.42	20681.5	11507.9	9173.5	-0.0	-0.00
25YR-72HR	14.43	20721.7	11532.3	9189.5	-0.0	-0.00
25YR-72HR	14.45	20762.3	11557.1	9205.3	-0.0	-0.00
25YR-72HR	14.47	20802.2	11580.8	9221.4	-0.0	-0.00
25YR-72HR	14.48	20842.5	11605.2	9237.3	-0.0	-0.00
25YR-72HR	14.50	20883.2	11629.6	9253.6	-0.0	-0.00
25YR-72HR	14.52	20923.4	11653.8	9269.6	-0.0	-0.00
25YR-72HR	14.53	20963.8	11678.4	9285.3	-0.0	-0.00
25YR-72HR	14.55	21004.1	11703.0	9301.1	-0.0	-0.00
25YR-72HR	14.57	21044.6	11727.1	9317.5	-0.0	-0.00
25YR-72HR	14.58	21084.9	11751.5	9333.4	-0.0	-0.00
25YR-72HR	14.60	21125.6	11775.8	9349.7	-0.0	-0.00
25YR-72HR	14.62	21166.2	11800.7	9365.6	-0.0	-0.00
25YR-72HR	14.63	21206.4	11824.7	9381.7	-0.0	-0.00
25YR-72HR	14.65	21247.1	11849.6	9397.5	-0.0	-0.00
25YR-72HR	14.67	21287.6	11874.1	9413.5	-0.0	-0.00
25YR-72HR	14.68	21328.1	11898.8	9429.4	-0.0	-0.00
25YR-72HR	14.70	21368.5	11923.2	9445.4	-0.0	-0.00
25YR-72HR	14.72	21409.1	11947.6	9461.4	-0.0	-0.00
25YR-72HR	14.73	21449.9	11971.9	9478.0	-0.0	-0.00
25YR-72HR	14.75	21490.3	11996.7	9493.7	-0.0	-0.00
25YR-72HR	14.77	21531.1	12021.3	9509.8	-0.0	-0.00
25YR-72HR	14.78	21571.7	12045.6	9526.1	-0.0	-0.00
25YR-72HR	14.80	21612.1	12070.4	9541.7	-0.0	-0.00
25YR-72HR	14.82	21652.8	12094.6	9558.1	-0.0	-0.00
25YR-72HR	14.83	21693.7	12119.5	9574.1	-0.0	-0.00
25YR-72HR	14.85	21734.1	12144.3	9589.8	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	14.87	21775.2	12169.1	9606.1	-0.0	-0.00
25YR-72HR	14.88	21815.9	12193.9	9622.0	-0.0	-0.00
25YR-72HR	14.90	21856.5	12218.1	9638.4	-0.0	-0.00
25YR-72HR	14.92	21897.2	12243.1	9654.1	-0.0	-0.00
25YR-72HR	14.93	21938.0	12267.6	9670.4	-0.0	-0.00
25YR-72HR	14.95	21978.9	12292.4	9686.5	-0.0	-0.00
25YR-72HR	14.97	22019.8	12317.2	9702.7	-0.0	-0.00
25YR-72HR	14.98	22060.5	12341.9	9718.6	-0.0	-0.00
25YR-72HR	15.00	22101.4	12366.4	9734.9	-0.0	-0.00
25YR-72HR	15.02	22142.0	12391.1	9750.9	-0.0	-0.00
25YR-72HR	15.03	22182.9	12416.2	9766.7	-0.0	-0.00
25YR-72HR	15.05	22224.1	12441.3	9782.8	-0.0	-0.00
25YR-72HR	15.07	22265.0	12466.1	9798.9	-0.0	-0.00
25YR-72HR	15.08	22305.8	12490.4	9815.5	-0.0	-0.00
25YR-72HR	15.10	22346.6	12515.1	9831.4	-0.0	-0.00
25YR-72HR	15.12	22387.7	12540.3	9847.4	-0.0	-0.00
25YR-72HR	15.13	22428.8	12565.0	9863.8	-0.0	-0.00
25YR-72HR	15.15	22469.7	12589.9	9879.8	-0.0	-0.00
25YR-72HR	15.17	22510.8	12614.9	9895.9	-0.0	-0.00
25YR-72HR	15.18	22551.7	12639.6	9912.2	-0.0	-0.00
25YR-72HR	15.20	22592.8	12664.4	9928.4	-0.0	-0.00
25YR-72HR	15.22	22633.9	12689.4	9944.5	-0.0	-0.00
25YR-72HR	15.23	22674.8	12714.3	9960.6	-0.0	-0.00
25YR-72HR	15.25	22715.7	12739.1	9976.6	-0.0	-0.00
25YR-72HR	15.27	22757.1	12764.3	9992.8	-0.0	-0.00
25YR-72HR	15.28	22798.2	12789.2	10009.0	-0.0	-0.00
25YR-72HR	15.30	22839.0	12814.2	10024.9	-0.0	-0.00
25YR-72HR	15.32	22880.4	12839.1	10041.2	-0.0	-0.00
25YR-72HR	15.33	22921.4	12863.7	10057.6	-0.0	-0.00
25YR-72HR	15.35	22962.8	12889.0	10073.8	-0.0	-0.00
25YR-72HR	15.37	23003.7	12913.7	10090.0	-0.0	-0.00
25YR-72HR	15.38	23045.2	12939.1	10106.1	-0.0	-0.00
25YR-72HR	15.40	23086.3	12964.1	10122.2	-0.0	-0.00
25YR-72HR	15.42	23127.5	12989.2	10138.3	-0.0	-0.00
25YR-72HR	15.43	23168.8	13014.4	10154.4	-0.0	-0.00
25YR-72HR	15.45	23209.8	13039.2	10170.6	-0.0	-0.00
25YR-72HR	15.47	23251.4	13064.5	10186.9	-0.0	-0.00
25YR-72HR	15.48	23292.8	13089.4	10203.4	-0.0	-0.00
25YR-72HR	15.50	23334.0	13114.5	10219.5	-0.0	-0.00
25YR-72HR	15.52	23375.2	13139.5	10235.7	-0.0	-0.00
25YR-72HR	15.53	23416.4	13164.6	10251.7	-0.0	-0.00
25YR-72HR	15.55	23457.8	13190.0	10267.8	-0.0	-0.00
25YR-72HR	15.57	23499.2	13215.1	10284.1	-0.0	-0.00
25YR-72HR	15.58	23540.5	13240.5	10300.0	-0.0	-0.00
25YR-72HR	15.60	23582.0	13265.6	10316.4	-0.0	-0.00
25YR-72HR	15.62	23623.6	13291.1	10332.5	-0.0	-0.00
25YR-72HR	15.63	23665.0	13316.0	10349.0	-0.0	-0.00
25YR-72HR	15.65	23706.1	13341.2	10365.0	-0.0	-0.00
25YR-72HR	15.67	23747.8	13366.7	10381.1	-0.0	-0.00
25YR-72HR	15.68	23789.2	13391.8	10397.4	-0.0	-0.00
25YR-72HR	15.70	23831.1	13417.3	10413.8	-0.0	-0.00
25YR-72HR	15.72	23872.4	13442.4	10430.0	-0.0	-0.00
25YR-72HR	15.73	23913.9	13467.9	10446.0	0.0	0.00
25YR-72HR	15.75	23955.3	13492.9	10462.4	-0.0	-0.00
25YR-72HR	15.77	23996.8	13518.1	10478.7	-0.0	-0.00
25YR-72HR	15.78	24038.4	13543.7	10494.7	-0.0	-0.00
25YR-72HR	15.80	24080.0	13568.8	10511.2	0.0	0.00
25YR-72HR	15.82	24121.6	13594.2	10527.3	0.0	0.00
25YR-72HR	15.83	24163.1	13619.5	10543.6	0.0	0.00
25YR-72HR	15.85	24205.0	13645.0	10559.9	0.0	0.00
25YR-72HR	15.87	24246.5	13670.6	10576.0	0.0	0.00
25YR-72HR	15.88	24288.3	13696.0	10592.3	0.0	0.00
25YR-72HR	15.90	24330.0	13721.2	10608.8	0.0	0.00
25YR-72HR	15.92	24371.5	13746.6	10624.9	0.0	0.00
25YR-72HR	15.93	24413.1	13772.0	10641.1	0.0	0.00
25YR-72HR	15.95	24454.9	13797.5	10657.4	0.0	0.00
25YR-72HR	15.97	24496.9	13822.8	10674.2	0.0	0.00
25YR-72HR	15.98	24538.6	13848.2	10690.4	0.0	0.00
25YR-72HR	16.00	24580.4	13873.5	10706.9	0.0	0.00
25YR-72HR	16.08	24789.7	14000.9	10788.7	0.0	0.00
25YR-72HR	16.17	24999.8	14128.6	10871.1	0.0	0.00
25YR-72HR	16.25	25210.0	14256.8	10953.2	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	16.33	25421.1	14385.4	11035.6	0.0	0.00
25YR-72HR	16.42	25632.9	14513.7	11119.2	0.0	0.00
25YR-72HR	16.50	25845.2	14643.1	11202.1	0.0	0.00
25YR-72HR	16.58	26058.0	14771.8	11286.2	0.0	0.00
25YR-72HR	16.67	26271.4	14901.3	11370.2	0.0	0.00
25YR-72HR	16.75	26485.6	15030.7	11454.9	0.0	0.00
25YR-72HR	16.83	26700.1	15160.7	11539.4	0.0	0.00
25YR-72HR	16.92	26915.5	15291.1	11624.5	0.0	0.00
25YR-72HR	17.00	27131.3	15421.5	11709.8	0.0	0.00
25YR-72HR	17.08	27348.2	15552.8	11795.4	0.0	0.00
25YR-72HR	17.17	27564.9	15683.3	11881.6	0.0	0.00
25YR-72HR	17.25	27782.5	15814.2	11968.3	0.0	0.00
25YR-72HR	17.33	28001.0	15946.1	12054.9	0.0	0.00
25YR-72HR	17.42	28219.6	16077.8	12141.8	0.0	0.00
25YR-72HR	17.50	28439.1	16209.5	12229.6	0.0	0.00
25YR-72HR	17.58	28658.9	16341.7	12317.2	0.0	0.00
25YR-72HR	17.67	28879.7	16474.5	12405.2	0.0	0.00
25YR-72HR	17.75	29100.6	16607.0	12493.6	0.0	0.00
25YR-72HR	17.83	29322.4	16740.2	12582.3	0.0	0.00
25YR-72HR	17.92	29544.3	16872.9	12671.4	0.0	0.00
25YR-72HR	18.00	29767.2	17006.3	12760.9	0.0	0.00
25YR-72HR	18.08	29990.7	17140.0	12850.7	0.0	0.00
25YR-72HR	18.17	30214.2	17274.0	12940.2	0.0	0.00
25YR-72HR	18.25	30438.8	17407.9	13030.9	0.0	0.00
25YR-72HR	18.33	30663.8	17542.2	13121.6	0.0	0.00
25YR-72HR	18.42	30889.2	17676.8	13212.4	0.0	0.00
25YR-72HR	18.50	31115.1	17811.5	13303.6	0.0	0.00
25YR-72HR	18.58	31341.8	17947.1	13394.6	0.0	0.00
25YR-72HR	18.67	31569.0	18082.3	13486.7	0.0	0.00
25YR-72HR	18.75	31796.5	18217.6	13578.9	0.0	0.00
25YR-72HR	18.83	32024.5	18353.0	13671.6	0.0	0.00
25YR-72HR	18.92	32253.1	18488.9	13764.2	0.0	0.00
25YR-72HR	19.00	32482.4	18625.0	13857.4	0.0	0.00
25YR-72HR	19.08	32712.3	18761.3	13951.0	0.0	0.00
25YR-72HR	19.17	32942.1	18897.6	14044.5	0.0	0.00
25YR-72HR	19.25	33172.8	19034.7	14138.1	0.0	0.00
25YR-72HR	19.33	33404.1	19171.5	14232.6	0.0	0.00
25YR-72HR	19.42	33635.9	19308.3	14327.6	0.0	0.00
25YR-72HR	19.50	33867.9	19445.9	14422.0	0.0	0.00
25YR-72HR	19.58	34100.6	19583.3	14517.3	0.0	0.00
25YR-72HR	19.67	34333.9	19721.1	14612.8	0.0	0.00
25YR-72HR	19.75	34567.6	19859.3	14708.4	0.0	0.00
25YR-72HR	19.83	34801.8	19997.3	14804.5	0.0	0.00
25YR-72HR	19.92	35036.3	20135.0	14901.3	0.0	0.00
25YR-72HR	20.00	35271.8	20274.1	14997.7	0.0	0.00
25YR-72HR	20.08	35507.0	20412.6	15094.4	0.0	0.00
25YR-72HR	20.17	35743.4	20551.5	15191.9	0.0	0.00
25YR-72HR	20.25	35980.0	20690.8	15289.2	0.0	0.00
25YR-72HR	20.33	36217.1	20830.0	15387.1	0.0	0.00
25YR-72HR	20.42	36454.4	20969.0	15485.4	0.0	0.00
25YR-72HR	20.50	36692.7	21109.0	15583.7	0.0	0.00
25YR-72HR	20.58	36930.9	21248.6	15682.3	0.0	0.00
25YR-72HR	20.67	37169.8	21388.7	15781.1	0.0	0.00
25YR-72HR	20.75	37409.5	21528.9	15880.6	0.0	0.00
25YR-72HR	20.83	37649.8	21669.6	15980.2	0.0	0.00
25YR-72HR	20.92	37890.2	21809.8	16080.3	0.0	0.00
25YR-72HR	21.00	38131.6	21950.7	16180.9	0.0	0.00
25YR-72HR	21.08	38373.2	22091.9	16281.3	0.0	0.00
25YR-72HR	21.17	38615.5	22233.2	16382.3	0.0	0.00
25YR-72HR	21.25	38858.5	22374.5	16483.9	0.0	0.00
25YR-72HR	21.33	39102.3	22516.0	16586.3	0.0	0.00
25YR-72HR	21.42	39346.3	22657.9	16688.4	0.0	0.00
25YR-72HR	21.50	39590.7	22799.8	16790.9	0.0	0.00
25YR-72HR	21.58	39836.0	22942.0	16894.0	0.0	0.00
25YR-72HR	21.67	40082.1	23084.8	16997.4	0.0	0.00
25YR-72HR	21.75	40328.2	23227.0	17101.2	0.0	0.00
25YR-72HR	21.83	40575.0	23370.1	17205.0	0.0	0.00
25YR-72HR	21.92	40822.6	23513.0	17309.7	0.0	0.00
25YR-72HR	22.00	41070.5	23656.0	17414.5	0.0	0.00
25YR-72HR	22.08	41319.3	23799.5	17519.8	0.0	0.00
25YR-72HR	22.17	41568.2	23943.1	17625.2	0.0	0.00
25YR-72HR	22.25	41817.9	24086.8	17731.1	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	22.33	42068.0	24230.9	17837.1	0.0	0.00
25YR-72HR	22.42	42318.8	24374.7	17944.1	0.0	0.00
25YR-72HR	22.50	42570.4	24519.0	18051.3	0.0	0.00
25YR-72HR	22.58	42821.9	24663.5	18158.4	0.0	0.00
25YR-72HR	22.67	43074.2	24807.8	18266.4	0.0	0.00
25YR-72HR	22.75	43327.1	24952.8	18374.4	0.0	0.00
25YR-72HR	22.83	43580.8	25097.6	18483.1	0.0	0.00
25YR-72HR	22.92	43834.8	25242.7	18592.1	0.0	0.00
25YR-72HR	23.00	44089.2	25388.3	18701.0	0.0	0.00
25YR-72HR	23.08	44344.0	25533.7	18810.4	0.0	0.00
25YR-72HR	23.17	44599.7	25679.5	18920.2	0.0	0.00
25YR-72HR	23.25	44855.7	25825.3	19030.4	0.0	0.00
25YR-72HR	23.33	45112.4	25971.4	19141.0	0.0	0.00
25YR-72HR	23.42	45369.4	26117.8	19251.5	0.0	0.00
25YR-72HR	23.50	45627.1	26264.0	19363.0	0.0	0.00
25YR-72HR	23.58	45885.0	26410.5	19474.5	0.0	0.00
25YR-72HR	23.67	46143.5	26557.1	19586.3	0.0	0.00
25YR-72HR	23.75	46402.8	26704.1	19698.6	0.0	0.00
25YR-72HR	23.83	46662.5	26850.9	19811.6	0.0	0.00
25YR-72HR	23.92	46922.5	26998.0	19924.4	0.0	0.00
25YR-72HR	24.00	47183.4	27145.3	20038.1	0.0	0.00
25YR-72HR	24.25	48076.6	27647.1	20429.4	0.0	0.00
25YR-72HR	24.50	49130.1	28238.6	20891.5	0.0	0.00
25YR-72HR	24.75	50258.1	28871.0	21387.1	0.0	0.00
25YR-72HR	25.00	51418.0	29519.1	21898.9	0.0	0.00
25YR-72HR	25.25	52593.0	30173.5	22419.5	0.0	0.00
25YR-72HR	25.50	53776.3	30830.0	22946.2	0.0	0.00
25YR-72HR	25.75	54968.0	31489.7	23478.3	0.0	0.00
25YR-72HR	26.00	56167.6	32151.1	24016.6	0.0	0.00
25YR-72HR	26.25	57376.2	32815.7	24560.5	0.0	0.00
25YR-72HR	26.50	58593.2	33482.7	25110.4	0.0	0.00
25YR-72HR	26.75	59818.1	34152.4	25665.7	0.0	0.00
25YR-72HR	27.00	61050.8	34823.9	26226.9	0.0	0.00
25YR-72HR	27.25	62291.6	35498.4	26793.2	0.0	0.00
25YR-72HR	27.50	63539.2	36174.0	27365.2	0.0	0.00
25YR-72HR	27.75	64794.3	36852.5	27941.8	0.0	0.00
25YR-72HR	28.00	66057.6	37533.0	28524.6	0.0	0.00
25YR-72HR	28.25	67328.2	38215.7	29112.5	0.0	0.00
25YR-72HR	28.50	68606.0	38900.4	29705.6	0.0	0.00
25YR-72HR	28.75	69890.2	39586.6	30303.6	0.0	0.00
25YR-72HR	29.00	71182.4	40275.4	30906.9	-0.0	-0.00
25YR-72HR	29.25	72480.3	40965.3	31515.0	0.0	0.00
25YR-72HR	29.50	73785.9	41658.4	32127.5	0.0	0.00
25YR-72HR	29.75	75098.2	42353.0	32745.2	0.0	0.00
25YR-72HR	30.00	76416.9	43048.9	33368.0	0.0	0.00
25YR-72HR	30.25	77742.0	43746.8	33995.2	0.0	0.00
25YR-72HR	30.50	79073.9	44446.3	34627.5	0.0	0.00
25YR-72HR	30.75	80411.6	45147.4	35264.2	0.0	0.00
25YR-72HR	31.00	81756.2	45850.3	35906.0	0.0	0.00
25YR-72HR	31.25	83106.3	46554.8	36551.5	0.0	0.00
25YR-72HR	31.50	84462.9	47261.3	37201.6	0.0	0.00
25YR-72HR	31.75	85825.5	47969.3	37856.2	0.0	0.00
25YR-72HR	32.00	87193.8	48678.4	38515.4	0.0	0.00
25YR-72HR	32.25	88567.9	49388.8	39179.1	0.0	0.00
25YR-72HR	32.50	89947.8	50101.4	39846.4	0.0	0.00
25YR-72HR	32.75	91333.9	50815.3	40518.6	0.0	0.00
25YR-72HR	33.00	92725.1	51530.6	41194.5	0.0	0.00
25YR-72HR	33.25	94121.5	52246.9	41874.6	0.0	0.00
25YR-72HR	33.50	95523.9	52965.1	42558.8	0.0	0.00
25YR-72HR	33.75	96931.3	53683.9	43247.4	0.0	0.00
25YR-72HR	34.00	98344.9	54404.6	43940.3	0.0	0.00
25YR-72HR	34.25	99762.7	55126.3	44636.4	0.0	0.00
25YR-72HR	34.50	101186.5	55849.1	45337.4	0.0	0.00
25YR-72HR	34.75	102615.5	56574.3	46041.2	0.0	0.00
25YR-72HR	35.00	104049.0	57299.5	46749.5	0.0	0.00
25YR-72HR	35.25	105487.5	58025.8	47461.7	0.0	0.00
25YR-72HR	35.50	106931.4	58754.0	48177.4	0.0	0.00
25YR-72HR	35.75	108380.2	59483.4	48896.8	0.0	0.00
25YR-72HR	36.00	109833.0	60213.6	49619.4	0.0	0.00
25YR-72HR	36.25	111295.8	60947.7	50348.1	0.0	0.00
25YR-72HR	36.50	112770.1	61685.9	51084.1	0.0	0.00
25YR-72HR	36.75	114251.2	62426.0	51825.2	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	37.00	115738.7	63168.0	52570.7	0.0	0.00
25YR-72HR	37.25	117230.1	63911.2	53318.9	0.0	0.00
25YR-72HR	37.50	118727.4	64655.4	54072.0	0.0	0.00
25YR-72HR	37.75	120228.6	65400.5	54828.1	0.0	0.00
25YR-72HR	38.00	121733.6	66146.7	55586.9	0.0	0.00
25YR-72HR	38.25	123244.4	66894.8	56349.6	0.0	0.00
25YR-72HR	38.50	124758.8	67643.1	57115.7	0.0	0.00
25YR-72HR	38.75	126277.1	68392.6	57884.5	0.0	0.00
25YR-72HR	39.00	127800.8	69142.7	58658.1	0.0	0.00
25YR-72HR	39.25	129327.6	69893.6	59434.0	0.0	0.00
25YR-72HR	39.50	130859.1	70645.6	60213.5	0.0	0.00
25YR-72HR	39.75	132395.1	71399.0	60996.1	0.0	0.00
25YR-72HR	40.00	133935.0	72152.6	61782.5	0.0	0.00
25YR-72HR	40.25	135478.5	72907.5	62571.0	0.0	0.00
25YR-72HR	40.50	137026.3	73663.3	63363.0	0.0	0.00
25YR-72HR	40.75	138578.2	74419.9	64158.4	0.0	0.00
25YR-72HR	41.00	140133.7	75177.1	64956.6	0.0	0.00
25YR-72HR	41.25	141693.4	75935.8	65757.5	0.0	0.00
25YR-72HR	41.50	143257.0	76695.5	66561.5	0.0	0.00
25YR-72HR	41.75	144824.4	77455.4	67369.0	0.0	0.00
25YR-72HR	42.00	146394.7	78215.8	68178.9	0.0	0.00
25YR-72HR	42.25	147969.6	78976.8	68992.8	0.0	0.00
25YR-72HR	42.50	149548.3	79739.5	69808.8	0.0	0.00
25YR-72HR	42.75	151130.1	80502.3	70627.8	0.0	0.00
25YR-72HR	43.00	152715.8	81266.4	71449.4	0.0	0.00
25YR-72HR	43.25	154305.2	82030.9	72274.3	0.0	0.00
25YR-72HR	43.50	155898.0	82796.2	73101.8	0.0	0.00
25YR-72HR	43.75	157494.1	83562.3	73931.8	0.0	0.00
25YR-72HR	44.00	159093.5	84328.9	74764.6	0.0	0.00
25YR-72HR	44.25	160696.4	85096.1	75600.2	0.0	0.00
25YR-72HR	44.50	162303.3	85865.0	76438.3	0.0	0.00
25YR-72HR	44.75	163912.4	86633.7	77278.7	0.0	0.00
25YR-72HR	45.00	165526.4	87403.6	78122.8	0.0	0.00
25YR-72HR	45.25	167142.4	88173.2	78969.2	0.0	0.00
25YR-72HR	45.50	168762.3	88944.1	79818.3	0.0	0.00
25YR-72HR	45.75	170385.4	89715.6	80669.8	0.0	0.00
25YR-72HR	46.00	172010.8	90487.7	81523.1	0.0	0.00
25YR-72HR	46.25	173640.4	91260.5	82379.9	0.0	0.00
25YR-72HR	46.50	175272.2	92033.2	83239.0	0.0	0.00
25YR-72HR	46.75	176908.0	92807.4	84100.6	0.0	0.00
25YR-72HR	47.00	178546.5	93582.1	84964.4	0.0	0.00
25YR-72HR	47.25	180187.7	94357.0	85830.7	0.0	0.00
25YR-72HR	47.50	181832.3	95132.8	86699.5	0.0	0.00
25YR-72HR	47.75	183479.7	95909.5	87570.2	0.0	0.00
25YR-72HR	48.00	185130.7	96686.7	88444.0	0.0	0.00
25YR-72HR	48.25	186835.6	97487.3	89348.4	0.0	0.00
25YR-72HR	48.50	188629.8	98329.2	90300.6	0.0	0.00
25YR-72HR	48.75	190459.1	99187.0	91272.0	0.0	0.00
25YR-72HR	49.00	192304.3	100052.0	92252.3	0.0	0.00
25YR-72HR	49.25	194167.0	100924.0	93243.0	0.0	0.00
25YR-72HR	49.50	196049.8	101804.0	94245.8	0.0	0.00
25YR-72HR	49.75	197943.2	102687.9	95255.3	0.0	0.00
25YR-72HR	50.00	199843.7	103574.7	96269.0	0.0	0.00
25YR-72HR	50.25	201847.8	104507.1	97340.6	0.0	0.00
25YR-72HR	50.50	204015.1	105515.2	98499.9	0.0	0.00
25YR-72HR	50.75	206247.6	106553.4	99694.2	0.0	0.00
25YR-72HR	51.00	208505.4	107602.2	100903.1	0.0	0.00
25YR-72HR	51.25	210830.8	108680.3	102150.4	0.0	0.00
25YR-72HR	51.50	213257.5	109804.9	103452.6	0.0	0.00
25YR-72HR	51.75	215724.6	110947.2	104777.4	0.0	0.00
25YR-72HR	52.00	218210.8	112096.7	106114.1	0.0	0.00
25YR-72HR	52.25	220921.5	113344.4	107577.1	0.0	0.00
25YR-72HR	52.50	223989.6	114756.8	109232.9	0.0	0.00
25YR-72HR	52.75	227195.1	116231.1	110964.0	0.0	0.00
25YR-72HR	53.00	230458.0	117730.1	112727.9	0.0	0.00
25YR-72HR	53.25	233956.2	119331.1	114625.1	0.0	0.00
25YR-72HR	53.50	237819.0	121099.1	116719.9	0.0	0.00
25YR-72HR	53.75	241822.9	122929.4	118893.5	0.0	0.00
25YR-72HR	54.00	245891.2	124786.5	121104.7	0.0	0.00
25YR-72HR	54.25	250205.1	126748.9	123456.1	0.0	0.00
25YR-72HR	54.50	254902.9	128884.1	126018.8	0.0	0.00
25YR-72HR	54.75	259757.2	131087.7	128669.5	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	55.00	264676.5	133317.4	131359.1	0.0	0.00
25YR-72HR	55.25	269849.2	135653.3	134195.9	0.0	0.00
25YR-72HR	55.50	275418.7	138165.2	137253.5	0.0	0.00
25YR-72HR	55.75	281143.1	140742.1	140400.9	0.0	0.00
25YR-72HR	56.00	286944.5	143350.1	143594.3	0.0	0.00
25YR-72HR	56.25	293043.6	146082.7	146960.9	0.0	0.00
25YR-72HR	56.50	299629.2	149030.1	150599.0	0.0	0.00
25YR-72HR	56.75	306405.9	152058.9	154347.0	0.0	0.00
25YR-72HR	57.00	313274.2	155122.9	158151.4	0.0	0.00
25YR-72HR	57.25	320524.7	158344.9	162179.8	0.0	0.00
25YR-72HR	57.50	328406.8	161842.8	166564.0	0.0	0.00
25YR-72HR	57.75	336743.8	165533.4	171210.4	0.0	0.00
25YR-72HR	58.00	345527.4	169416.1	176111.3	0.0	0.00
25YR-72HR	58.25	354753.0	173456.1	181296.9	0.0	0.00
25YR-72HR	58.50	364519.4	177624.1	186895.4	0.0	0.00
25YR-72HR	58.75	375435.7	182046.1	193389.6	0.0	0.00
25YR-72HR	59.00	388027.2	186961.4	201065.8	0.0	0.00
25YR-72HR	59.25	403377.5	192644.4	210733.2	0.0	0.00
25YR-72HR	59.50	422483.6	199532.3	222951.2	0.0	0.00
25YR-72HR	59.75	477900.4	212572.6	265327.8	0.0	0.00
25YR-72HR	60.00	594383.7	238943.0	355440.7	0.0	0.00
25YR-72HR	60.25	700660.2	284770.5	415889.7	0.0	0.00
25YR-72HR	60.50	760495.4	316309.6	444185.9	0.0	0.00
25YR-72HR	60.75	797409.9	337887.6	459522.3	0.0	0.00
25YR-72HR	61.00	819523.2	349765.8	469757.4	0.0	0.00
25YR-72HR	61.25	836594.4	359131.4	477463.0	0.0	0.00
25YR-72HR	61.50	850445.1	367213.9	483231.2	0.0	0.00
25YR-72HR	61.75	862770.0	374384.7	488385.3	0.0	0.00
25YR-72HR	62.00	873798.7	380737.9	493060.8	0.0	0.00
25YR-72HR	62.25	883622.2	386369.1	497253.1	0.0	0.00
25YR-72HR	62.50	891977.6	391246.1	500731.5	0.0	0.00
25YR-72HR	62.75	899605.4	395583.3	504022.1	0.0	0.00
25YR-72HR	63.00	906663.1	399475.2	507187.9	0.0	0.00
25YR-72HR	63.25	913550.2	403056.2	510494.1	0.0	0.00
25YR-72HR	63.50	920377.6	406405.4	513972.2	0.0	0.00
25YR-72HR	63.75	927197.3	409588.3	517609.0	0.0	0.00
25YR-72HR	64.00	934018.9	412649.7	521369.1	0.0	0.00
25YR-72HR	64.25	940064.8	415467.1	524597.6	0.0	0.00
25YR-72HR	64.50	944829.7	417888.9	526940.8	0.0	0.00
25YR-72HR	64.75	949116.8	420064.1	529052.7	0.0	0.00
25YR-72HR	65.00	953223.8	422072.5	531151.3	0.0	0.00
25YR-72HR	65.25	957313.6	423980.7	533332.9	0.0	0.00
25YR-72HR	65.50	961418.9	425825.1	535593.8	0.0	0.00
25YR-72HR	65.75	965530.7	427621.6	537909.1	0.0	0.00
25YR-72HR	66.00	969645.6	429384.0	540261.6	0.0	0.00
25YR-72HR	66.25	973761.7	431116.0	542645.7	0.0	0.00
25YR-72HR	66.50	977878.5	432822.0	545056.6	0.0	0.00
25YR-72HR	66.75	981996.3	434508.6	547487.7	0.0	0.00
25YR-72HR	67.00	986115.0	436181.9	549933.2	0.0	0.00
25YR-72HR	67.25	990234.8	437845.2	552389.7	0.0	0.00
25YR-72HR	67.50	994355.6	439501.0	554854.7	0.0	0.00
25YR-72HR	67.75	998477.4	441151.5	557326.0	0.0	0.00
25YR-72HR	68.00	1002599.9	442797.7	559802.2	0.0	0.00
25YR-72HR	68.25	1006315.4	444362.5	561952.9	0.0	0.00
25YR-72HR	68.50	1009387.7	445762.8	563625.0	0.0	0.00
25YR-72HR	68.75	1012220.9	447064.5	565156.4	0.0	0.00
25YR-72HR	69.00	1014964.4	448301.2	566663.2	0.0	0.00
25YR-72HR	69.25	1017695.2	449498.1	568197.1	0.0	0.00
25YR-72HR	69.50	1020426.5	450667.8	569758.7	0.0	0.00
25YR-72HR	69.75	1023158.2	451817.5	571340.7	0.0	0.00
25YR-72HR	70.00	1025890.3	452952.5	572937.7	0.0	0.00
25YR-72HR	70.25	1028627.3	454077.8	574549.5	0.0	0.00
25YR-72HR	70.50	1031371.9	455196.5	576175.4	0.0	0.00
25YR-72HR	70.75	1034119.6	456310.7	577808.9	0.0	0.00
25YR-72HR	71.00	1036868.7	457421.5	579447.2	0.0	0.00
25YR-72HR	71.25	1039618.4	458529.9	581088.5	0.0	0.00
25YR-72HR	71.50	1042368.6	459636.0	582732.5	0.0	0.00
25YR-72HR	71.75	1045119.1	460740.8	584378.3	0.0	0.00
25YR-72HR	72.00	1047869.6	461844.4	586025.1	-0.0	-0.00
25YR-72HR	72.25	1049825.0	462812.5	587012.5	-0.0	-0.00
25YR-72HR	72.50	1050135.0	463409.6	586725.4	-0.0	-0.00
25YR-72HR	72.75	1050135.0	463844.5	586290.5	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	73.00	1050135.0	464202.5	585932.4	-0.0	-0.00
25YR-72HR	73.25	1050135.0	464503.3	585631.7	-0.0	-0.00
25YR-72HR	73.50	1050135.0	464761.5	585373.5	-0.0	-0.00
25YR-72HR	73.75	1050135.0	464988.2	585146.8	-0.0	-0.00
25YR-72HR	74.00	1050135.0	465191.6	584943.4	-0.0	-0.00
25YR-72HR	74.25	1050135.0	465377.9	584757.1	-0.0	-0.00
25YR-72HR	74.50	1050135.0	465551.6	584583.4	-0.0	-0.00
25YR-72HR	74.75	1050135.0	465716.0	584419.0	-0.0	-0.00
25YR-72HR	75.00	1050135.0	465873.5	584261.5	-0.0	-0.00
25YR-72HR	75.25	1050135.0	466025.8	584109.1	-0.0	-0.00
25YR-72HR	75.50	1050135.0	466174.4	583960.6	-0.0	-0.00
25YR-72HR	75.75	1050135.0	466320.0	583815.0	-0.0	-0.00
25YR-72HR	76.00	1050135.0	466463.4	583671.6	-0.0	-0.00
25YR-72HR	76.25	1050135.0	466605.0	583530.0	-0.0	-0.00
25YR-72HR	76.50	1050135.0	466745.2	583389.8	-0.0	-0.00
25YR-72HR	76.75	1050135.0	466884.2	583250.8	-0.0	-0.00
25YR-72HR	77.00	1050135.0	467022.2	583112.8	-0.0	-0.00
25YR-72HR	77.25	1050135.0	467159.4	582975.6	-0.0	-0.00
25YR-72HR	77.50	1050135.0	467295.7	582839.3	-0.0	-0.00
25YR-72HR	77.75	1050135.0	467333.9	582801.1	-0.0	-0.00
25YR-72HR	78.00	1050135.0	467336.9	582798.1	-0.0	-0.00
25YR-72HR	78.25	1050135.0	467339.9	582795.1	-0.0	-0.00
25YR-72HR	78.50	1050135.0	467342.9	582792.1	-0.0	-0.00
25YR-72HR	78.75	1050135.0	467345.9	582789.1	-0.0	-0.00
25YR-72HR	79.00	1050135.0	467348.9	582786.0	-0.0	-0.00
25YR-72HR	79.25	1050135.0	467351.9	582783.0	-0.0	-0.00
25YR-72HR	79.50	1050135.0	467355.0	582780.0	-0.0	-0.00
25YR-72HR	79.75	1050135.0	467358.0	582777.0	-0.0	-0.00
25YR-72HR	80.00	1050135.0	467361.0	582774.0	-0.0	-0.00
25YR-72HR	80.25	1050135.0	467364.0	582771.0	-0.0	-0.00
25YR-72HR	80.50	1050135.0	467367.0	582768.0	-0.0	-0.00
25YR-72HR	80.75	1050135.0	467370.0	582765.0	-0.0	-0.00
25YR-72HR	81.00	1050135.0	467373.0	582762.0	-0.0	-0.00
25YR-72HR	81.25	1050135.0	467376.0	582759.0	-0.0	-0.00
25YR-72HR	81.50	1050135.0	467379.0	582755.9	-0.0	-0.00
25YR-72HR	81.75	1050135.0	467382.1	582752.9	-0.0	-0.00
25YR-72HR	82.00	1050135.0	467385.1	582749.9	-0.0	-0.00
25YR-72HR	82.25	1050135.0	467388.1	582746.9	-0.0	-0.00
25YR-72HR	82.50	1050135.0	467391.1	582743.9	-0.0	-0.00
25YR-72HR	82.75	1050135.0	467394.1	582740.9	-0.0	-0.00
25YR-72HR	83.00	1050135.0	467397.1	582737.9	0.0	0.00
25YR-72HR	83.25	1050135.0	467400.1	582734.9	-0.0	-0.00
25YR-72HR	83.50	1050135.0	467403.1	582731.9	0.0	0.00
25YR-72HR	83.75	1050135.0	467406.1	582728.8	-0.0	-0.00
25YR-72HR	84.00	1050135.0	467409.2	582725.8	-0.0	-0.00
25YR-72HR	84.25	1050135.0	467412.2	582722.8	-0.0	-0.00
25YR-72HR	84.50	1050135.0	467415.2	582719.8	-0.0	-0.00
25YR-72HR	84.75	1050135.0	467418.2	582716.8	0.0	0.00
25YR-72HR	85.00	1050135.0	467421.2	582713.8	-0.0	-0.00
25YR-72HR	85.25	1050135.0	467424.2	582710.8	-0.0	-0.00
25YR-72HR	85.50	1050135.0	467427.2	582707.8	0.0	0.00
25YR-72HR	85.75	1050135.0	467430.2	582704.8	-0.0	-0.00
25YR-72HR	86.00	1050135.0	467433.2	582701.7	-0.0	-0.00
25YR-72HR	86.25	1050135.0	467436.2	582698.7	-0.0	-0.00
25YR-72HR	86.50	1050135.0	467439.3	582695.7	0.0	0.00
25YR-72HR	86.75	1050135.0	467442.3	582692.7	-0.0	-0.00
25YR-72HR	87.00	1050135.0	467445.3	582689.7	-0.0	-0.00
25YR-72HR	87.25	1050135.0	467448.3	582686.7	-0.0	-0.00
25YR-72HR	87.50	1050135.0	467451.3	582683.7	0.0	0.00
25YR-72HR	87.75	1050135.0	467454.3	582680.7	-0.0	-0.00
25YR-72HR	88.00	1050135.0	467457.3	582677.7	-0.0	-0.00
25YR-72HR	88.25	1050135.0	467460.3	582674.6	-0.0	-0.00
25YR-72HR	88.50	1050135.0	467463.3	582671.6	-0.0	-0.00
25YR-72HR	88.75	1050135.0	467466.4	582668.6	0.0	0.00
25YR-72HR	89.00	1050135.0	467469.4	582665.6	0.0	0.00
25YR-72HR	89.25	1050135.0	467472.4	582662.6	-0.0	-0.00
25YR-72HR	89.50	1050135.0	467475.4	582659.6	-0.0	-0.00
25YR-72HR	89.75	1050135.0	467478.4	582656.6	-0.0	-0.00
25YR-72HR	90.00	1050135.0	467481.4	582653.6	-0.0	-0.00
25YR-72HR	90.25	1050135.0	467484.4	582650.6	-0.0	-0.00
25YR-72HR	90.50	1050135.0	467487.4	582647.6	0.0	0.00
25YR-72HR	90.75	1050135.0	467490.4	582644.5	0.0	0.00

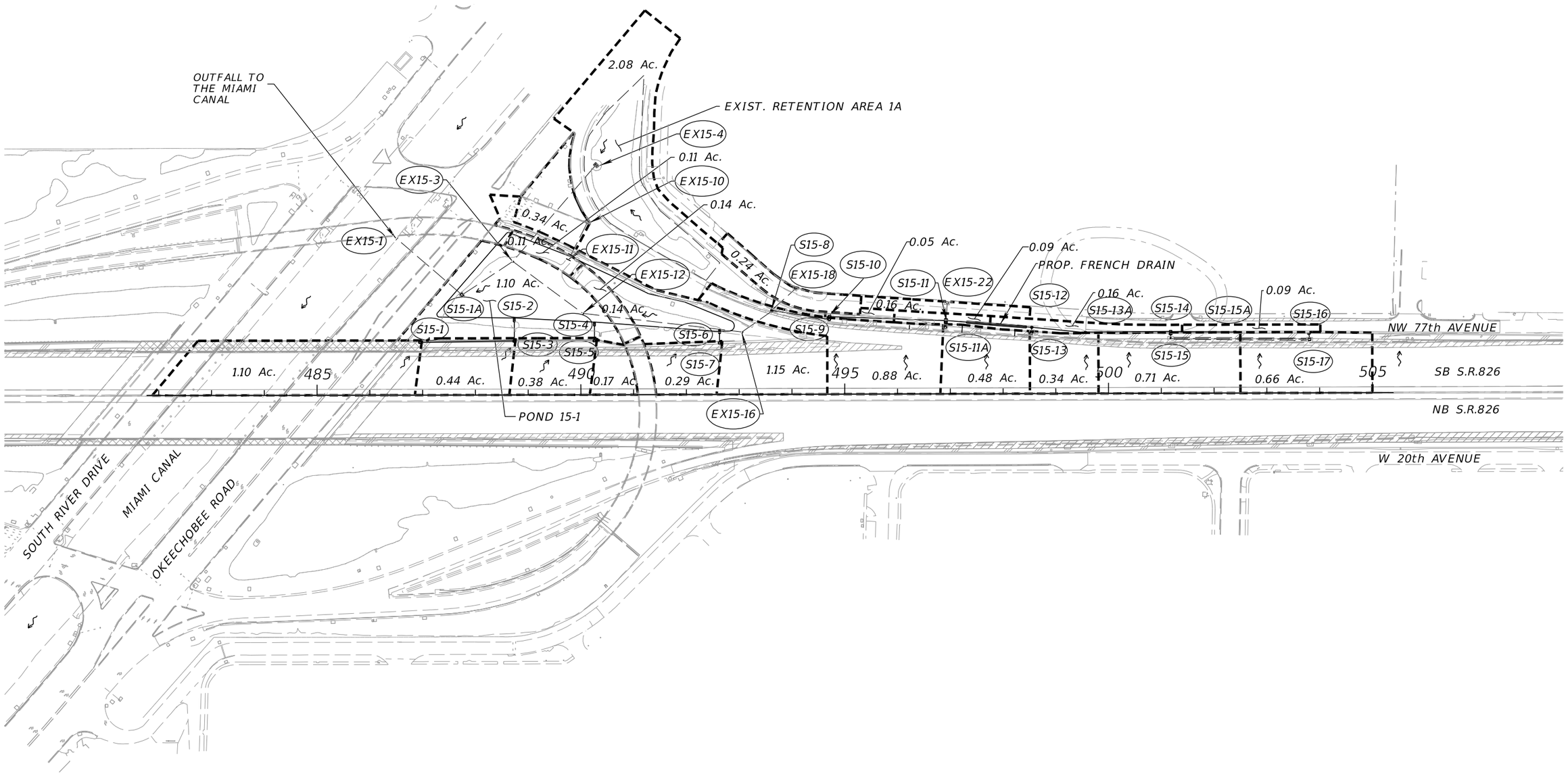
Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	91.00	1050135.0	467493.5	582641.5	-0.0	-0.00
25YR-72HR	91.25	1050135.0	467496.5	582638.5	-0.0	-0.00
25YR-72HR	91.50	1050135.0	467499.5	582635.5	-0.0	-0.00
25YR-72HR	91.75	1050135.0	467502.5	582632.5	-0.0	-0.00
25YR-72HR	92.00	1050135.0	467505.5	582629.5	-0.0	-0.00
25YR-72HR	92.25	1050135.0	467508.5	582626.5	0.0	0.00
25YR-72HR	92.50	1050135.0	467511.5	582623.5	0.0	0.00
25YR-72HR	92.75	1050135.0	467514.5	582620.5	0.0	0.00
25YR-72HR	93.00	1050135.0	467517.5	582617.4	0.0	0.00
25YR-72HR	93.25	1050135.0	467520.5	582614.4	-0.0	-0.00
25YR-72HR	93.50	1050135.0	467523.6	582611.4	-0.0	-0.00
25YR-72HR	93.75	1050135.0	467526.6	582608.4	-0.0	-0.00
25YR-72HR	94.00	1050135.0	467529.6	582605.4	-0.0	-0.00
25YR-72HR	94.25	1050135.0	467532.6	582602.4	-0.0	-0.00
25YR-72HR	94.50	1050135.0	467535.6	582599.4	-0.0	-0.00
25YR-72HR	94.75	1050135.0	467538.6	582596.4	-0.0	-0.00
25YR-72HR	95.00	1050135.0	467541.6	582593.4	0.0	0.00
25YR-72HR	95.25	1050135.0	467544.6	582590.3	0.0	0.00
25YR-72HR	95.50	1050135.0	467547.6	582587.3	0.0	0.00
25YR-72HR	95.75	1050135.0	467550.7	582584.3	-0.0	-0.00
25YR-72HR	96.00	1050135.0	467553.7	582581.3	-0.0	-0.00
25YR-72HR	96.00	1050135.0	467553.7	582581.3	-0.0	-0.00

Basin 15

Drainage Maps

PRE-DEVELOPMENT CONDITIONS

0 50 200
Feet



BASIN 15 TOTAL AREA = 11.16 ACRES
SUB-BASIN 15A TOTAL AREA = 2.08 ACRES
SUB-BASIN 15B TOTAL AREA = 5.22 ACRES
SUB-BASIN 15C TOTAL AREA = 3.86 ACRES

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
826	MIAMI-DADE	432687-1-52-01

DRAINAGE MAP (BASIN 15)

SHEET NO. J-1022

malfonso 5/6/2019 3:14:34 PM P:\432687152\01 SR-826-I-75 Express Lanes\drainage\Post-Development Conditions\drmprd15.dgn

Curve Number Calculations

PRE-DEVELOPMENT CONDITIONS
AREA BREAKDOWN (BASIN B-15)

SUB-BASIN	TOTAL DRAINAGE AREA (ACRES)	PERVIOUS DRAINAGE AREA (ACRES)	PERVIOUS AREA CURVE NUMBER	IMPERVIOUS DRAINAGE AREA (ACRES)	IMPERVIOUS AREA CURVE NUMBER	COMPOSITE CURVE NUMBER
BX15-4	2.08	0.94	61	1.14	96	80
Total Sub-Basin B-15A	**2.08**	**0.94**	**61**	**1.14**	**96**	**80**
B15-1	1.10	0.00	61	1.10	96	96
B15-3	0.44	0.00	61	0.44	96	96
B15-5	0.38	0.00	61	0.38	96	96
B15-7	0.46	0.00	61	0.46	96	96
B15-1A	2.25	1.10	61	1.15	96	79
BX15-10	0.34	0.17	61	0.17	96	79
BX15-11	0.25	0.17	61	0.08	96	72
Total Sub-Basin B-15B	**5.22**	**1.44**	**61**	**3.78**	**96**	**86**
B15-9	0.88	0.00	61	0.88	96	96
B15-10	0.05	0.00	61	0.05	96	96
B15-11	0.09	0.09	61	0.00	96	61
B15-11A	0.48	0.00	61	0.48	96	96
B15-13	0.34	0.00	61	0.34	96	96
B15-13A	0.16	0.00	61	0.16	96	96
B15-14	0.71	0.00	61	0.71	96	96
B15-15A	0.09	0.00	61	0.09	96	96
B15-16	0.66	0.08	61	0.58	96	92
BX15-18	0.24	0.07	61	0.17	96	86
BX15-22	0.16	0.08	61	0.08	96	79
Total Sub-Basin B-15C	**3.86**	**0.32**	**61**	3.54	**96**	**93**
Total Basin B-15	**11.16**	**2.70**	**61**	**8.46**	**96**	**88**

Average Hydraulic Conductivity

Average Hydraulic Conductivity

Basin B-15		
Percolation Test	P-27	P-28
Average Flow to 10 ft. depth (gpm)	0.10	49.82
Depth to Water Table (ft)	1.90	3.40
Head Maintained (ft)	0.90	2.40
Borehole Diameter (ft)	0.604	0.604
Borehole Depth (ft)	10.00	10.00
Du (ft)	0.90	2.40
Average Flow (cfs)	0.0002	0.1110
Ds (ft)	8.10	6.60
Hydraulic Conductivity K (cfs/ft2-ft head)	1.48E-05	3.06E-03
Average Hydraulic Conductivity K	**1.54E-03**	

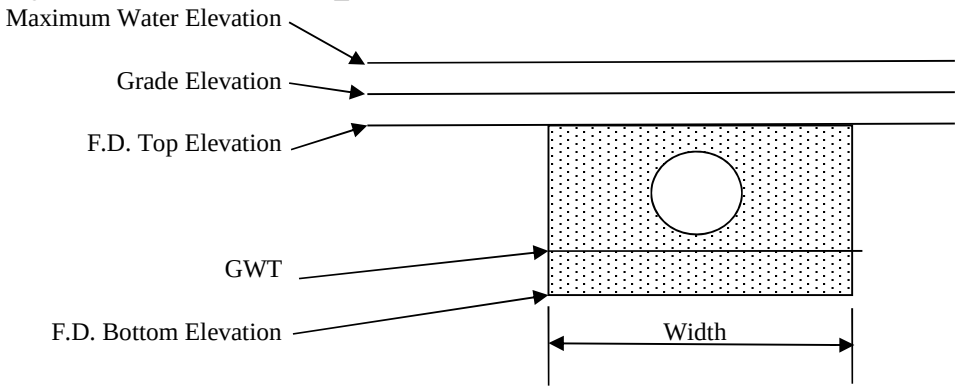
Rating Curve Calculations

Made by: _____ _____

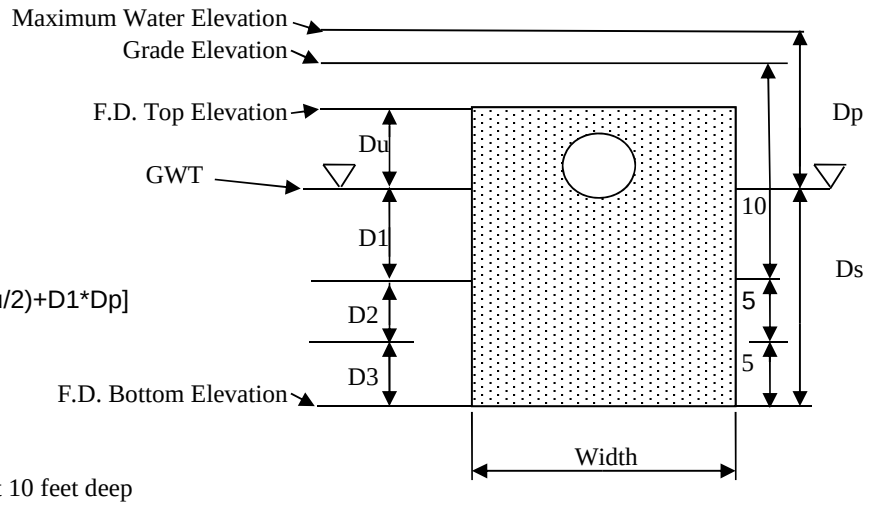
Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-15



Maximum Water Elevation =	**5.45**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**4.45**	ft.NAVD	
F.D.Top Elevation =	**3.90**	ft.NAVD	
Ground Water Table =	**1.45**	ft.NAVD	
F.D. Bottom Elevation =	**-11.54**	ft.NAVD	
Width =	**4.50**	feet.	
Pipe Diameter =	**24**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**1.54E-03**	cfs/ft^2-ft head	(Ave. P-27,P-28)
Hydraulic Conductivity K15 =	**1.54E-03**	cfs/ft^2-ft head	(Ave. P-27,P-28)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____

Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-15

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs/ft)	(cfs/ft)
1.45	0.000	0.000
2.20	0.026	0.000
3.90	0.107	0.076
5.45	0.181	0.150

Rating Curve (Q)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs)	(cfs)
1.45	0.00	0.00
2.20	0.03	0.00
3.90	0.11	0.08
5.45	0.18	0.15

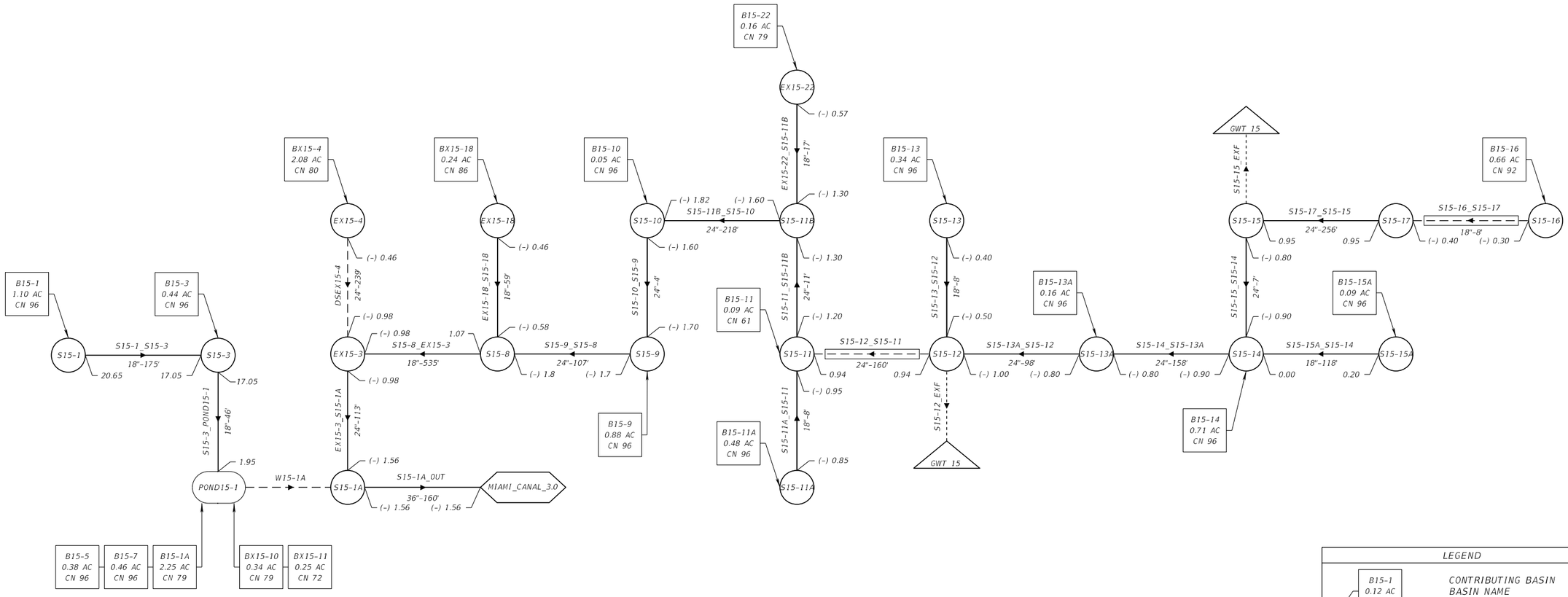
Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

Rating Curve Adjusted (Q)

Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.45	1.45	0.00
1.45	2.20	0.03
1.45	3.90	0.10
1.45	5.45	0.10
2.20	2.20	0.00
2.20	3.90	0.08
2.20	5.45	0.10

Nodal Diagram

PRE-DEVELOPMENT CONDITIONS



WEIR INPUT SUMMARY							
WEIR	VERT. TYPE	HORIZ.	CIRC.	RECT.	INV.	SPAN	RISE
W15-1A	-	X	-	X	3.15'	54"	29.76"
DSEX15-4	-	X	-	X	3.25'	37"	24"

LEGEND

- B15-1 / 0.12 AC / CN 96 — CONTRIBUTING BASIN, BASIN NAME, BASIN AREA, CURVE NUMBER
- S15-2 — NODE NAME
- PETER'S PIPE CANAL — BOUNDARY NODE WITH CONSTANT TAILWATER
- GWT 23 — BOUNDARY NODE WITH VARIABLE TAILWATER
- S15-3_S15-4 / 18"-42" / 21.50 / 21.40 — PIPE LINK WITH (QUANTITY)SIZE-LENGTH INVERT ELEVATIONS
- WEX15_14 — WEIR LINK
- AREA 1_EXF — RATING CURVE LINK

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
826	MIAMI-DADE	447165-1-52-01 441830-1-52-01 441831-1-52-01

NODAL DIAGRAM
BASIN 15

SHEET NO.

AMATHURA 11/10/2020 2:13:09 PM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\44716515201\zz_working\AM's Work

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
EX15-18	Basin 15	25YR-72HR	60.07	3.51	4.60	-0.0021	115	60.02	1.45	60.07	1.40
EX15-22	Basin 15	25YR-72HR	60.06	3.52	4.93	-0.0025	114	60.02	0.94	60.02	1.01
EX15-3	Basin 15	25YR-72HR	60.18	2.43	7.00	0.0021	139	60.23	7.79	60.25	7.81
EX15-4	Basin 15	25YR-72HR	60.43	3.54	7.00	0.0007	35418	60.02	12.26	60.43	4.98
CWT_15	Basin 15	25YR-72HR	72.00	2.20	99.00	0.0002	0	60.05	17.98	0.00	0.00
MIAMI_CANAL_3.0	Basin 15	25YR-72HR	0.00	1.45	99.00	0.0000	12	60.17	30.54	0.00	0.00
POND15-1	Basin 15	25YR-72HR	60.16	3.79	7.00	0.0006	53637	60.02	31.27	60.16	22.78
S15-1	Basin 15	25YR-72HR	60.02	22.24	24.07	-0.0019	151	60.02	6.82	60.02	6.82
S15-10	Basin 15	25YR-72HR	60.06	3.54	6.35	0.0058	124	71.71	2.25	71.72	2.18
S15-11	Basin 15	25YR-72HR	60.06	3.49	4.92	-0.0021	122	71.71	2.66	71.72	2.47
S15-11A	Basin 15	25YR-72HR	60.06	3.56	4.09	-0.0021	113	60.02	2.98	60.02	2.92
S15-11B	Basin 15	25YR-72HR	60.06	3.51	5.50	0.0039	125	71.72	3.24	71.71	2.25
S15-12	Basin 15	25YR-72HR	60.05	3.26	5.12	-0.0016	126	71.72	1.85	71.71	1.41
S15-13	Basin 15	25YR-72HR	60.05	3.29	4.50	-0.0017	113	60.02	2.11	60.03	2.07
S15-13A	Basin 15	25YR-72HR	60.05	3.24	5.43	0.0041	126	59.58	1.79	71.71	1.37
S15-14	Basin 15	25YR-72HR	60.05	3.21	4.48	-0.0057	126	70.34	1.20	68.35	1.65
S15-15	Basin 15	25YR-72HR	60.05	3.06	5.10	-0.0022	126	60.03	4.02	60.04	4.01
S15-15A	Basin 15	25YR-72HR	60.05	3.21	5.71	-0.0015	117	60.02	0.56	60.09	0.56
S15-16	Basin 15	25YR-72HR	60.04	3.33	4.52	-0.0018	113	60.02	4.07	60.02	4.04
S15-17	Basin 15	25YR-72HR	60.05	3.20	4.03	-0.0015	126	60.02	4.04	60.03	4.02
S15-1A	Basin 15	25YR-72HR	60.17	2.17	7.00	0.0026	131	60.17	30.54	60.17	30.54
S15-3	Basin 15	25YR-72HR	60.03	18.96	20.47	-0.0028	221	60.02	9.54	60.03	9.52
S15-8	Basin 15	25YR-72HR	60.07	3.49	4.40	-0.0021	141	59.97	5.32	59.96	5.22
S15-9	Basin 15	25YR-72HR	60.07	3.55	3.51	-0.0055	119	59.93	6.10	59.86	4.08

Qpre = 30.54 cfs

==========
==== Basins ====
==========

Name: B15-1 Node: S15-1 Status: Onsite
Group: Basin 15 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 1.100 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B15-10 Node: S15-10 Status: Onsite
Group: Basin 15 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.050 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B15-11 Node: S15-11 Status: Onsite
Group: Basin 15 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.090 Time Shift(hrs): 0.00
Curve Number: 61.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B15-11A Node: S15-11A Status: Onsite
Group: Basin 15 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.480 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B15-13 Node: S15-13 Status: Onsite
Group: Basin 15 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.340 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B15-13A Node: S15-13A Status: Onsite
Group: Basin 15 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00

Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.160 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B15-14 Node: S15-14 Status: Onsite
Group: Basin 15 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.710 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B15-15A Node: S15-15A Status: Onsite
Group: Basin 15 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.090 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B15-16 Node: S15-16 Status: Onsite
Group: Basin 15 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.660 Time Shift(hrs): 0.00
Curve Number: 92.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B15-1A Node: POND15-1 Status: Onsite
Group: Basin 15 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 2.250 Time Shift(hrs): 0.00
Curve Number: 79.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B15-3 Node: S15-3 Status: Onsite
Group: Basin 15 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.440 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B15-5 Node: POND15-1 Status: Onsite
Group: Basin 15 Type: SCS Unit Hydrograph CN

```
        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.380                   Time Shift(hrs): 0.00
            Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: B15-7                    Node: POND15-1              Status: Onsite
        Group: Basin 15                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.460                   Time Shift(hrs): 0.00
            Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: B15-9                    Node: S15-9                 Status: Onsite
        Group: Basin 15                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.880                   Time Shift(hrs): 0.00
            Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: BX15-10                  Node: POND15-1              Status: Onsite
        Group: Basin 15                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.340                   Time Shift(hrs): 0.00
            Curve Number: 79.00               Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: BX15-11                  Node: POND15-1              Status: Onsite
        Group: Basin 15                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.250                   Time Shift(hrs): 0.00
            Curve Number: 72.00               Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: BX15-18                  Node: EX15-18               Status: Onsite
        Group: Basin 15                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.240                   Time Shift(hrs): 0.00
            Curve Number: 86.00               Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

Name: BX15-22 Node: EX15-22 Status: Onsite
Group: Basin 15 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.160 Time Shift(hrs): 0.00
Curve Number: 79.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX15-4 Node: EX15-4 Status: Onsite
Group: Basin 15 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 2.080 Time Shift(hrs): 0.00
Curve Number: 80.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

==========
==== Nodes ==========
==========

Name: EX15-18 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 4.600
Type: Stage/Area

Stage(ft)	Area(ac)
0.000	0.0004
4.600	0.0004

Name: EX15-22 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 4.930
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.930	0.0004

Name: EX15-3 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 7.000
Type: Stage/Area

Stage(ft)	Area(ac)
-0.980	0.0004
5.450	0.0004

Name: EX15-4 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 7.000
Type: Stage/Area

Stage(ft)	Area(ac)
-0.460	0.0004

1.940	0.0004
1.950	0.7700
3.250	0.8000
5.000	0.8800
6.000	0.9300

Name: GWT_15 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	1.450
108.00	1.450

Name: MIAMI_CANAL_3.0 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	1.450
108.00	1.450

Name: POND15-1 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 7.000
Type: Stage/Area

Stage(ft)	Area(ac)
-1.560	0.0004
1.940	0.0004
1.950	1.1200
3.250	1.2000
5.000	1.3000
6.000	1.3600

Name: S15-1 Base Flow(cfs): 0.000 Init Stage(ft): 20.650
Group: Basin 15 Warn Stage(ft): 24.070
Type: Stage/Area

Stage(ft)	Area(ac)
18.650	0.0004
24.070	0.0004

Name: S15-10 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 6.350
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.350	0.0004

Name: S15-11 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 4.920
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.920	0.0004

Name: S15-11A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 4.090
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.090	0.0004

Name: S15-11B Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 5.500
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.500	0.0004

Name: S15-12 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 5.120
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.120	0.0004

Name: S15-13 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 4.500
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.500	0.0004

Name: S15-13A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 5.430
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.430	0.0004

Name: S15-14 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 4.480
Type: Stage/Area

Stage(ft)	Area(ac)

1.450	0.0004
4.480	0.0004

Name: S15-15 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 5.100
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.100	0.0004

Name: S15-15A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 5.710
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.710	0.0004

Name: S15-16 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 4.520
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.520	0.0004

Name: S15-17 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 4.030
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.030	0.0004

Name: S15-1A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 7.000
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
3.150	0.0004

Name: S15-3 Base Flow(cfs): 0.000 Init Stage(ft): 17.050
Group: Basin 15 Warn Stage(ft): 20.470
Type: Stage/Area

Stage(ft)	Area(ac)
15.050	0.0004
20.470	0.0004

```
--------------------------------------------------------------------------------------------
      Name: S15-8               Base Flow(cfs): 0.000          Init Stage(ft): 1.450
     Group: Basin 15                                           Warn Stage(ft): 4.400
      Type: Stage/Area


      Stage(ft)        Area(ac)
--------------- ---------------
          1.450          0.0004
          4.400          0.0004

--------------------------------------------------------------------------------------------
      Name: S15-9               Base Flow(cfs): 0.000          Init Stage(ft): 1.450
     Group: Basin 15                                           Warn Stage(ft): 3.510
      Type: Stage/Area


      Stage(ft)        Area(ac)
--------------- ---------------
          1.450          0.0004
          3.510          0.0004

============================================================================================
==== Operating Tables ======================================================================
============================================================================================

      Name: E_OPT_15C            Group: Basin 15
      Type: Rating Curve
  Function: Family of Tailwater-Headwater-Discharge Relationships


  Tailwater(ft)   Headwater(ft)  Discharge(cfs)
--------------- --------------- ---------------
          1.450            1.45            0.00
          1.450            2.20            0.03
          1.450            3.90            0.10
          1.450            5.45            0.10
          2.200            2.20            0.00
          2.200            3.90            0.08
          2.200            5.45            0.10

============================================================================================
==== Pipes =================================================================================
============================================================================================

         Name: EX15-18_S15-8       From Node: EX15-18           Length(ft): 59.00
        Group: Basin 15              To Node: S15-8                Count: 1
                                                        Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
    Geometry: Circular        Circular                         Flow: Both
    Span(in): 18.00           18.00                   Entrance Loss Coef: 0.50
    Rise(in): 18.00           18.00                       Exit Loss Coef: 1.46
   Invert(ft): -0.460         -0.580                      Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                 Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                      Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                   Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


--------------------------------------------------------------------------------------------
         Name: EX15-22_S15-11B     From Node: EX15-22           Length(ft): 17.00
        Group: Basin 15              To Node: S15-11B              Count: 1
                                                        Friction Equation: Automatic
```

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	18.00	18.00	Flow:	Both
Rise(in):	18.00	18.00	Entrance Loss Coef:	0.50
Invert(ft):	-0.570	-1.300	Exit Loss Coef:	1.46
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX15-3_S15-1A	From Node:	EX15-3
Group:	Basin 15	To Node:	S15-1A

Length(ft): 113.00
Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	24.00	24.00	Flow:	Both
Rise(in):	24.00	24.00	Entrance Loss Coef:	0.50
Invert(ft):	-0.980	-1.560	Exit Loss Coef:	1.46
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	P15-1A_OUT	From Node:	S15-1A
Group:	Basin 15	To Node:	MIAMI_CANAL_3.0

Length(ft): 160.00
Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	36.00	36.00	Flow:	Both
Rise(in):	36.00	36.00	Entrance Loss Coef:	0.50
Invert(ft):	-1.560	-1.560	Exit Loss Coef:	1.00
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-10_S15-9	From Node:	S15-10
Group:	Basin 15	To Node:	S15-9

Length(ft): 4.00
Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	24.00	24.00	Flow:	Both
Rise(in):	24.00	24.00	Entrance Loss Coef:	0.50
Invert(ft):	-1.600	-1.700	Exit Loss Coef:	1.46
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
			Outlet Ctrl Spec:	Use dc or tw

Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-11_S15-11B	From Node: S15-11	Length(ft): 11.00
Group:	Basin 15	To Node: S15-11B	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 1.46
Invert(ft):	-1.200	-1.300	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-11A_S15-11	From Node: S15-11A	Length(ft): 8.00
Group:	Basin 15	To Node: S15-11	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.10
Invert(ft):	-0.850	-0.950	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-11B_S15-10	From Node: S15-11B	Length(ft): 218.00
Group:	Basin 15	To Node: S15-10	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 1.46
Invert(ft):	-1.600	-1.820	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:

Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-12_S15-11	From Node: S15-12	Length(ft):	160.00
Group:	Basin 15	To Node: S15-11	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	1.35
Rise(in):	24.00	24.00	Exit Loss Coef:	1.46
Invert(ft):	0.940	0.940	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-13_S15-12	From Node: S15-13	Length(ft):	8.00
Group:	Basin 15	To Node: S15-12	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	-0.400	-0.500	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-13A_S15-12	From Node: S15-13A	Length(ft):	98.00
Group:	Basin 15	To Node: S15-12	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	0.10
Invert(ft):	-0.800	-1.000	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

```
-------------------------------------------------------------------------------------------------
         Name: S15-14_S15-13A      From Node: S15-14            Length(ft): 158.00
        Group: Basin 15              To Node: S15-13A                Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 24.00          24.00                     Entrance Loss Coef: 0.50
     Rise(in): 24.00          24.00                         Exit Loss Coef: 0.10
   Invert(ft): -0.900         -0.800                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: S15-15_S15-14       From Node: S15-15            Length(ft): 7.00
        Group: Basin 15              To Node: S15-14                 Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 24.00          24.00                     Entrance Loss Coef: 0.50
     Rise(in): 24.00          24.00                         Exit Loss Coef: 1.46
   Invert(ft): -0.800         -0.900                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: S15-15A_S15-14      From Node: S15-15A           Length(ft): 118.00
        Group: Basin 15              To Node: S15-14                 Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 18.00          18.00                     Entrance Loss Coef: 0.50
     Rise(in): 18.00          18.00                         Exit Loss Coef: 0.10
   Invert(ft): 0.200          0.000                         Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: S15-16_S15-17       From Node: S15-16            Length(ft): 8.00
        Group: Basin 15              To Node: S15-17                 Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
```

Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	-0.300	-0.400	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-17_S15-15	From Node: S15-17	Length(ft):	256.00
Group:	Basin 15	To Node: S15-15	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	1.35
Rise(in):	24.00	24.00	Exit Loss Coef:	1.46
Invert(ft):	0.950	0.950	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-1_S15-3	From Node: S15-1	Length(ft):	175.00
Group:	Basin 15	To Node: S15-3	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	20.650	17.050	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-3_S15-1A	From Node: S15-3	Length(ft):	46.00
Group:	Basin 15	To Node: POND15-1	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.00
Invert(ft):	17.050	1.950	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn

```
 Bot Clip(in): 0.000          0.000                      Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


------------------------------------------------------------------------------------------------
         Name: S15-8_EX15-3        From Node: S15-8             Length(ft): 535.00
        Group: Basin 15              To Node: EX15-3                 Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 18.00          18.00                     Entrance Loss Coef: 0.50
     Rise(in): 18.00          18.00                         Exit Loss Coef: 1.46
   Invert(ft): 1.070          -0.980                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


------------------------------------------------------------------------------------------------
         Name: S15-9_S15-8         From Node: S15-9             Length(ft): 107.00
        Group: Basin 15              To Node: S15-8                  Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 24.00          24.00                     Entrance Loss Coef: 0.50
     Rise(in): 24.00          24.00                         Exit Loss Coef: 1.46
   Invert(ft): -1.700         -1.800                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


================================================================================================
==== Drop Structures ===========================================================================
================================================================================================

         Name: DSEX15-4            From Node: EX15-4            Length(ft): 239.00
        Group: Basin 15              To Node: EX15-3                 Count: 1

               UPSTREAM       DOWNSTREAM                Friction Equation: Automatic
     Geometry: Circular       Circular                 Solution Algorithm: Most Restrictive
     Span(in): 24.00          24.00                            Flow: Both
     Rise(in): 24.00          24.00                     Entrance Loss Coef: 0.500
   Invert(ft): -0.460         -0.980                        Exit Loss Coef: 0.100
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                          Solution Incs: 10

Upstream FHWA Inlet Edge Description:
```

Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 1 for Drop Structure DSEX15-4 ***

TABLE

Count: 1 | Bottom Clip(in): 0.000
Type: Horizontal | Top Clip(in): 0.000
Flow: Both | Weir Disc Coef: 3.200
Geometry: Rectangular | Orifice Disc Coef: 0.600

Span(in): 37.00 | Invert(ft): 3.250
Rise(in): 24.00 | Control Elev(ft): 3.250

==========
==== Weirs ==========
==========

Name: W15-1A | From Node: POND15-1
Group: Basin 15 | To Node: S15-1A
Flow: Both | Count: 1
Type: Horizontal | Geometry: Rectangular

Span(in): 54.00
Rise(in): 29.76
Invert(ft): 3.150
Control Elevation(ft): 3.150

TABLE

Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 3.200
Orifice Discharge Coef: 0.600

==========
==== Rating Curves ==========
==========

Name: S15-12_EXF | From Node: S15-12 | Count: 114
Group: Basin 15 | To Node: GWT_15 | Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_15C	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S15-15_EXF | From Node: S15-15 | Count: 244
Group: Basin 15 | To Node: GWT_15 | Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_15C	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

==========
==== Hydrology Simulations ==========
==========

Name: 100YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 1.00

Rainfall File: Fdot-1
Rainfall Amount(in): 5.00

Time(hrs)	Print Inc(min)
1.000	1.00
1.330	1.00

Name: 100YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 13.44

Time(hrs)	Print Inc(min)
8.000	5.00
16.000	1.00
24.000	5.00
24.330	5.00

Name: 100YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 9.60

Time(hrs)	Print Inc(min)
2.000	5.00
6.000	1.00
8.000	5.00
8.330	5.00

Name: 10YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 3.50

Time(hrs)	Print Inc(min)
1.000	1.00
1.330	1.00

Name: 10YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 8.88

Time(hrs)	Print Inc(min)
8.000	5.00
16.000	1.00
24.000	5.00
24.330	5.00

Name: 10YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes

Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 6.40

Time(hrs)	Print Inc(min)
2.000	5.00
6.000	1.00
8.000	5.00
8.330	5.00

Name: 25YR-72HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Sfwmd72
Rainfall Amount(in): 14.00

Time(hrs)	Print Inc(min)
48.000	15.00
56.000	5.00
64.000	1.00
72.000	5.00
96.000	5.00

==========
==== Routing Simulations ==========
==========

Name: 100YR-1HR Hydrology Sim: 100YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 25.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
1.000	1.000
25.000	15.000

Group	Run
Basin 15	Yes

Name: 100YR-24HR Hydrology Sim: 100YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 48.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 24HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000

24.000 5.000
48.000 15.000

Group	Run
Basin 15	Yes

Name: 100YR-8HR Hydrology Sim: 100YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 36.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 8HR Boundary Flows:

Time(hrs)	Print Inc(min)
2.000	5.000
6.000	1.000
8.000	5.000
36.000	15.000

Group	Run
Basin 15	Yes

Name: 10YR-1HR Hydrology Sim: 10YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.01000
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 25.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
1.000	1.000
25.000	15.000

Group	Run
Basin 15	Yes

Name: 10YR-24HR Hydrology Sim: 10YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 48.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 24HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
48.000	15.000

Group	Run
Basin 15	Yes

Name: 10YR-8HR Hydrology Sim: 10YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 36.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 8HR Boundary Flows:

Time(hrs)	Print Inc(min)
2.000	5.000
6.000	1.000
8.000	5.000
36.000	15.000

Group	Run
Basin 15	Yes

Name: 25YR-72HR Hydrology Sim: 25YR-72HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 96.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 72HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
96.000	15.000

Group	Run
Basin 15	Yes

==========
==== Boundary Conditions ====
==========

Name: 8HR Node: GWT_15 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.450

1.000	1.470
2.000	1.550
3.000	1.660
4.000	1.980
5.000	2.100
6.000	2.140
7.000	2.180
8.000	2.200
12.000	1.450
36.000	1.450

Name: 24HR Node: GWT_15 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.450
1.000	1.460
2.000	1.470
3.000	1.500
4.000	1.520
5.000	1.540
6.000	1.570
7.000	1.600
8.000	1.630
9.000	1.680
10.000	1.720
11.000	1.780
12.000	1.860
13.000	1.910
14.000	1.950
15.000	2.000
16.000	2.040
17.000	2.070
18.000	2.100
19.000	2.130
20.000	2.150
21.000	2.170
22.000	2.190
23.000	2.190
24.000	2.200
36.000	1.450
48.000	1.450

Name: 72HR Node: GWT_15 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.450
24.000	1.530
36.000	1.590
48.000	1.650
49.000	1.650
50.000	1.660
51.000	1.670
52.000	1.670
53.000	1.680
54.000	1.690
55.000	1.710
56.000	1.720
57.000	1.740
57.500	1.750
58.000	1.770
58.500	1.780
59.000	1.800
59.500	1.820
60.000	2.010
60.500	2.050
61.000	2.070
61.500	2.090
62.000	2.100
62.500	2.110
63.000	2.120
64.000	2.130

65.000	2.140
66.000	2.150
68.000	2.170
70.000	2.190
72.000	2.200
96.000	1.450

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	0.00	0.0	0.0	0.0	0.0	0.00
25YR-72HR	0.08	0.0	-0.1	0.1	0.0	0.00
25YR-72HR	0.17	0.0	-0.5	0.5	0.0	0.00
25YR-72HR	0.25	0.0	-0.8	0.8	-0.0	-0.00
25YR-72HR	0.33	0.0	-1.7	1.7	0.0	0.00
25YR-72HR	0.42	0.0	-2.2	2.2	0.0	0.00
25YR-72HR	0.50	0.0	-2.6	2.6	0.0	0.00
25YR-72HR	0.58	0.0	-3.0	3.0	0.0	0.00
25YR-72HR	0.67	0.0	-3.4	3.4	0.0	0.00
25YR-72HR	0.75	0.0	-3.8	3.8	0.0	0.00
25YR-72HR	0.83	0.0	-4.1	4.1	0.0	0.00
25YR-72HR	0.92	0.0	-4.5	4.5	-0.0	-0.00
25YR-72HR	1.00	0.0	-4.8	4.8	-0.0	-0.00
25YR-72HR	1.08	0.0	-5.2	5.2	-0.0	-0.00
25YR-72HR	1.17	0.0	-5.5	5.5	-0.0	-0.00
25YR-72HR	1.25	0.0	-5.8	5.8	-0.0	-0.00
25YR-72HR	1.33	0.1	-6.1	6.2	-0.0	-0.00
25YR-72HR	1.42	0.6	-6.3	6.8	-0.0	-0.00
25YR-72HR	1.50	1.2	-6.4	7.6	-0.0	-0.00
25YR-72HR	1.58	2.8	-6.1	8.9	-0.0	-0.00
25YR-72HR	1.67	5.8	-5.2	11.0	-0.0	-0.00
25YR-72HR	1.75	10.3	-3.5	13.8	-0.0	-0.00
25YR-72HR	1.83	16.5	-1.0	17.5	-0.0	-0.00
25YR-72HR	1.92	24.5	2.4	22.1	-0.0	-0.00
25YR-72HR	2.00	34.4	6.8	27.6	-0.0	-0.00
25YR-72HR	2.08	46.1	12.1	33.9	-0.0	-0.00
25YR-72HR	2.17	59.7	18.5	41.2	-0.0	-0.00
25YR-72HR	2.25	75.1	25.8	49.4	-0.0	-0.00
25YR-72HR	2.33	92.4	34.0	58.4	-0.0	-0.00
25YR-72HR	2.42	111.4	43.3	68.2	-0.0	-0.00
25YR-72HR	2.50	132.2	53.4	78.8	-0.0	-0.00
25YR-72HR	2.58	154.6	64.4	90.2	-0.0	-0.00
25YR-72HR	2.67	178.5	76.2	102.3	-0.0	-0.00
25YR-72HR	2.75	204.1	88.9	115.2	-0.0	-0.00
25YR-72HR	2.83	231.2	102.4	128.7	0.0	0.00
25YR-72HR	2.92	259.7	116.7	143.0	0.0	0.00
25YR-72HR	3.00	289.7	131.8	157.9	0.0	0.00
25YR-72HR	3.08	321.2	147.7	173.4	0.0	0.00
25YR-72HR	3.17	354.0	164.4	189.6	0.0	0.00
25YR-72HR	3.25	388.2	181.9	206.4	0.0	0.00
25YR-72HR	3.33	423.9	200.1	223.8	0.0	0.00
25YR-72HR	3.42	460.8	219.1	241.7	0.0	0.00
25YR-72HR	3.50	499.0	238.9	260.2	0.0	0.00
25YR-72HR	3.58	538.5	259.4	279.2	0.0	0.00
25YR-72HR	3.67	579.3	280.6	298.7	0.0	0.00
25YR-72HR	3.75	621.2	302.6	318.7	0.0	0.00
25YR-72HR	3.83	664.4	325.2	339.2	0.0	0.00
25YR-72HR	3.92	708.6	348.5	360.1	-0.0	-0.00
25YR-72HR	4.00	754.0	372.4	381.6	0.0	0.00
25YR-72HR	4.08	800.5	397.0	403.4	-0.0	-0.00
25YR-72HR	4.17	848.0	422.2	425.7	-0.0	-0.00
25YR-72HR	4.25	896.5	448.1	448.5	-0.0	-0.00
25YR-72HR	4.33	946.1	474.5	471.6	-0.0	-0.00
25YR-72HR	4.42	996.6	501.5	495.1	-0.0	-0.00
25YR-72HR	4.50	1048.1	529.1	519.0	-0.0	-0.00
25YR-72HR	4.58	1100.5	557.2	543.3	-0.0	-0.00
25YR-72HR	4.67	1153.8	585.8	568.0	-0.0	-0.00
25YR-72HR	4.75	1208.0	615.0	593.0	-0.0	-0.00
25YR-72HR	4.83	1263.0	644.7	618.3	-0.0	-0.00
25YR-72HR	4.92	1318.9	674.9	644.0	-0.0	-0.00
25YR-72HR	5.00	1375.6	705.6	670.1	-0.0	-0.00
25YR-72HR	5.08	1433.2	736.7	696.4	-0.0	-0.00
25YR-72HR	5.17	1491.4	768.3	723.1	-0.0	-0.00
25YR-72HR	5.25	1550.5	800.4	750.1	-0.0	-0.00
25YR-72HR	5.33	1610.3	833.0	777.4	-0.0	-0.00
25YR-72HR	5.42	1670.9	865.9	804.9	0.0	0.00
25YR-72HR	5.50	1732.2	899.4	832.8	-0.0	-0.00
25YR-72HR	5.58	1794.2	933.2	861.0	0.0	0.00
25YR-72HR	5.67	1856.9	967.5	889.4	-0.0	-0.00
25YR-72HR	5.75	1920.3	1002.2	918.1	-0.0	-0.00
25YR-72HR	5.83	1984.4	1037.3	947.0	-0.0	-0.00
25YR-72HR	5.92	2049.1	1072.9	976.2	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	6.00	2114.5	1108.8	1005.7	-0.0	-0.00
25YR-72HR	6.08	2180.5	1145.1	1035.4	-0.0	-0.00
25YR-72HR	6.17	2247.2	1181.9	1065.3	-0.0	-0.00
25YR-72HR	6.25	2314.4	1218.9	1095.5	-0.0	-0.00
25YR-72HR	6.33	2382.3	1256.4	1125.9	-0.0	-0.00
25YR-72HR	6.42	2450.8	1294.3	1156.5	-0.0	-0.00
25YR-72HR	6.50	2519.8	1332.4	1187.3	-0.0	-0.00
25YR-72HR	6.58	2589.4	1371.0	1218.4	-0.0	-0.00
25YR-72HR	6.67	2659.5	1409.9	1249.6	-0.0	-0.00
25YR-72HR	6.75	2730.2	1449.1	1281.1	-0.0	-0.00
25YR-72HR	6.83	2801.4	1488.7	1312.8	-0.0	-0.00
25YR-72HR	6.92	2873.2	1528.6	1344.6	-0.0	-0.00
25YR-72HR	7.00	2945.4	1568.8	1376.7	-0.0	-0.00
25YR-72HR	7.08	3018.2	1609.3	1408.9	-0.0	-0.00
25YR-72HR	7.17	3091.4	1650.1	1441.3	-0.0	-0.00
25YR-72HR	7.25	3165.2	1691.2	1473.9	-0.0	-0.00
25YR-72HR	7.33	3239.4	1732.7	1506.7	-0.0	-0.00
25YR-72HR	7.42	3314.0	1774.4	1539.6	-0.0	-0.00
25YR-72HR	7.50	3389.2	1816.4	1572.8	0.0	0.00
25YR-72HR	7.58	3464.7	1858.7	1606.0	0.0	0.00
25YR-72HR	7.67	3540.7	1901.3	1639.5	0.0	0.00
25YR-72HR	7.75	3617.2	1944.1	1673.1	-0.0	-0.00
25YR-72HR	7.83	3694.1	1987.2	1706.8	-0.0	-0.00
25YR-72HR	7.92	3771.3	2030.6	1740.8	-0.0	-0.00
25YR-72HR	8.00	3849.0	2074.2	1774.8	-0.0	-0.00
25YR-72HR	8.08	3927.2	2118.1	1809.1	-0.0	-0.00
25YR-72HR	8.10	3942.8	2126.9	1815.9	-0.0	-0.00
25YR-72HR	8.12	3958.5	2135.7	1822.8	-0.0	-0.00
25YR-72HR	8.13	3974.3	2144.6	1829.7	-0.0	-0.00
25YR-72HR	8.15	3990.0	2153.4	1836.6	-0.0	-0.00
25YR-72HR	8.17	4005.7	2162.2	1843.5	-0.0	-0.00
25YR-72HR	8.18	4021.5	2171.1	1850.4	-0.0	-0.00
25YR-72HR	8.20	4037.3	2180.0	1857.3	-0.0	-0.00
25YR-72HR	8.22	4053.1	2188.8	1864.3	-0.0	-0.00
25YR-72HR	8.23	4068.9	2197.7	1871.2	-0.0	-0.00
25YR-72HR	8.25	4084.8	2206.6	1878.1	-0.0	-0.00
25YR-72HR	8.27	4100.6	2215.5	1885.1	-0.0	-0.00
25YR-72HR	8.28	4116.5	2224.4	1892.0	-0.0	-0.00
25YR-72HR	8.30	4132.4	2233.4	1899.0	-0.0	-0.00
25YR-72HR	8.32	4148.3	2242.3	1906.0	-0.0	-0.00
25YR-72HR	8.33	4164.2	2251.2	1913.0	-0.0	-0.00
25YR-72HR	8.35	4180.2	2260.2	1920.0	-0.0	-0.00
25YR-72HR	8.37	4196.2	2269.2	1927.0	-0.0	-0.00
25YR-72HR	8.38	4212.2	2278.1	1934.0	-0.0	-0.00
25YR-72HR	8.40	4228.2	2287.1	1941.1	-0.0	-0.00
25YR-72HR	8.42	4244.2	2296.1	1948.1	-0.0	-0.00
25YR-72HR	8.43	4260.3	2305.1	1955.2	-0.0	-0.00
25YR-72HR	8.45	4276.4	2314.1	1962.2	-0.0	-0.00
25YR-72HR	8.47	4292.5	2323.1	1969.3	-0.0	-0.00
25YR-72HR	8.48	4308.6	2332.2	1976.4	-0.0	-0.00
25YR-72HR	8.50	4324.7	2341.2	1983.5	-0.0	-0.00
25YR-72HR	8.52	4340.9	2350.2	1990.6	-0.0	-0.00
25YR-72HR	8.53	4357.0	2359.3	1997.7	-0.0	-0.00
25YR-72HR	8.55	4373.2	2368.4	2004.9	-0.0	-0.00
25YR-72HR	8.57	4389.5	2377.4	2012.0	-0.0	-0.00
25YR-72HR	8.58	4405.7	2386.5	2019.2	-0.0	-0.00
25YR-72HR	8.60	4422.0	2395.6	2026.4	-0.0	-0.00
25YR-72HR	8.62	4438.3	2404.7	2033.6	-0.0	-0.00
25YR-72HR	8.63	4454.6	2413.8	2040.8	-0.0	-0.00
25YR-72HR	8.65	4470.9	2423.0	2048.0	-0.0	-0.00
25YR-72HR	8.67	4487.3	2432.1	2055.2	-0.0	-0.00
25YR-72HR	8.68	4503.7	2441.2	2062.5	-0.0	-0.00
25YR-72HR	8.70	4520.1	2450.4	2069.7	-0.0	-0.00
25YR-72HR	8.72	4536.5	2459.5	2077.0	-0.0	-0.00
25YR-72HR	8.73	4553.0	2468.7	2084.3	-0.0	-0.00
25YR-72HR	8.75	4569.4	2477.9	2091.6	-0.0	-0.00
25YR-72HR	8.77	4585.9	2487.0	2098.9	-0.0	-0.00
25YR-72HR	8.78	4602.5	2496.2	2106.2	-0.0	-0.00
25YR-72HR	8.80	4619.0	2505.4	2113.6	-0.0	-0.00
25YR-72HR	8.82	4635.6	2514.7	2120.9	-0.0	-0.00
25YR-72HR	8.83	4652.2	2523.9	2128.3	-0.0	-0.00
25YR-72HR	8.85	4668.8	2533.1	2135.7	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	8.87	4685.5	2542.3	2143.1	0.0	0.00
25YR-72HR	8.88	4702.2	2551.6	2150.6	0.0	0.00
25YR-72HR	8.90	4718.9	2560.8	2158.0	0.0	0.00
25YR-72HR	8.92	4735.6	2570.1	2165.5	0.0	0.00
25YR-72HR	8.93	4752.4	2579.4	2173.0	0.0	0.00
25YR-72HR	8.95	4769.1	2588.7	2180.5	0.0	0.00
25YR-72HR	8.97	4785.9	2597.9	2188.0	0.0	0.00
25YR-72HR	8.98	4802.8	2607.2	2195.5	0.0	0.00
25YR-72HR	9.00	4819.6	2616.6	2203.1	0.0	0.00
25YR-72HR	9.02	4836.5	2625.9	2210.7	0.0	0.00
25YR-72HR	9.03	4853.4	2635.2	2218.2	0.0	0.00
25YR-72HR	9.05	4870.4	2644.5	2225.8	0.0	0.00
25YR-72HR	9.07	4887.3	2653.9	2233.5	0.0	0.00
25YR-72HR	9.08	4904.3	2663.2	2241.1	0.0	0.00
25YR-72HR	9.10	4921.4	2672.6	2248.8	0.0	0.00
25YR-72HR	9.12	4938.4	2682.0	2256.4	0.0	0.00
25YR-72HR	9.13	4955.5	2691.3	2264.1	0.0	0.00
25YR-72HR	9.15	4972.6	2700.7	2271.8	0.0	0.00
25YR-72HR	9.17	4989.7	2710.1	2279.6	0.0	0.00
25YR-72HR	9.18	5006.8	2719.5	2287.3	0.0	0.00
25YR-72HR	9.20	5024.0	2728.9	2295.1	0.0	0.00
25YR-72HR	9.22	5041.2	2738.4	2302.9	0.0	0.00
25YR-72HR	9.23	5058.5	2747.8	2310.7	0.0	0.00
25YR-72HR	9.25	5075.7	2757.2	2318.5	0.0	0.00
25YR-72HR	9.27	5093.0	2766.7	2326.3	0.0	0.00
25YR-72HR	9.28	5110.3	2776.1	2334.2	0.0	0.00
25YR-72HR	9.30	5127.6	2785.6	2342.1	0.0	0.00
25YR-72HR	9.32	5145.0	2795.0	2349.9	0.0	0.00
25YR-72HR	9.33	5162.4	2804.5	2357.9	0.0	0.00
25YR-72HR	9.35	5179.8	2814.0	2365.8	0.0	0.00
25YR-72HR	9.37	5197.2	2823.5	2373.7	0.0	0.00
25YR-72HR	9.38	5214.7	2833.0	2381.7	0.0	0.00
25YR-72HR	9.40	5232.2	2842.5	2389.7	0.0	0.00
25YR-72HR	9.42	5249.7	2852.0	2397.7	0.0	0.00
25YR-72HR	9.43	5267.2	2861.6	2405.7	0.0	0.00
25YR-72HR	9.45	5284.8	2871.1	2413.7	0.0	0.00
25YR-72HR	9.47	5302.4	2880.7	2421.7	0.0	0.00
25YR-72HR	9.48	5320.0	2890.2	2429.8	0.0	0.00
25YR-72HR	9.50	5337.7	2899.8	2437.9	0.0	0.00
25YR-72HR	9.52	5355.3	2909.3	2446.0	0.0	0.00
25YR-72HR	9.53	5373.0	2918.9	2454.1	0.0	0.00
25YR-72HR	9.55	5390.8	2928.5	2462.3	0.0	0.00
25YR-72HR	9.57	5408.5	2938.1	2470.4	0.0	0.00
25YR-72HR	9.58	5426.3	2947.7	2478.6	0.0	0.00
25YR-72HR	9.60	5444.1	2957.3	2486.8	0.0	0.00
25YR-72HR	9.62	5461.9	2966.9	2495.0	0.0	0.00
25YR-72HR	9.63	5479.8	2976.6	2503.2	0.0	0.00
25YR-72HR	9.65	5497.6	2986.2	2511.4	0.0	0.00
25YR-72HR	9.67	5515.5	2995.8	2519.7	0.0	0.00
25YR-72HR	9.68	5533.5	3005.5	2528.0	0.0	0.00
25YR-72HR	9.70	5551.4	3015.1	2536.3	0.0	0.00
25YR-72HR	9.72	5569.4	3024.8	2544.6	0.0	0.00
25YR-72HR	9.73	5587.4	3034.5	2552.9	0.0	0.00
25YR-72HR	9.75	5605.4	3044.1	2561.3	0.0	0.00
25YR-72HR	9.77	5623.5	3053.8	2569.6	0.0	0.00
25YR-72HR	9.78	5641.5	3063.5	2578.0	0.0	0.00
25YR-72HR	9.80	5659.6	3073.2	2586.4	0.0	0.00
25YR-72HR	9.82	5677.8	3082.9	2594.8	0.0	0.00
25YR-72HR	9.83	5695.9	3092.7	2603.2	0.0	0.00
25YR-72HR	9.85	5714.1	3102.4	2611.7	0.0	0.00
25YR-72HR	9.87	5732.3	3112.1	2620.1	0.0	0.00
25YR-72HR	9.88	5750.5	3121.9	2628.6	0.0	0.00
25YR-72HR	9.90	5768.7	3131.6	2637.1	0.0	0.00
25YR-72HR	9.92	5787.0	3141.4	2645.6	0.0	0.00
25YR-72HR	9.93	5805.3	3151.1	2654.2	0.0	0.00
25YR-72HR	9.95	5823.6	3160.9	2662.7	0.0	0.00
25YR-72HR	9.97	5842.0	3170.7	2671.3	0.0	0.00
25YR-72HR	9.98	5860.3	3180.5	2679.9	0.0	0.00
25YR-72HR	10.00	5878.7	3190.3	2688.5	0.0	0.00
25YR-72HR	10.02	5897.2	3200.1	2697.1	0.0	0.00
25YR-72HR	10.03	5915.6	3209.9	2705.7	0.0	0.00
25YR-72HR	10.05	5934.1	3219.7	2714.4	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	10.07	5952.5	3229.5	2723.0	0.0	0.00
25YR-72HR	10.08	5971.1	3239.3	2731.7	0.0	0.00
25YR-72HR	10.10	5989.6	3249.2	2740.4	0.0	0.00
25YR-72HR	10.12	6008.2	3259.0	2749.1	0.0	0.00
25YR-72HR	10.13	6026.7	3268.9	2757.9	0.0	0.00
25YR-72HR	10.15	6045.4	3278.7	2766.6	0.0	0.00
25YR-72HR	10.17	6064.0	3288.6	2775.4	0.0	0.00
25YR-72HR	10.18	6082.6	3298.5	2784.1	0.0	0.00
25YR-72HR	10.20	6101.3	3308.4	2792.9	0.0	0.00
25YR-72HR	10.22	6120.0	3318.3	2801.8	0.0	0.00
25YR-72HR	10.23	6138.7	3328.2	2810.6	0.0	0.00
25YR-72HR	10.25	6157.5	3338.1	2819.4	0.0	0.00
25YR-72HR	10.27	6176.3	3348.0	2828.3	0.0	0.00
25YR-72HR	10.28	6195.1	3357.9	2837.2	0.0	0.00
25YR-72HR	10.30	6213.9	3367.8	2846.1	0.0	0.00
25YR-72HR	10.32	6232.7	3377.7	2855.0	0.0	0.00
25YR-72HR	10.33	6251.6	3387.7	2863.9	0.0	0.00
25YR-72HR	10.35	6270.5	3397.6	2872.9	0.0	0.00
25YR-72HR	10.37	6289.4	3407.6	2881.8	0.0	0.00
25YR-72HR	10.38	6308.3	3417.5	2890.8	0.0	0.00
25YR-72HR	10.40	6327.3	3427.5	2899.8	0.0	0.00
25YR-72HR	10.42	6346.3	3437.5	2908.8	0.0	0.00
25YR-72HR	10.43	6365.3	3447.5	2917.8	0.0	0.00
25YR-72HR	10.45	6384.3	3457.4	2926.9	0.0	0.00
25YR-72HR	10.47	6403.4	3467.4	2935.9	0.0	0.00
25YR-72HR	10.48	6422.4	3477.4	2945.0	0.0	0.00
25YR-72HR	10.50	6441.5	3487.4	2954.1	0.0	0.00
25YR-72HR	10.52	6460.6	3497.5	2963.2	0.0	0.00
25YR-72HR	10.53	6479.8	3507.5	2972.3	0.0	0.00
25YR-72HR	10.55	6498.9	3517.5	2981.4	0.0	0.00
25YR-72HR	10.57	6518.1	3527.5	2990.6	0.0	0.00
25YR-72HR	10.58	6537.3	3537.6	2999.8	0.0	0.00
25YR-72HR	10.60	6556.6	3547.6	3008.9	0.0	0.00
25YR-72HR	10.62	6575.8	3557.7	3018.1	0.0	0.00
25YR-72HR	10.63	6595.1	3567.8	3027.3	0.0	0.00
25YR-72HR	10.65	6614.4	3577.8	3036.6	0.0	0.00
25YR-72HR	10.67	6633.7	3587.9	3045.8	0.0	0.00
25YR-72HR	10.68	6653.1	3598.0	3055.1	0.0	0.00
25YR-72HR	10.70	6672.4	3608.1	3064.4	0.0	0.00
25YR-72HR	10.72	6691.8	3618.2	3073.7	0.0	0.00
25YR-72HR	10.73	6711.2	3628.3	3083.0	0.0	0.00
25YR-72HR	10.75	6730.7	3638.4	3092.3	0.0	0.00
25YR-72HR	10.77	6750.1	3648.5	3101.6	0.0	0.00
25YR-72HR	10.78	6769.6	3658.6	3111.0	0.0	0.00
25YR-72HR	10.80	6789.1	3668.7	3120.4	0.0	0.00
25YR-72HR	10.82	6808.6	3678.9	3129.7	0.0	0.00
25YR-72HR	10.83	6828.2	3689.0	3139.1	0.0	0.00
25YR-72HR	10.85	6847.7	3699.2	3148.6	0.0	0.00
25YR-72HR	10.87	6867.3	3709.3	3158.0	0.0	0.00
25YR-72HR	10.88	6886.9	3719.5	3167.4	0.0	0.00
25YR-72HR	10.90	6906.5	3729.6	3176.9	0.0	0.00
25YR-72HR	10.92	6926.2	3739.8	3186.4	0.0	0.00
25YR-72HR	10.93	6945.9	3750.0	3195.9	0.0	0.00
25YR-72HR	10.95	6965.6	3760.2	3205.4	0.0	0.00
25YR-72HR	10.97	6985.3	3770.4	3214.9	0.0	0.00
25YR-72HR	10.98	7005.0	3780.6	3224.4	0.0	0.00
25YR-72HR	11.00	7024.8	3790.8	3234.0	0.0	0.00
25YR-72HR	11.02	7044.6	3801.0	3243.6	0.0	0.00
25YR-72HR	11.03	7064.4	3811.2	3253.2	0.0	0.00
25YR-72HR	11.05	7084.2	3821.4	3262.8	0.0	0.00
25YR-72HR	11.07	7104.0	3831.7	3272.4	0.0	0.00
25YR-72HR	11.08	7123.9	3841.9	3282.0	0.0	0.00
25YR-72HR	11.10	7143.8	3852.1	3291.6	0.0	0.00
25YR-72HR	11.12	7163.7	3862.4	3301.3	0.0	0.00
25YR-72HR	11.13	7183.6	3872.6	3311.0	0.0	0.00
25YR-72HR	11.15	7203.6	3882.9	3320.7	0.0	0.00
25YR-72HR	11.17	7223.5	3893.2	3330.4	0.0	0.00
25YR-72HR	11.18	7243.5	3903.5	3340.1	0.0	0.00
25YR-72HR	11.20	7263.6	3913.7	3349.8	0.0	0.00
25YR-72HR	11.22	7283.6	3924.0	3359.6	0.0	0.00
25YR-72HR	11.23	7303.6	3934.3	3369.3	0.0	0.00
25YR-72HR	11.25	7323.7	3944.6	3379.1	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	11.27	7343.8	3954.9	3388.9	0.0	0.00
25YR-72HR	11.28	7363.9	3965.2	3398.7	0.0	0.00
25YR-72HR	11.30	7384.1	3975.5	3408.5	0.0	0.00
25YR-72HR	11.32	7404.2	3985.9	3418.4	0.0	0.00
25YR-72HR	11.33	7424.4	3996.2	3428.2	0.0	0.00
25YR-72HR	11.35	7444.6	4006.5	3438.1	0.0	0.00
25YR-72HR	11.37	7464.8	4016.9	3448.0	0.0	0.00
25YR-72HR	11.38	7485.1	4027.2	3457.9	0.0	0.00
25YR-72HR	11.40	7505.4	4037.6	3467.8	0.0	0.00
25YR-72HR	11.42	7525.6	4047.9	3477.7	0.0	0.00
25YR-72HR	11.43	7545.9	4058.3	3487.7	0.0	0.00
25YR-72HR	11.45	7566.3	4068.7	3497.6	0.0	0.00
25YR-72HR	11.47	7586.6	4079.0	3507.6	0.0	0.00
25YR-72HR	11.48	7607.0	4089.4	3517.6	0.0	0.00
25YR-72HR	11.50	7627.4	4099.8	3527.6	0.0	0.00
25YR-72HR	11.52	7647.8	4110.2	3537.6	0.0	0.00
25YR-72HR	11.53	7668.2	4120.6	3547.6	0.0	0.00
25YR-72HR	11.55	7688.6	4131.0	3557.7	0.0	0.00
25YR-72HR	11.57	7709.1	4141.4	3567.7	0.0	0.00
25YR-72HR	11.58	7729.6	4151.8	3577.8	0.0	0.00
25YR-72HR	11.60	7750.1	4162.2	3587.9	0.0	0.00
25YR-72HR	11.62	7770.6	4172.7	3598.0	0.0	0.00
25YR-72HR	11.63	7791.2	4183.1	3608.1	0.0	0.00
25YR-72HR	11.65	7811.8	4193.5	3618.2	0.0	0.00
25YR-72HR	11.67	7832.3	4204.0	3628.4	0.0	0.00
25YR-72HR	11.68	7853.0	4214.4	3638.5	0.0	0.00
25YR-72HR	11.70	7873.6	4224.9	3648.7	0.0	0.00
25YR-72HR	11.72	7894.2	4235.4	3658.9	0.0	0.00
25YR-72HR	11.73	7914.9	4245.8	3669.1	0.0	0.00
25YR-72HR	11.75	7935.6	4256.3	3679.3	0.0	0.00
25YR-72HR	11.77	7956.3	4266.8	3689.5	0.0	0.00
25YR-72HR	11.78	7977.0	4277.3	3699.8	0.0	0.00
25YR-72HR	11.80	7997.8	4287.8	3710.0	0.0	0.00
25YR-72HR	11.82	8018.5	4298.2	3720.3	0.0	0.00
25YR-72HR	11.83	8039.3	4308.7	3730.6	0.0	0.00
25YR-72HR	11.85	8060.1	4319.3	3740.9	0.0	0.00
25YR-72HR	11.87	8080.9	4329.8	3751.2	0.0	0.00
25YR-72HR	11.88	8101.8	4340.3	3761.5	0.0	0.00
25YR-72HR	11.90	8122.7	4350.8	3771.8	0.0	0.00
25YR-72HR	11.92	8143.5	4361.3	3782.2	0.0	0.00
25YR-72HR	11.93	8164.4	4371.9	3792.6	0.0	0.00
25YR-72HR	11.95	8185.4	4382.4	3803.0	0.0	0.00
25YR-72HR	11.97	8206.3	4393.0	3813.4	0.0	0.00
25YR-72HR	11.98	8227.3	4403.5	3823.8	0.0	0.00
25YR-72HR	12.00	8248.3	4414.1	3834.2	0.0	0.00
25YR-72HR	12.02	8269.3	4424.6	3844.6	0.0	0.00
25YR-72HR	12.03	8290.3	4435.2	3855.1	0.0	0.00
25YR-72HR	12.05	8311.3	4445.8	3865.5	0.0	0.00
25YR-72HR	12.07	8332.4	4456.3	3876.0	0.0	0.00
25YR-72HR	12.08	8353.4	4466.9	3886.5	0.0	0.00
25YR-72HR	12.10	8374.5	4477.5	3897.0	0.0	0.00
25YR-72HR	12.12	8395.7	4488.1	3907.5	0.0	0.00
25YR-72HR	12.13	8416.8	4498.7	3918.1	0.0	0.00
25YR-72HR	12.15	8437.9	4509.3	3928.6	0.0	0.00
25YR-72HR	12.17	8459.1	4519.9	3939.2	0.0	0.00
25YR-72HR	12.18	8480.3	4530.5	3949.8	0.0	0.00
25YR-72HR	12.20	8501.5	4541.2	3960.4	0.0	0.00
25YR-72HR	12.22	8522.7	4551.8	3971.0	0.0	0.00
25YR-72HR	12.23	8544.0	4562.4	3981.6	0.0	0.00
25YR-72HR	12.25	8565.3	4573.1	3992.2	0.0	0.00
25YR-72HR	12.27	8586.5	4583.7	4002.8	0.0	0.00
25YR-72HR	12.28	8607.8	4594.3	4013.5	0.0	0.00
25YR-72HR	12.30	8629.2	4605.0	4024.2	0.0	0.00
25YR-72HR	12.32	8650.5	4615.6	4034.9	0.0	0.00
25YR-72HR	12.33	8671.9	4626.3	4045.6	0.0	0.00
25YR-72HR	12.35	8693.2	4637.0	4056.3	0.0	0.00
25YR-72HR	12.37	8714.6	4647.7	4067.0	0.0	0.00
25YR-72HR	12.38	8736.1	4658.3	4077.7	0.0	0.00
25YR-72HR	12.40	8757.5	4669.0	4088.5	0.0	0.00
25YR-72HR	12.42	8778.9	4679.7	4099.2	0.0	0.00
25YR-72HR	12.43	8800.4	4690.4	4110.0	0.0	0.00
25YR-72HR	12.45	8821.9	4701.1	4120.8	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	12.47	8843.4	4711.8	4131.6	0.0	0.00
25YR-72HR	12.48	8864.9	4722.5	4142.4	0.0	0.00
25YR-72HR	12.50	8886.5	4733.2	4153.3	0.0	0.00
25YR-72HR	12.52	8908.0	4743.9	4164.1	0.0	0.00
25YR-72HR	12.53	8929.6	4754.7	4175.0	0.0	0.00
25YR-72HR	12.55	8951.2	4765.4	4185.8	0.0	0.00
25YR-72HR	12.57	8972.8	4776.1	4196.7	0.0	0.00
25YR-72HR	12.58	8994.5	4786.9	4207.6	0.0	0.00
25YR-72HR	12.60	9016.1	4797.6	4218.5	0.0	0.00
25YR-72HR	12.62	9037.8	4808.3	4229.5	0.0	0.00
25YR-72HR	12.63	9059.5	4819.1	4240.4	0.0	0.00
25YR-72HR	12.65	9081.2	4829.9	4251.4	0.0	0.00
25YR-72HR	12.67	9102.9	4840.6	4262.3	0.0	0.00
25YR-72HR	12.68	9124.7	4851.4	4273.3	0.0	0.00
25YR-72HR	12.70	9146.5	4862.2	4284.3	0.0	0.00
25YR-72HR	12.72	9168.2	4872.9	4295.3	0.0	0.00
25YR-72HR	12.73	9190.0	4883.7	4306.3	0.0	0.00
25YR-72HR	12.75	9211.9	4894.5	4317.4	0.0	0.00
25YR-72HR	12.77	9233.7	4905.3	4328.4	0.0	0.00
25YR-72HR	12.78	9255.6	4916.1	4339.5	0.0	0.00
25YR-72HR	12.80	9277.4	4926.9	4350.5	0.0	0.00
25YR-72HR	12.82	9299.3	4937.7	4361.6	0.0	0.00
25YR-72HR	12.83	9321.2	4948.5	4372.7	0.0	0.00
25YR-72HR	12.85	9343.2	4959.3	4383.8	0.0	0.00
25YR-72HR	12.87	9365.1	4970.2	4395.0	0.0	0.00
25YR-72HR	12.88	9387.1	4981.0	4406.1	0.0	0.00
25YR-72HR	12.90	9409.0	4991.8	4417.2	0.0	0.00
25YR-72HR	12.92	9431.1	5002.6	4428.4	0.0	0.00
25YR-72HR	12.93	9453.1	5013.5	4439.6	0.0	0.00
25YR-72HR	12.95	9475.1	5024.3	4450.8	0.0	0.00
25YR-72HR	12.97	9497.2	5035.2	4462.0	0.0	0.00
25YR-72HR	12.98	9519.2	5046.0	4473.2	0.0	0.00
25YR-72HR	13.00	9541.3	5056.9	4484.4	0.0	0.00
25YR-72HR	13.02	9563.4	5067.8	4495.7	0.0	0.00
25YR-72HR	13.03	9585.6	5078.6	4506.9	0.0	0.00
25YR-72HR	13.05	9607.7	5089.5	4518.2	0.0	0.00
25YR-72HR	13.07	9629.9	5100.4	4529.5	0.0	0.00
25YR-72HR	13.08	9652.0	5111.3	4540.8	0.0	0.00
25YR-72HR	13.10	9674.2	5122.1	4552.1	0.0	0.00
25YR-72HR	13.12	9696.5	5133.0	4563.4	0.0	0.00
25YR-72HR	13.13	9718.7	5143.9	4574.8	0.0	0.00
25YR-72HR	13.15	9740.9	5154.8	4586.1	0.0	0.00
25YR-72HR	13.17	9763.2	5165.7	4597.5	0.0	0.00
25YR-72HR	13.18	9785.5	5176.6	4608.8	0.0	0.00
25YR-72HR	13.20	9807.8	5187.6	4620.2	0.0	0.00
25YR-72HR	13.22	9830.1	5198.5	4631.6	0.0	0.00
25YR-72HR	13.23	9852.5	5209.4	4643.0	-0.0	-0.00
25YR-72HR	13.25	9874.8	5220.3	4654.5	-0.0	-0.00
25YR-72HR	13.27	9897.2	5231.3	4665.9	-0.0	-0.00
25YR-72HR	13.28	9919.6	5242.2	4677.4	-0.0	-0.00
25YR-72HR	13.30	9942.0	5253.1	4688.8	-0.0	-0.00
25YR-72HR	13.32	9964.4	5264.1	4700.3	-0.0	-0.00
25YR-72HR	13.33	9986.8	5275.0	4711.8	-0.0	-0.00
25YR-72HR	13.35	10009.3	5286.0	4723.3	-0.0	-0.00
25YR-72HR	13.37	10031.8	5297.0	4734.8	-0.0	-0.00
25YR-72HR	13.38	10054.3	5307.9	4746.4	-0.0	-0.00
25YR-72HR	13.40	10076.8	5318.9	4757.9	-0.0	-0.00
25YR-72HR	13.42	10099.3	5329.9	4769.5	-0.0	-0.00
25YR-72HR	13.43	10121.9	5340.8	4781.0	-0.0	-0.00
25YR-72HR	13.45	10144.4	5351.8	4792.6	-0.0	-0.00
25YR-72HR	13.47	10167.0	5362.8	4804.2	-0.0	-0.00
25YR-72HR	13.48	10189.6	5373.8	4815.8	-0.0	-0.00
25YR-72HR	13.50	10212.2	5384.8	4827.4	-0.0	-0.00
25YR-72HR	13.52	10234.9	5395.8	4839.1	-0.0	-0.00
25YR-72HR	13.53	10257.5	5406.8	4850.7	-0.0	-0.00
25YR-72HR	13.55	10280.2	5417.8	4862.4	-0.0	-0.00
25YR-72HR	13.57	10302.9	5428.8	4874.0	-0.0	-0.00
25YR-72HR	13.58	10325.6	5439.8	4885.7	-0.0	-0.00
25YR-72HR	13.60	10348.3	5450.9	4897.4	-0.0	-0.00
25YR-72HR	13.62	10371.0	5461.9	4909.1	-0.0	-0.00
25YR-72HR	13.63	10393.8	5472.9	4920.8	-0.0	-0.00
25YR-72HR	13.65	10416.5	5483.9	4932.6	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	13.67	10439.3	5495.0	4944.3	-0.0	-0.00
25YR-72HR	13.68	10462.1	5506.0	4956.1	-0.0	-0.00
25YR-72HR	13.70	10484.9	5517.1	4967.8	-0.0	-0.00
25YR-72HR	13.72	10507.8	5528.1	4979.6	-0.0	-0.00
25YR-72HR	13.73	10530.6	5539.2	4991.4	-0.0	-0.00
25YR-72HR	13.75	10553.5	5550.2	5003.2	-0.0	-0.00
25YR-72HR	13.77	10576.4	5561.3	5015.1	-0.0	-0.00
25YR-72HR	13.78	10599.3	5572.4	5026.9	-0.0	-0.00
25YR-72HR	13.80	10622.2	5583.4	5038.7	-0.0	-0.00
25YR-72HR	13.82	10645.1	5594.5	5050.6	-0.0	-0.00
25YR-72HR	13.83	10668.1	5605.6	5062.5	-0.0	-0.00
25YR-72HR	13.85	10691.0	5616.7	5074.3	-0.0	-0.00
25YR-72HR	13.87	10714.0	5627.8	5086.2	-0.0	-0.00
25YR-72HR	13.88	10737.0	5638.9	5098.1	-0.0	-0.00
25YR-72HR	13.90	10760.0	5650.0	5110.1	-0.0	-0.00
25YR-72HR	13.92	10783.1	5661.1	5122.0	-0.0	-0.00
25YR-72HR	13.93	10806.1	5672.2	5133.9	-0.0	-0.00
25YR-72HR	13.95	10829.2	5683.3	5145.9	-0.0	-0.00
25YR-72HR	13.97	10852.3	5694.4	5157.9	-0.0	-0.00
25YR-72HR	13.98	10875.4	5705.5	5169.9	-0.0	-0.00
25YR-72HR	14.00	10898.5	5716.6	5181.8	-0.0	-0.00
25YR-72HR	14.02	10921.6	5727.8	5193.9	-0.0	-0.00
25YR-72HR	14.03	10944.8	5738.9	5205.9	-0.0	-0.00
25YR-72HR	14.05	10967.9	5750.0	5217.9	-0.0	-0.00
25YR-72HR	14.07	10991.1	5761.2	5229.9	-0.0	-0.00
25YR-72HR	14.08	11014.3	5772.3	5242.0	-0.0	-0.00
25YR-72HR	14.10	11037.5	5783.5	5254.1	-0.0	-0.00
25YR-72HR	14.12	11060.7	5794.6	5266.1	-0.0	-0.00
25YR-72HR	14.13	11084.0	5805.8	5278.2	-0.0	-0.00
25YR-72HR	14.15	11107.3	5816.9	5290.3	-0.0	-0.00
25YR-72HR	14.17	11130.5	5828.1	5302.4	-0.0	-0.00
25YR-72HR	14.18	11153.8	5839.3	5314.6	-0.0	-0.00
25YR-72HR	14.20	11177.1	5850.4	5326.7	-0.0	-0.00
25YR-72HR	14.22	11200.5	5861.6	5338.9	-0.0	-0.00
25YR-72HR	14.23	11223.8	5872.8	5351.0	-0.0	-0.00
25YR-72HR	14.25	11247.2	5884.0	5363.2	-0.0	-0.00
25YR-72HR	14.27	11270.5	5895.1	5375.4	-0.0	-0.00
25YR-72HR	14.28	11293.9	5906.3	5387.6	-0.0	-0.00
25YR-72HR	14.30	11317.3	5917.5	5399.8	-0.0	-0.00
25YR-72HR	14.32	11340.8	5928.7	5412.0	-0.0	-0.00
25YR-72HR	14.33	11364.2	5939.9	5424.3	-0.0	-0.00
25YR-72HR	14.35	11387.6	5951.1	5436.5	-0.0	-0.00
25YR-72HR	14.37	11411.1	5962.3	5448.8	-0.0	-0.00
25YR-72HR	14.38	11434.6	5973.6	5461.0	-0.0	-0.00
25YR-72HR	14.40	11458.1	5984.8	5473.3	-0.0	-0.00
25YR-72HR	14.42	11481.6	5996.0	5485.6	-0.0	-0.00
25YR-72HR	14.43	11505.1	6007.2	5497.9	-0.0	-0.00
25YR-72HR	14.45	11528.7	6018.5	5510.2	-0.0	-0.00
25YR-72HR	14.47	11552.2	6029.7	5522.6	-0.0	-0.00
25YR-72HR	14.48	11575.8	6040.9	5534.9	-0.0	-0.00
25YR-72HR	14.50	11599.4	6052.2	5547.3	-0.0	-0.00
25YR-72HR	14.52	11623.0	6063.4	5559.6	-0.0	-0.00
25YR-72HR	14.53	11646.7	6074.7	5572.0	-0.0	-0.00
25YR-72HR	14.55	11670.3	6085.9	5584.4	-0.0	-0.00
25YR-72HR	14.57	11694.0	6097.2	5596.8	-0.0	-0.00
25YR-72HR	14.58	11717.6	6108.4	5609.2	-0.0	-0.00
25YR-72HR	14.60	11741.3	6119.7	5621.6	-0.0	-0.00
25YR-72HR	14.62	11765.0	6131.0	5634.0	-0.0	-0.00
25YR-72HR	14.63	11788.7	6142.2	5646.5	-0.0	-0.00
25YR-72HR	14.65	11812.5	6153.5	5659.0	-0.0	-0.00
25YR-72HR	14.67	11836.2	6164.8	5671.4	-0.0	-0.00
25YR-72HR	14.68	11860.0	6176.1	5683.9	-0.0	-0.00
25YR-72HR	14.70	11883.8	6187.4	5696.4	-0.0	-0.00
25YR-72HR	14.72	11907.6	6198.7	5708.9	-0.0	-0.00
25YR-72HR	14.73	11931.4	6209.9	5721.4	-0.0	-0.00
25YR-72HR	14.75	11955.2	6221.2	5733.9	-0.0	-0.00
25YR-72HR	14.77	11979.0	6232.5	5746.5	-0.0	-0.00
25YR-72HR	14.78	12002.9	6243.9	5759.0	-0.0	-0.00
25YR-72HR	14.80	12026.8	6255.2	5771.6	-0.0	-0.00
25YR-72HR	14.82	12050.6	6266.5	5784.2	-0.0	-0.00
25YR-72HR	14.83	12074.5	6277.8	5796.8	-0.0	-0.00
25YR-72HR	14.85	12098.5	6289.1	5809.3	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	14.87	12122.4	6300.4	5822.0	-0.0	-0.00
25YR-72HR	14.88	12146.3	6311.8	5834.6	-0.0	-0.00
25YR-72HR	14.90	12170.3	6323.1	5847.2	-0.0	-0.00
25YR-72HR	14.92	12194.3	6334.4	5859.8	-0.0	-0.00
25YR-72HR	14.93	12218.3	6345.8	5872.5	-0.0	-0.00
25YR-72HR	14.95	12242.3	6357.1	5885.2	-0.0	-0.00
25YR-72HR	14.97	12266.3	6368.5	5897.8	-0.0	-0.00
25YR-72HR	14.98	12290.3	6379.8	5910.5	-0.0	-0.00
25YR-72HR	15.00	12314.4	6391.2	5923.2	-0.0	-0.00
25YR-72HR	15.02	12338.5	6402.5	5935.9	-0.0	-0.00
25YR-72HR	15.03	12362.5	6413.9	5948.7	-0.0	-0.00
25YR-72HR	15.05	12386.6	6425.2	5961.4	-0.0	-0.00
25YR-72HR	15.07	12410.7	6436.6	5974.1	-0.0	-0.00
25YR-72HR	15.08	12434.9	6448.0	5986.9	-0.0	-0.00
25YR-72HR	15.10	12459.0	6459.4	5999.6	-0.0	-0.00
25YR-72HR	15.12	12483.2	6470.7	6012.4	-0.0	-0.00
25YR-72HR	15.13	12507.3	6482.1	6025.2	-0.0	-0.00
25YR-72HR	15.15	12531.5	6493.5	6038.0	-0.0	-0.00
25YR-72HR	15.17	12555.7	6504.9	6050.8	-0.0	-0.00
25YR-72HR	15.18	12579.9	6516.3	6063.6	-0.0	-0.00
25YR-72HR	15.20	12604.2	6527.7	6076.5	-0.0	-0.00
25YR-72HR	15.22	12628.4	6539.1	6089.3	-0.0	-0.00
25YR-72HR	15.23	12652.7	6550.5	6102.2	-0.0	-0.00
25YR-72HR	15.25	12676.9	6561.9	6115.0	-0.0	-0.00
25YR-72HR	15.27	12701.2	6573.3	6127.9	-0.0	-0.00
25YR-72HR	15.28	12725.5	6584.7	6140.8	-0.0	-0.00
25YR-72HR	15.30	12749.8	6596.1	6153.7	-0.0	-0.00
25YR-72HR	15.32	12774.2	6607.6	6166.6	-0.0	-0.00
25YR-72HR	15.33	12798.5	6619.0	6179.5	-0.0	-0.00
25YR-72HR	15.35	12822.9	6630.4	6192.5	-0.0	-0.00
25YR-72HR	15.37	12847.3	6641.8	6205.4	-0.0	-0.00
25YR-72HR	15.38	12871.6	6653.3	6218.4	-0.0	-0.00
25YR-72HR	15.40	12896.0	6664.7	6231.3	-0.0	-0.00
25YR-72HR	15.42	12920.5	6676.1	6244.3	-0.0	-0.00
25YR-72HR	15.43	12944.9	6687.6	6257.3	-0.0	-0.00
25YR-72HR	15.45	12969.3	6699.0	6270.3	-0.0	-0.00
25YR-72HR	15.47	12993.8	6710.5	6283.3	-0.0	-0.00
25YR-72HR	15.48	13018.3	6721.9	6296.3	-0.0	-0.00
25YR-72HR	15.50	13042.8	6733.4	6309.4	-0.0	-0.00
25YR-72HR	15.52	13067.3	6744.9	6322.4	-0.0	-0.00
25YR-72HR	15.53	13091.8	6756.3	6335.5	-0.0	-0.00
25YR-72HR	15.55	13116.3	6767.8	6348.5	-0.0	-0.00
25YR-72HR	15.57	13140.9	6779.3	6361.6	-0.0	-0.00
25YR-72HR	15.58	13165.4	6790.7	6374.7	0.0	0.00
25YR-72HR	15.60	13190.0	6802.2	6387.8	0.0	0.00
25YR-72HR	15.62	13214.6	6813.7	6400.9	0.0	0.00
25YR-72HR	15.63	13239.2	6825.2	6414.0	0.0	0.00
25YR-72HR	15.65	13263.8	6836.7	6427.1	0.0	0.00
25YR-72HR	15.67	13288.4	6848.2	6440.3	0.0	0.00
25YR-72HR	15.68	13313.1	6859.7	6453.4	0.0	0.00
25YR-72HR	15.70	13337.8	6871.2	6466.6	0.0	0.00
25YR-72HR	15.72	13362.4	6882.7	6479.8	0.0	0.00
25YR-72HR	15.73	13387.1	6894.2	6493.0	0.0	0.00
25YR-72HR	15.75	13411.8	6905.7	6506.1	0.0	0.00
25YR-72HR	15.77	13436.5	6917.2	6519.4	0.0	0.00
25YR-72HR	15.78	13461.3	6928.7	6532.6	0.0	0.00
25YR-72HR	15.80	13486.0	6940.2	6545.8	0.0	0.00
25YR-72HR	15.82	13510.8	6951.7	6559.0	0.0	0.00
25YR-72HR	15.83	13535.5	6963.3	6572.3	0.0	0.00
25YR-72HR	15.85	13560.3	6974.8	6585.5	0.0	0.00
25YR-72HR	15.87	13585.1	6986.3	6598.8	0.0	0.00
25YR-72HR	15.88	13609.9	6997.8	6612.1	0.0	0.00
25YR-72HR	15.90	13634.8	7009.4	6625.4	0.0	0.00
25YR-72HR	15.92	13659.6	7020.9	6638.7	0.0	0.00
25YR-72HR	15.93	13684.5	7032.5	6652.0	0.0	0.00
25YR-72HR	15.95	13709.3	7044.0	6665.3	0.0	0.00
25YR-72HR	15.97	13734.2	7055.6	6678.6	0.0	0.00
25YR-72HR	15.98	13759.1	7067.1	6692.0	0.0	0.00
25YR-72HR	16.00	13784.0	7078.7	6705.3	0.0	0.00
25YR-72HR	16.08	13908.8	7136.5	6772.3	0.0	0.00
25YR-72HR	16.17	14033.9	7194.4	6839.4	0.0	0.00
25YR-72HR	16.25	14159.3	7252.4	6906.9	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	16.33	14285.1	7310.5	6974.6	0.0	0.00
25YR-72HR	16.42	14411.2	7368.6	7042.5	0.0	0.00
25YR-72HR	16.50	14537.6	7426.8	7110.8	0.0	0.00
25YR-72HR	16.58	14664.3	7485.1	7179.2	0.0	0.00
25YR-72HR	16.67	14791.4	7543.5	7248.0	0.0	0.00
25YR-72HR	16.75	14918.8	7601.9	7316.9	0.0	0.00
25YR-72HR	16.83	15046.6	7660.4	7386.1	0.0	0.00
25YR-72HR	16.92	15174.6	7719.0	7455.6	-0.0	-0.00
25YR-72HR	17.00	15303.0	7777.7	7525.3	-0.0	-0.00
25YR-72HR	17.08	15431.7	7836.4	7595.3	-0.0	-0.00
25YR-72HR	17.17	15560.7	7895.2	7665.5	-0.0	-0.00
25YR-72HR	17.25	15690.0	7954.1	7735.9	-0.0	-0.00
25YR-72HR	17.33	15819.6	8013.0	7806.6	-0.0	-0.00
25YR-72HR	17.42	15949.5	8072.0	7877.5	-0.0	-0.00
25YR-72HR	17.50	16079.8	8131.1	7948.7	-0.0	-0.00
25YR-72HR	17.58	16210.3	8190.2	8020.1	-0.0	-0.00
25YR-72HR	17.67	16341.2	8249.4	8091.7	-0.0	-0.00
25YR-72HR	17.75	16472.3	8308.7	8163.6	-0.0	-0.00
25YR-72HR	17.83	16603.7	8368.0	8235.7	-0.0	-0.00
25YR-72HR	17.92	16735.5	8427.4	8308.0	-0.0	-0.00
25YR-72HR	18.00	16867.5	8486.9	8380.6	0.0	0.00
25YR-72HR	18.08	16999.8	8546.4	8453.4	0.0	0.00
25YR-72HR	18.17	17132.4	8606.0	8526.4	0.0	0.00
25YR-72HR	18.25	17265.3	8665.7	8599.7	0.0	0.00
25YR-72HR	18.33	17398.5	8725.4	8673.1	0.0	0.00
25YR-72HR	18.42	17532.0	8785.2	8746.8	0.0	0.00
25YR-72HR	18.50	17665.7	8845.0	8820.7	0.0	0.00
25YR-72HR	18.58	17799.8	8904.9	8894.9	0.0	0.00
25YR-72HR	18.67	17934.1	8964.9	8969.2	0.0	0.00
25YR-72HR	18.75	18068.7	9024.9	9043.8	0.0	0.00
25YR-72HR	18.83	18203.6	9085.0	9118.6	0.0	0.00
25YR-72HR	18.92	18338.7	9145.1	9193.6	0.0	0.00
25YR-72HR	19.00	18474.1	9205.3	9268.9	0.0	0.00
25YR-72HR	19.08	18609.8	9265.5	9344.3	0.0	0.00
25YR-72HR	19.17	18745.8	9325.8	9419.9	0.0	0.00
25YR-72HR	19.25	18882.0	9386.2	9495.8	0.0	0.00
25YR-72HR	19.33	19018.5	9446.6	9571.9	0.0	0.00
25YR-72HR	19.42	19155.3	9507.1	9648.2	0.0	0.00
25YR-72HR	19.50	19292.3	9567.6	9724.7	0.0	0.00
25YR-72HR	19.58	19429.6	9628.2	9801.4	0.0	0.00
25YR-72HR	19.67	19567.1	9688.8	9878.3	0.0	0.00
25YR-72HR	19.75	19704.9	9749.5	9955.4	0.0	0.00
25YR-72HR	19.83	19843.0	9810.2	10032.7	0.0	0.00
25YR-72HR	19.92	19981.3	9871.0	10110.2	0.0	0.00
25YR-72HR	20.00	20119.9	9931.9	10188.0	0.0	0.00
25YR-72HR	20.08	20258.7	9992.8	10265.9	0.0	0.00
25YR-72HR	20.17	20397.8	10053.7	10344.0	0.0	0.00
25YR-72HR	20.25	20537.1	10114.7	10422.3	0.0	0.00
25YR-72HR	20.33	20676.6	10175.8	10500.9	0.0	0.00
25YR-72HR	20.42	20816.5	10236.9	10579.6	0.0	0.00
25YR-72HR	20.50	20956.5	10298.0	10658.5	0.0	0.00
25YR-72HR	20.58	21096.8	10359.2	10737.6	0.0	0.00
25YR-72HR	20.67	21237.4	10420.5	10816.9	0.0	0.00
25YR-72HR	20.75	21378.2	10481.8	10896.4	0.0	0.00
25YR-72HR	20.83	21519.2	10543.1	10976.1	0.0	0.00
25YR-72HR	20.92	21660.5	10604.5	11056.0	0.0	0.00
25YR-72HR	21.00	21802.0	10666.0	11136.1	0.0	0.00
25YR-72HR	21.08	21943.8	10727.5	11216.3	0.0	0.00
25YR-72HR	21.17	22085.8	10789.0	11296.8	0.0	0.00
25YR-72HR	21.25	22228.0	10850.6	11377.4	0.0	0.00
25YR-72HR	21.33	22370.5	10912.2	11458.2	0.0	0.00
25YR-72HR	21.42	22513.2	10973.9	11539.2	0.0	0.00
25YR-72HR	21.50	22656.1	11035.7	11620.4	0.0	0.00
25YR-72HR	21.58	22799.2	11097.4	11701.8	0.0	0.00
25YR-72HR	21.67	22942.6	11159.3	11783.4	0.0	0.00
25YR-72HR	21.75	23086.2	11221.1	11865.1	0.0	0.00
25YR-72HR	21.83	23230.1	11283.1	11947.0	0.0	0.00
25YR-72HR	21.92	23374.2	11345.0	12029.1	0.0	0.00
25YR-72HR	22.00	23518.4	11407.1	12111.4	0.0	0.00
25YR-72HR	22.08	23663.0	11469.1	12193.9	0.0	0.00
25YR-72HR	22.17	23807.7	11531.2	12276.5	0.0	0.00
25YR-72HR	22.25	23952.7	11593.4	12359.3	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	22.33	24097.8	11655.6	12442.3	0.0	0.00
25YR-72HR	22.42	24243.2	11717.8	12525.4	0.0	0.00
25YR-72HR	22.50	24388.8	11780.1	12608.8	0.0	0.00
25YR-72HR	22.58	24534.7	11842.4	12692.3	0.0	0.00
25YR-72HR	22.67	24680.7	11904.8	12775.9	0.0	0.00
25YR-72HR	22.75	24827.0	11967.2	12859.8	0.0	0.00
25YR-72HR	22.83	24973.5	12029.6	12943.8	0.0	0.00
25YR-72HR	22.92	25120.1	12092.1	13028.0	0.0	0.00
25YR-72HR	23.00	25267.0	12154.7	13112.4	0.0	0.00
25YR-72HR	23.08	25414.1	12217.2	13196.9	0.0	0.00
25YR-72HR	23.17	25561.4	12279.9	13281.6	0.0	0.00
25YR-72HR	23.25	25709.0	12342.5	13366.4	0.0	0.00
25YR-72HR	23.33	25856.7	12405.2	13451.5	0.0	0.00
25YR-72HR	23.42	26004.6	12468.0	13536.6	0.0	0.00
25YR-72HR	23.50	26152.7	12530.8	13622.0	0.0	0.00
25YR-72HR	23.58	26301.1	12593.6	13707.5	0.0	0.00
25YR-72HR	23.67	26449.6	12656.4	13793.2	0.0	0.00
25YR-72HR	23.75	26598.4	12719.3	13879.0	0.0	0.00
25YR-72HR	23.83	26747.3	12782.3	13965.0	0.0	0.00
25YR-72HR	23.92	26896.5	12845.3	14051.2	0.0	0.00
25YR-72HR	24.00	27045.9	12908.3	14137.6	0.0	0.00
25YR-72HR	24.25	27556.8	13114.9	14441.9	0.0	0.00
25YR-72HR	24.50	28158.1	13361.7	14796.4	0.0	0.00
25YR-72HR	24.75	28800.4	13628.3	15172.1	0.0	0.00
25YR-72HR	25.00	29460.1	13903.1	15557.0	0.0	0.00
25YR-72HR	25.25	30125.9	14180.3	15945.6	0.0	0.00
25YR-72HR	25.50	30795.1	14458.2	16336.9	0.0	0.00
25YR-72HR	25.75	31467.6	14736.8	16730.8	0.0	0.00
25YR-72HR	26.00	32143.4	15015.9	17127.4	0.0	0.00
25YR-72HR	26.25	32822.3	15295.7	17526.6	0.0	0.00
25YR-72HR	26.50	33504.3	15576.0	17928.3	0.0	0.00
25YR-72HR	26.75	34189.3	15856.9	18332.4	0.0	0.00
25YR-72HR	27.00	34877.3	16138.3	18739.0	0.0	0.00
25YR-72HR	27.25	35568.2	16420.2	19148.0	0.0	0.00
25YR-72HR	27.50	36262.0	16702.6	19559.4	0.0	0.00
25YR-72HR	27.75	36958.6	16985.6	19973.0	-0.0	-0.00
25YR-72HR	28.00	37657.9	17269.0	20388.9	0.0	0.00
25YR-72HR	28.25	38360.0	17552.9	20807.1	-0.0	-0.00
25YR-72HR	28.50	39064.6	17837.3	21227.4	-0.0	-0.00
25YR-72HR	28.75	39771.9	18122.1	21649.8	-0.0	-0.00
25YR-72HR	29.00	40481.7	18407.3	22074.4	0.0	0.00
25YR-72HR	29.25	41194.0	18693.0	22501.0	0.0	0.00
25YR-72HR	29.50	41908.8	18979.1	22929.7	-0.0	-0.00
25YR-72HR	29.75	42626.0	19265.6	23360.4	-0.0	-0.00
25YR-72HR	30.00	43345.5	19552.6	23793.0	-0.0	-0.00
25YR-72HR	30.25	44067.4	19839.9	24227.5	-0.0	-0.00
25YR-72HR	30.50	44791.5	20127.6	24664.0	-0.0	-0.00
25YR-72HR	30.75	45517.9	20415.6	25102.3	-0.0	-0.00
25YR-72HR	31.00	46246.5	20704.1	25542.4	-0.0	-0.00
25YR-72HR	31.25	46977.2	20992.9	25984.3	-0.0	-0.00
25YR-72HR	31.50	47710.1	21282.0	26428.1	-0.0	-0.00
25YR-72HR	31.75	48445.0	21571.5	26873.5	-0.0	-0.00
25YR-72HR	32.00	49182.0	21861.3	27320.7	-0.0	-0.00
25YR-72HR	32.25	49921.0	22151.5	27769.5	-0.0	-0.00
25YR-72HR	32.50	50662.0	22442.0	28220.0	-0.0	-0.00
25YR-72HR	32.75	51405.0	22732.8	28672.2	-0.0	-0.00
25YR-72HR	33.00	52149.8	23023.9	29125.9	-0.0	-0.00
25YR-72HR	33.25	52896.5	23315.3	29581.3	-0.0	-0.00
25YR-72HR	33.50	53645.1	23607.0	30038.1	-0.0	-0.00
25YR-72HR	33.75	54395.5	23899.0	30496.5	-0.0	-0.00
25YR-72HR	34.00	55147.8	24191.3	30956.5	-0.0	-0.00
25YR-72HR	34.25	55901.7	24483.9	31417.9	-0.0	-0.00
25YR-72HR	34.50	56657.4	24776.7	31880.7	-0.0	-0.00
25YR-72HR	34.75	57414.8	25069.8	32345.0	-0.0	-0.00
25YR-72HR	35.00	58173.9	25363.2	32810.7	-0.0	-0.00
25YR-72HR	35.25	58934.6	25656.9	33277.8	-0.0	-0.00
25YR-72HR	35.50	59697.0	25950.8	33746.2	-0.0	-0.00
25YR-72HR	35.75	60461.0	26245.0	34216.0	-0.0	-0.00
25YR-72HR	36.00	61226.5	26539.4	34687.2	-0.0	-0.00
25YR-72HR	36.25	61996.0	26834.6	35161.4	-0.0	-0.00
25YR-72HR	36.50	62770.4	27131.4	35639.0	-0.0	-0.00
25YR-72HR	36.75	63547.8	27429.2	36118.6	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	37.00	64327.2	27727.5	36599.7	-0.0	-0.00
25YR-72HR	37.25	65108.3	28026.1	37082.2	-0.0	-0.00
25YR-72HR	37.50	65890.8	28325.0	37565.8	-0.0	-0.00
25YR-72HR	37.75	66674.8	28624.1	38050.7	0.0	0.00
25YR-72HR	38.00	67460.2	28923.4	38536.8	-0.0	-0.00
25YR-72HR	38.25	68247.0	29222.8	39024.2	-0.0	-0.00
25YR-72HR	38.50	69035.1	29522.4	39512.7	-0.0	-0.00
25YR-72HR	38.75	69824.7	29822.3	40002.4	-0.0	-0.00
25YR-72HR	39.00	70615.6	30122.5	40493.1	-0.0	-0.00
25YR-72HR	39.25	71407.7	30422.6	40985.1	-0.0	-0.00
25YR-72HR	39.50	72201.2	30723.2	41478.0	-0.0	-0.00
25YR-72HR	39.75	72996.0	31023.9	41972.1	0.0	0.00
25YR-72HR	40.00	73792.1	31324.7	42467.4	0.0	0.00
25YR-72HR	40.25	74589.4	31625.8	42963.6	0.0	0.00
25YR-72HR	40.50	75387.9	31926.9	43461.0	0.0	0.00
25YR-72HR	40.75	76187.6	32228.4	43959.2	0.0	0.00
25YR-72HR	41.00	76988.6	32529.9	44458.6	0.0	0.00
25YR-72HR	41.25	77790.7	32831.7	44959.0	0.0	0.00
25YR-72HR	41.50	78594.0	33133.7	45460.3	0.0	0.00
25YR-72HR	41.75	79398.4	33435.8	45962.6	0.0	0.00
25YR-72HR	42.00	80203.9	33738.0	46465.9	0.0	0.00
25YR-72HR	42.25	81010.6	34040.5	46970.1	0.0	0.00
25YR-72HR	42.50	81818.4	34343.0	47475.3	0.0	0.00
25YR-72HR	42.75	82627.2	34645.8	47981.4	0.0	0.00
25YR-72HR	43.00	83437.1	34948.7	48488.4	0.0	0.00
25YR-72HR	43.25	84248.1	35251.8	48996.3	0.0	0.00
25YR-72HR	43.50	85060.1	35555.0	49505.2	0.0	0.00
25YR-72HR	43.75	85873.2	35858.3	50014.9	0.0	0.00
25YR-72HR	44.00	86687.2	36161.8	50525.4	0.0	0.00
25YR-72HR	44.25	87502.3	36465.4	51036.9	0.0	0.00
25YR-72HR	44.50	88318.4	36769.2	51549.2	0.0	0.00
25YR-72HR	44.75	89135.7	37073.3	52062.4	0.0	0.00
25YR-72HR	45.00	89953.7	37377.2	52576.5	0.0	0.00
25YR-72HR	45.25	90772.5	37681.5	53091.0	-0.0	-0.00
25YR-72HR	45.50	91592.5	37985.8	53606.7	-0.0	-0.00
25YR-72HR	45.75	92413.1	38290.3	54122.8	0.0	0.00
25YR-72HR	46.00	93234.7	38594.9	54639.8	0.0	0.00
25YR-72HR	46.25	94057.4	38899.5	55157.9	0.0	0.00
25YR-72HR	46.50	94881.1	39204.5	55676.7	0.0	0.00
25YR-72HR	46.75	95705.2	39509.3	56195.9	-0.0	-0.00
25YR-72HR	47.00	96530.8	39814.5	56716.3	-0.0	-0.00
25YR-72HR	47.25	97356.5	40119.7	57236.9	-0.0	-0.00
25YR-72HR	47.50	98183.7	40425.2	57758.6	0.0	0.00
25YR-72HR	47.75	99011.3	40730.6	58280.8	0.0	0.00
25YR-72HR	48.00	99840.1	41035.9	58804.2	0.0	0.00
25YR-72HR	48.25	100695.3	41350.2	59345.1	0.0	0.00
25YR-72HR	48.50	101594.6	41682.1	59912.4	0.0	0.00
25YR-72HR	48.75	102511.2	42021.6	60489.6	0.0	0.00
25YR-72HR	49.00	103434.5	42364.0	61070.5	0.0	0.00
25YR-72HR	49.25	104365.1	42704.2	61661.0	0.0	0.00
25YR-72HR	49.50	105306.1	43046.9	62259.2	0.0	0.00
25YR-72HR	49.75	106251.3	43391.3	62860.0	0.0	0.00
25YR-72HR	50.00	107199.3	43736.6	63462.6	0.0	0.00
25YR-72HR	50.25	108198.1	44094.7	64103.4	0.0	0.00
25YR-72HR	50.50	109277.4	44484.3	64793.1	0.0	0.00
25YR-72HR	50.75	110386.8	44887.1	65499.7	0.0	0.00
25YR-72HR	51.00	111509.3	45295.5	66213.8	0.0	0.00
25YR-72HR	51.25	112664.3	45717.0	66947.3	0.0	0.00
25YR-72HR	51.50	113867.4	46158.0	67709.4	0.0	0.00
25YR-72HR	51.75	115090.1	46607.4	68482.7	0.0	0.00
25YR-72HR	52.00	116320.4	47059.8	69260.5	0.0	0.00
25YR-72HR	52.25	117660.9	47535.7	70125.2	0.0	0.00
25YR-72HR	52.50	119176.9	48078.9	71098.0	0.0	0.00
25YR-72HR	52.75	120758.7	48650.9	72107.9	0.0	0.00
25YR-72HR	53.00	122367.0	49234.4	73132.6	0.0	0.00
25YR-72HR	53.25	124088.7	49847.3	74241.4	0.0	0.00
25YR-72HR	53.50	125987.2	50528.4	75458.7	0.0	0.00
25YR-72HR	53.75	127953.6	51239.0	76714.5	0.0	0.00
25YR-72HR	54.00	129947.5	51961.3	77986.2	0.0	0.00
25YR-72HR	54.25	132059.3	52709.5	79349.8	0.0	0.00
25YR-72HR	54.50	134356.4	53527.8	80828.6	-0.0	-0.00
25YR-72HR	54.75	136725.0	54417.9	82307.1	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	55.00	139123.1	55471.8	83651.3	-0.0	-0.00
25YR-72HR	55.25	141640.2	56744.3	84895.9	-0.0	-0.00
25YR-72HR	55.50	144344.9	58280.8	86064.1	-0.0	-0.00
25YR-72HR	55.75	147122.6	60025.7	87096.9	-0.0	-0.00
25YR-72HR	56.00	149930.9	61930.5	88000.4	-0.0	-0.00
25YR-72HR	56.25	152879.6	63986.0	88893.6	-0.0	-0.00
25YR-72HR	56.50	156057.2	66246.2	89811.0	-0.0	-0.00
25YR-72HR	56.75	159322.9	68651.4	90671.6	-0.0	-0.00
25YR-72HR	57.00	162627.2	71158.8	91468.5	-0.0	-0.00
25YR-72HR	57.25	166108.3	73779.9	92328.3	-0.0	-0.00
25YR-72HR	57.50	169886.3	76605.3	93281.0	-0.0	-0.00
25YR-72HR	57.75	173876.2	79591.8	94284.5	-0.0	-0.00
25YR-72HR	58.00	178071.5	82758.1	95313.4	-0.0	-0.00
25YR-72HR	58.25	182466.4	86090.9	96375.5	-0.0	-0.00
25YR-72HR	58.50	187113.1	89627.7	97485.5	-0.0	-0.00
25YR-72HR	58.75	192297.6	93422.6	98875.0	-0.0	-0.00
25YR-72HR	59.00	198259.4	97719.2	100540.2	-0.0	-0.00
25YR-72HR	59.25	205512.2	102657.4	102854.8	-0.0	-0.00
25YR-72HR	59.50	214512.2	108764.4	105747.7	-0.0	-0.00
25YR-72HR	59.75	240396.7	120391.8	120004.8	-0.0	-0.00
25YR-72HR	60.00	294336.4	150122.4	144214.0	-0.0	-0.00
25YR-72HR	60.25	343087.0	190445.0	152642.0	-0.0	-0.00
25YR-72HR	60.50	370468.2	223238.1	147230.2	-0.0	-0.00
25YR-72HR	60.75	387278.3	247584.9	139693.4	-0.0	-0.00
25YR-72HR	61.00	397313.8	264274.9	133039.0	-0.0	-0.00
25YR-72HR	61.25	405055.6	276587.6	128468.0	-0.0	-0.00
25YR-72HR	61.50	411330.5	286083.3	125247.2	-0.0	-0.00
25YR-72HR	61.75	416906.7	293903.3	123003.4	-0.0	-0.00
25YR-72HR	62.00	421897.8	300535.3	121362.4	-0.0	-0.00
25YR-72HR	62.25	426340.1	306324.9	120015.1	-0.0	-0.00
25YR-72HR	62.50	430116.0	311290.7	118825.4	-0.0	-0.00
25YR-72HR	62.75	433563.1	315684.7	117878.5	-0.0	-0.00
25YR-72HR	63.00	436749.5	319621.7	117127.8	-0.0	-0.00
25YR-72HR	63.25	439858.4	323269.9	116588.5	-0.0	-0.00
25YR-72HR	63.50	442942.7	326730.9	116211.9	-0.0	-0.00
25YR-72HR	63.75	446018.7	330062.7	115956.0	-0.0	-0.00
25YR-72HR	64.00	449095.4	333312.7	115782.6	-0.0	-0.00
25YR-72HR	64.25	451822.2	336403.1	115419.1	-0.0	-0.00
25YR-72HR	64.50	453970.2	339113.8	114856.4	-0.0	-0.00
25YR-72HR	64.75	455903.7	341548.7	114355.0	-0.0	-0.00
25YR-72HR	65.00	457754.1	343791.8	113962.2	-0.0	-0.00
25YR-72HR	65.25	459597.1	345915.3	113681.8	-0.0	-0.00
25YR-72HR	65.50	461447.7	347962.3	113485.4	-0.0	-0.00
25YR-72HR	65.75	463299.3	349953.0	113346.3	-0.0	-0.00
25YR-72HR	66.00	465153.6	351906.3	113247.3	-0.0	-0.00
25YR-72HR	66.25	467006.6	353829.6	113177.0	-0.0	-0.00
25YR-72HR	66.50	468861.5	355734.5	113127.1	-0.0	-0.00
25YR-72HR	66.75	470715.0	357622.8	113092.3	-0.0	-0.00
25YR-72HR	67.00	472568.7	359500.3	113068.4	-0.0	-0.00
25YR-72HR	67.25	474423.3	361370.8	113052.5	-0.0	-0.00
25YR-72HR	67.50	476277.7	363235.2	113042.5	-0.0	-0.00
25YR-72HR	67.75	478131.5	365094.9	113036.7	-0.0	-0.00
25YR-72HR	68.00	479986.9	366952.9	113034.0	-0.0	-0.00
25YR-72HR	68.25	481658.7	368755.3	112903.4	-0.0	-0.00
25YR-72HR	68.50	483039.9	370390.3	112649.6	-0.0	-0.00
25YR-72HR	68.75	484314.1	371905.8	112408.3	-0.0	-0.00
25YR-72HR	69.00	485547.1	373336.8	112210.4	-0.0	-0.00
25YR-72HR	69.25	486775.4	374713.8	112061.6	-0.0	-0.00
25YR-72HR	69.50	488003.1	376051.7	111951.4	-0.0	-0.00
25YR-72HR	69.75	489231.2	377361.6	111869.7	-0.0	-0.00
25YR-72HR	70.00	490458.6	378649.3	111809.3	-0.0	-0.00
25YR-72HR	70.25	491689.0	379924.8	111764.1	-0.0	-0.00
25YR-72HR	70.50	492922.6	381190.6	111732.0	-0.0	-0.00
25YR-72HR	70.75	494157.9	382449.0	111708.9	-0.0	-0.00
25YR-72HR	71.00	495392.8	383700.4	111692.3	0.0	0.00
25YR-72HR	71.25	496627.8	384947.2	111680.5	0.0	0.00
25YR-72HR	71.50	497864.2	386191.9	111672.3	0.0	0.00
25YR-72HR	71.75	499098.6	387431.8	111666.8	0.0	0.00
25YR-72HR	72.00	500334.4	388671.3	111663.2	0.0	0.00
25YR-72HR	72.25	501212.2	389823.5	111388.7	-0.0	-0.00
25YR-72HR	72.50	501517.6	390668.7	110848.9	-0.0	-0.00
25YR-72HR	72.75	501609.8	391297.0	110312.8	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	73.00	501621.6	391778.6	109843.0	0.0	0.00
25YR-72HR	73.25	501621.6	392164.0	109457.6	-0.0	-0.00
25YR-72HR	73.50	501621.6	392482.2	109139.4	-0.0	-0.00
25YR-72HR	73.75	501621.6	392748.4	108873.2	-0.0	-0.00
25YR-72HR	74.00	501621.6	392974.1	108647.5	-0.0	-0.00
25YR-72HR	74.25	501621.6	393167.5	108454.1	-0.0	-0.00
25YR-72HR	74.50	501621.6	393335.0	108286.5	-0.0	-0.00
25YR-72HR	74.75	501621.6	393481.5	108140.0	-0.0	-0.00
25YR-72HR	75.00	501621.6	393610.7	108010.9	-0.0	-0.00
25YR-72HR	75.25	501621.6	393725.8	107895.8	-0.0	-0.00
25YR-72HR	75.50	501621.6	393828.7	107792.8	-0.0	-0.00
25YR-72HR	75.75	501621.6	393921.6	107700.0	-0.0	-0.00
25YR-72HR	76.00	501621.6	394005.8	107615.8	-0.0	-0.00
25YR-72HR	76.25	501621.6	394082.7	107538.9	-0.0	-0.00
25YR-72HR	76.50	501621.6	394152.9	107468.7	-0.0	-0.00
25YR-72HR	76.75	501621.6	394218.0	107403.6	-0.0	-0.00
25YR-72HR	77.00	501621.6	394278.4	107343.2	-0.0	-0.00
25YR-72HR	77.25	501621.6	394334.6	107287.0	-0.0	-0.00
25YR-72HR	77.50	501621.6	394387.2	107234.3	-0.0	-0.00
25YR-72HR	77.75	501621.6	394436.7	107184.9	-0.0	-0.00
25YR-72HR	78.00	501621.6	394483.3	107138.3	-0.0	-0.00
25YR-72HR	78.25	501621.6	394527.4	107094.2	-0.0	-0.00
25YR-72HR	78.50	501621.6	394569.3	107052.3	-0.0	-0.00
25YR-72HR	78.75	501621.6	394609.2	107012.3	-0.0	-0.00
25YR-72HR	79.00	501621.6	394647.4	106974.2	-0.0	-0.00
25YR-72HR	79.25	501621.6	394683.8	106937.7	-0.0	-0.00
25YR-72HR	79.50	501621.6	394718.9	106902.7	-0.0	-0.00
25YR-72HR	79.75	501621.6	394752.6	106868.9	-0.0	-0.00
25YR-72HR	80.00	501621.6	394785.2	106836.4	-0.0	-0.00
25YR-72HR	80.25	501621.6	394816.6	106804.9	-0.0	-0.00
25YR-72HR	80.50	501621.6	394847.2	106774.4	-0.0	-0.00
25YR-72HR	80.75	501621.6	394876.8	106744.8	-0.0	-0.00
25YR-72HR	81.00	501621.6	394905.5	106716.1	-0.0	-0.00
25YR-72HR	81.25	501621.6	394933.5	106688.1	-0.0	-0.00
25YR-72HR	81.50	501621.6	394960.8	106660.8	-0.0	-0.00
25YR-72HR	81.75	501621.6	394987.5	106634.1	-0.0	-0.00
25YR-72HR	82.00	501621.6	395013.5	106608.1	-0.0	-0.00
25YR-72HR	82.25	501621.6	395039.1	106582.5	-0.0	-0.00
25YR-72HR	82.50	501621.6	395064.1	106557.5	-0.0	-0.00
25YR-72HR	82.75	501621.6	395088.7	106532.8	-0.0	-0.00
25YR-72HR	83.00	501621.6	395112.9	106508.7	-0.0	-0.00
25YR-72HR	83.25	501621.6	395136.5	106485.0	-0.0	-0.00
25YR-72HR	83.50	501621.6	395159.9	106461.7	-0.0	-0.00
25YR-72HR	83.75	501621.6	395183.0	106438.6	-0.0	-0.00
25YR-72HR	84.00	501621.6	395205.8	106415.8	-0.0	-0.00
25YR-72HR	84.25	501621.6	395228.2	106393.4	-0.0	-0.00
25YR-72HR	84.50	501621.6	395250.3	106371.3	-0.0	-0.00
25YR-72HR	84.75	501621.6	395272.1	106349.5	-0.0	-0.00
25YR-72HR	85.00	501621.6	395293.7	106327.8	-0.0	-0.00
25YR-72HR	85.25	501621.6	395315.1	106306.4	-0.0	-0.00
25YR-72HR	85.50	501621.6	395336.3	106285.3	-0.0	-0.00
25YR-72HR	85.75	501621.6	395357.3	106264.3	-0.0	-0.00
25YR-72HR	86.00	501621.6	395378.1	106243.5	-0.0	-0.00
25YR-72HR	86.25	501621.6	395398.7	106222.9	-0.0	-0.00
25YR-72HR	86.50	501621.6	395419.2	106202.4	-0.0	-0.00
25YR-72HR	86.75	501621.6	395439.5	106182.1	-0.0	-0.00
25YR-72HR	87.00	501621.6	395459.7	106161.9	-0.0	-0.00
25YR-72HR	87.25	501621.6	395479.8	106141.8	-0.0	-0.00
25YR-72HR	87.50	501621.6	395499.5	106122.0	-0.0	-0.00
25YR-72HR	87.75	501621.6	395518.8	106102.7	-0.0	-0.00
25YR-72HR	88.00	501621.6	395538.8	106082.8	-0.0	-0.00
25YR-72HR	88.25	501621.6	395558.3	106063.2	-0.0	-0.00
25YR-72HR	88.50	501621.6	395577.8	106043.8	-0.0	-0.00
25YR-72HR	88.75	501621.6	395597.0	106024.6	-0.0	-0.00
25YR-72HR	89.00	501621.6	395615.9	106005.6	-0.0	-0.00
25YR-72HR	89.25	501621.6	395635.2	105986.4	-0.0	-0.00
25YR-72HR	89.50	501621.6	395654.3	105967.3	-0.0	-0.00
25YR-72HR	89.75	501621.6	395673.3	105948.3	-0.0	-0.00
25YR-72HR	90.00	501621.6	395692.5	105929.0	-0.0	-0.00
25YR-72HR	90.25	501621.6	395711.2	105910.4	-0.0	-0.00
25YR-72HR	90.50	501621.6	395730.3	105891.3	-0.0	-0.00
25YR-72HR	90.75	501621.6	395748.8	105872.8	-0.0	-0.00

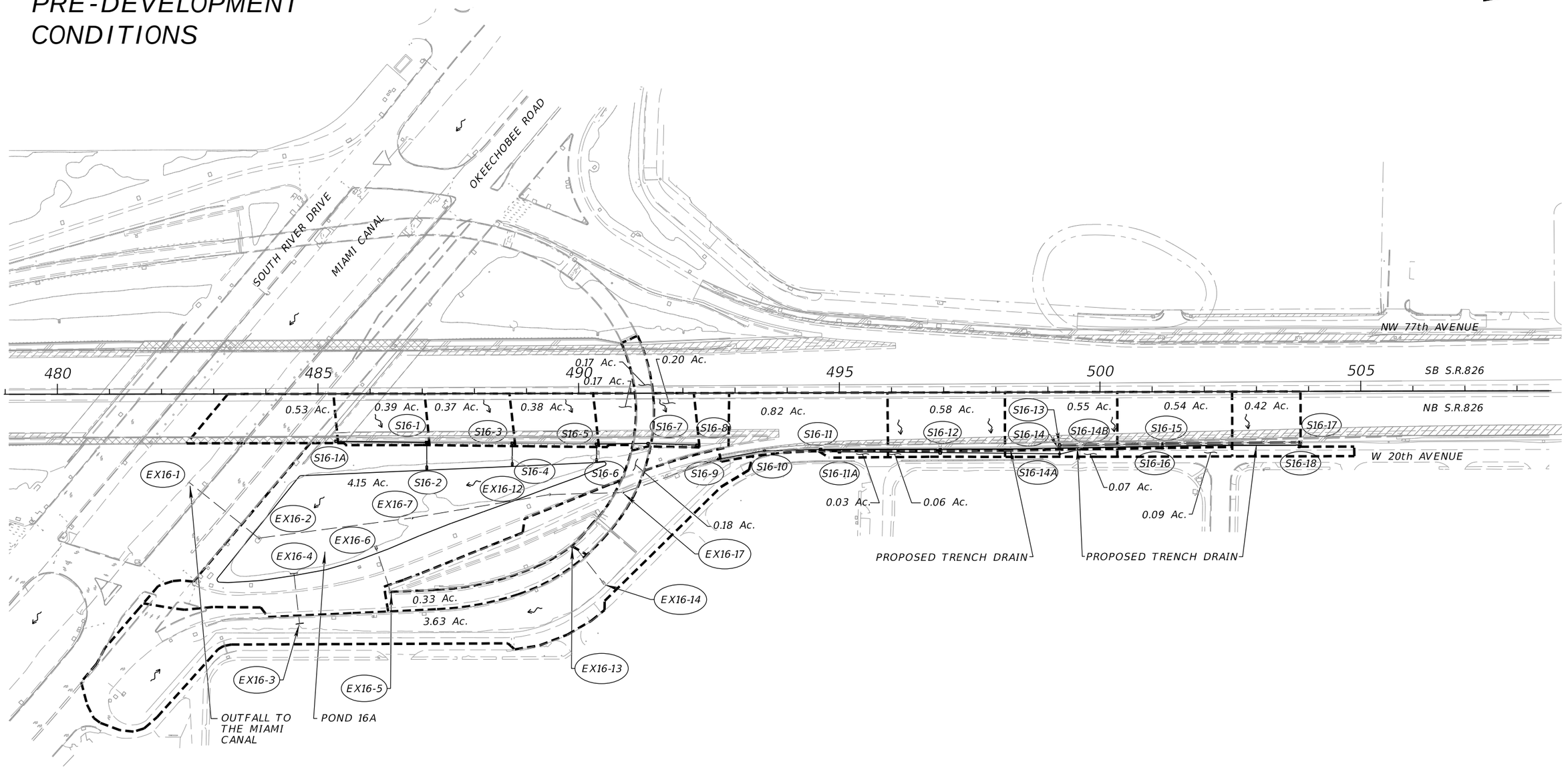
Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	91.00	501621.6	395767.5	105854.1	-0.0	-0.00
25YR-72HR	91.25	501621.6	395786.2	105835.3	-0.0	-0.00
25YR-72HR	91.50	501621.6	395805.0	105816.6	-0.0	-0.00
25YR-72HR	91.75	501621.6	395823.7	105797.9	-0.0	-0.00
25YR-72HR	92.00	501621.6	395842.4	105779.2	-0.0	-0.00
25YR-72HR	92.25	501621.6	395861.0	105760.5	-0.0	-0.00
25YR-72HR	92.50	501621.6	395879.7	105741.9	-0.0	-0.00
25YR-72HR	92.75	501621.6	395898.2	105723.3	-0.0	-0.00
25YR-72HR	93.00	501621.6	395916.8	105704.8	-0.0	-0.00
25YR-72HR	93.25	501621.6	395935.3	105686.3	-0.0	-0.00
25YR-72HR	93.50	501621.6	395953.7	105667.8	-0.0	-0.00
25YR-72HR	93.75	501621.6	395972.1	105649.5	-0.0	-0.00
25YR-72HR	94.00	501621.6	395990.4	105631.1	-0.0	-0.00
25YR-72HR	94.25	501621.6	396008.7	105612.9	-0.0	-0.00
25YR-72HR	94.50	501621.6	396026.8	105594.8	-0.0	-0.00
25YR-72HR	94.75	501621.6	396044.8	105576.7	-0.0	-0.00
25YR-72HR	95.00	501621.6	396062.7	105558.9	-0.0	-0.00
25YR-72HR	95.25	501621.6	396080.3	105541.3	-0.0	-0.00
25YR-72HR	95.50	501621.6	396097.4	105524.2	-0.0	-0.00
25YR-72HR	95.75	501621.6	396113.6	105507.9	-0.0	-0.00
25YR-72HR	96.00	501621.6	396126.8	105494.8	-0.0	-0.00
25YR-72HR	96.00	501621.6	396126.8	105494.8	-0.0	-0.00

Basin 16

Drainage Maps

PRE-DEVELOPMENT CONDITIONS

0 50 200
Feet



BASIN 16 TOTAL AREA = 13.66 ACRES
SUB-BASIN 16A TOTAL AREA = 10.50 ACRES
SUB-BASIN 16B TOTAL AREA = 3.16 ACRES

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
826	MIAMI-DADE	432687-1-52-01

DRAINAGE MAP (BASIN 16)

SHEET NO.
J-1091

malfonso 5/6/2019 3:14:36 PM P:\432687\5201 SR-826-I-75 Express Lanes\drainage\Post-Development Conditions\drmprdl6.dgn

Curve Number Calculations

PRE-DEVELOPMENT CONDITIONS
AREA BREAKDOWN (BASIN B-16)

SUB-BASIN	TOTAL DRAINAGE AREA (ACRES)	PERVIOUS DRAINAGE AREA (ACRES)	PERVIOUS AREA CURVE NUMBER	IMPERVIOUS DRAINAGE AREA (ACRES)	IMPERVIOUS AREA CURVE NUMBER	COMPOSITE CURVE NUMBER
B16-1	0.39	0.00	61	0.39	96	96
B16-1A	0.53	0.00	61	0.53	96	96
B16-3	0.37	0.00	61	0.37	96	96
B16-5	0.38	0.00	61	0.38	96	96
B16-7	0.17	0.00	61	0.17	96	96
B16-8	0.20	0.00	61	0.20	96	96
BX16-2	4.15	3.59	61	0.56	96	66
BX16-3	3.63	2.57	61	1.06	96	71
BX16-5	0.33	0.00	61	0.33	96	96
BX16-13	0.35	0.00	61	0.35	96	96
Total Sub-Basin B-16A	**10.50**	**6.16**	61	**4.34**	**96**	**75**
B16-11	0.82	0.00	61	0.82	96	96
B16-11A	0.03	0.00	61	0.03	96	96
B16-12	0.64	0.05	61	0.59	96	93
B16-14	0.55	0.05	61	0.50	96	93
B16-14B	0.07	0.00	61	0.07	96	96
B16-16	0.63	0.05	61	0.58	96	93
B16-18	0.42	0.10	61	0.32	96	88
Total Sub-Basin B-16B	**3.16**	**0.25**	**61**	**2.91**	**96**	**93**
Total Basin B-16	**13.66**	**6.41**	**61**	**7.25**	**96**	**80**

Average Hydraulic Conductivity

Average Hydraulic Conductivity

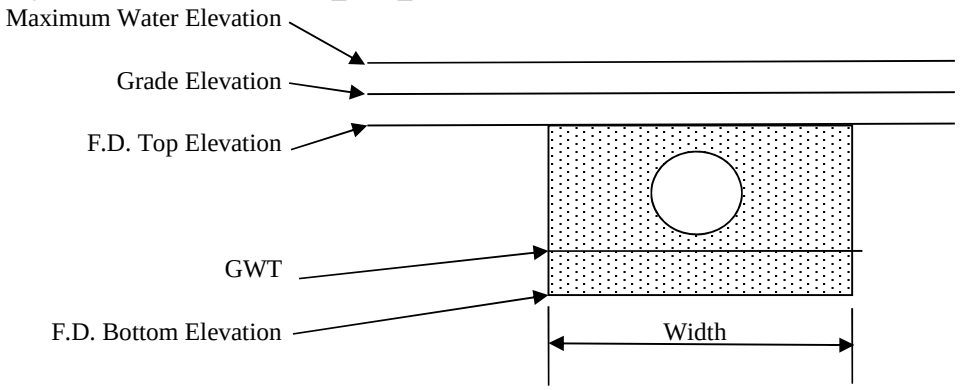
Basin B-16		
Percolation Test	P-27	P-28
Average Flow to 10 ft. depth (gpm)	0.10	49.82
Depth to Water Table (ft)	1.90	3.40
Head Maintained (ft)	0.90	2.40
Borehole Diameter (ft)	0.604	0.604
Borehole Depth (ft)	10.00	10.00
Du (ft)	0.90	2.40
Average Flow (cfs)	0.0002	0.1110
Ds (ft)	8.10	6.60
Hydraulic Conductivity K (cfs/ft2-ft head)	1.48E-05	3.06E-03
Average Hydraulic Conductivity K	**1.54E-03**	

Rating Curve Calculations

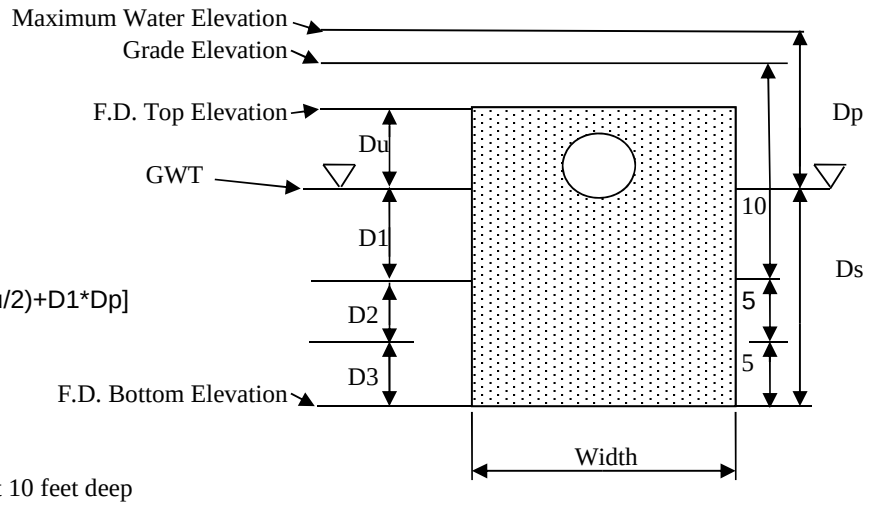
Made by: _____ _____
Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT_16



Maximum Water Elevation =	**5.45**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**4.45**	ft.NAVD	
F.D.Top Elevation =	**4.04**	ft.NAVD	
Ground Water Table =	**1.45**	ft.NAVD	
F.D. Bottom Elevation =	**-11.54**	ft.NAVD	
Width =	**4.50**	feet.	
Pipe Diameter =	**24**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**1.54E-03**	cfs/ft^2-ft head	(Ave. P-27,P-28)
Hydraulic Conductivity K15 =	**1.54E-03**	cfs/ft^2-ft head	(Ave. P-27,P-28)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____

Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT_16

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs/ft)	(cfs/ft)
1.45	0.000	0.000
2.20	0.026	0.000
3.90	0.107	0.076
5.45	0.182	0.151

Rating Curve (Q)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs)	(cfs)
1.45	0.00	0.00
2.20	0.03	0.00
3.90	0.11	0.08
5.45	0.18	0.15

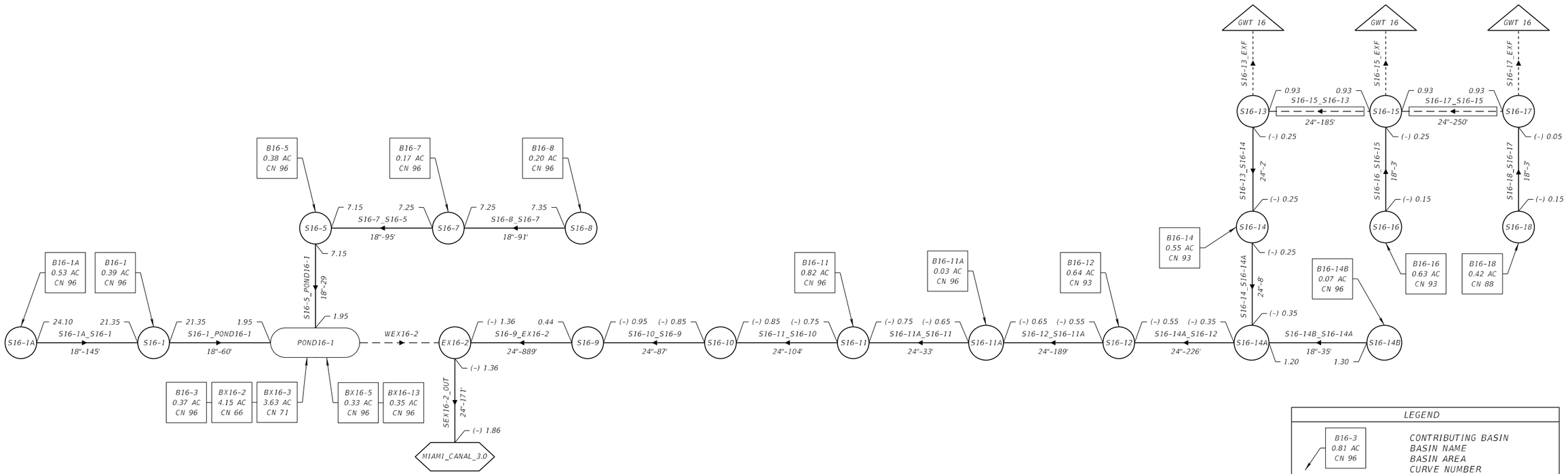
Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

Rating Curve Adjusted (Q)

Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.45	1.45	0.00
1.45	2.20	0.03
1.45	3.90	0.10
1.45	5.45	0.10
2.20	2.20	0.00
2.20	3.90	0.08
2.20	5.45	0.10

Nodal Diagram

PRE-DEVELOPMENT CONDITIONS



WEIR INPUT SUMMARY							
WEIR	VERT. TYPE	HORIZ.	CIRC.	RECT.	INV.	SPAN	RISE
WEX16-2	-	X	-	X	2.82'	37"	24"

LEGEND

- B16-3 / 0.81 AC / CN 96 — CONTRIBUTING BASIN, BASIN NAME, BASIN AREA, CURVE NUMBER
- S16-1 — NODE NAME
- OFFSITE_LAKE — BOUNDARY NODE WITH CONSTANT TAILWATER
- GWT 1-5 — BOUNDARY NODE WITH VARIABLE TAILWATER
- S16-14_S16-15 / 18"-37' / (-) 0.85 / (-) 1.95 — PIPE LINK WITH (QUANTITY)SIZE-LENGTH INVERT ELEVATIONS
- EX2-1_WEIR — WEIR LINK
- S16-12_EXF — RATING CURVE LINK
- S16-15_S16-17 / 24"x38"-126' / 0.64 / 0.64 — EXFILTRATION TRENCH LINK WITH LENGTH AND INVERT ELEVATIONS

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
826	MIAMI-DADE	447165-1-52-01 441830-1-52-01 441831-1-52-01

NODAL DIAGRAM BASIN 16

SHEET NO.

AMATHURA 11/10/2020 2:15:28 PM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\44716515201\zz_working\AM's Work

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
EX16-2	Basin 16	25YR-72HR	60.15	3.55	7.00	0.0030	166	60.19	20.38	60.15	20.09
GWT_16	Basin 16	25YR-72HR	72.00	2.20	99.00	0.0003	0	60.04	16.16	0.00	0.00
MIAMI_CANAL_3.0	Basin 16	25YR-72HR	0.00	1.45	99.00	0.0000	9	60.15	20.09	0.00	0.00
POND16-1	Basin 16	25YR-72HR	60.49	4.10	7.00	0.0012	84303	60.02	59.31	60.74	22.98
S16-1	Basin 16	25YR-72HR	60.03	22.52	24.79	-0.0017	251	60.02	5.70	60.03	5.69
S16-10	Basin 16	25YR-72HR	60.07	3.67	7.06	0.0053	123	59.70	3.59	59.69	3.39
S16-11	Basin 16	25YR-72HR	60.06	3.70	5.83	0.0046	120	59.76	4.85	59.70	3.59
S16-11A	Basin 16	25YR-72HR	60.06	3.69	6.24	0.0040	124	72.00	2.92	72.01	2.92
S16-12	Basin 16	25YR-72HR	60.06	3.66	4.94	0.0034	134	72.00	2.97	72.00	2.92
S16-13	Basin 16	25YR-72HR	60.05	3.09	5.23	-0.0021	137	72.45	1.96	86.35	2.94
S16-14	Basin 16	25YR-72HR	60.05	3.33	4.95	0.0080	114	79.16	3.69	64.03	2.92
S16-14A	Basin 16	25YR-72HR	60.05	3.43	6.54	0.0050	126	64.03	3.42	72.34	2.91
S16-14B	Basin 16	25YR-72HR	60.06	3.44	6.28	-0.0050	114	60.02	0.43	60.06	1.07
S16-15	Basin 16	25YR-72HR	60.05	2.86	5.20	0.0010	263	60.02	2.06	60.02	2.03
S16-16	Basin 16	25YR-72HR	60.04	2.97	4.89	-0.0040	113	60.02	3.89	60.02	3.87
S16-17	Basin 16	25YR-72HR	60.05	2.84	5.39	-0.0011	215	60.02	2.55	60.04	2.53
S16-18	Basin 16	25YR-72HR	60.04	2.89	5.02	-0.0036	113	60.02	2.56	60.02	2.55
S16-1A	Basin 16	25YR-72HR	60.02	25.08	27.52	-0.0011	216	60.02	3.29	60.02	3.28
S16-5	Basin 16	25YR-72HR	60.04	8.24	16.24	-0.0013	195	60.03	4.61	60.03	4.61
S16-7	Basin 16	25YR-72HR	60.04	8.37	13.56	-0.0013	235	60.03	2.28	60.05	2.27
S16-8	Basin 16	25YR-72HR	60.04	8.39	10.75	-0.0013	175	60.02	1.24	60.04	1.23
S16-9	Basin 16	25YR-72HR	60.07	3.64	8.19	0.0026	162	59.69	3.39	72.01	3.02

Qpre = 20.09 cfs

```
================================================================================
==== Basins ====================================================================
================================================================================

         Name: B16-1                   Node: S16-1                 Status: Onsite
        Group: Basin 16                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.390                 Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



--------------------------------------------------------------------------------
         Name: B16-11                  Node: S16-11                Status: Onsite
        Group: Basin 16                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.820                 Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



--------------------------------------------------------------------------------
         Name: B16-11A                 Node: S16-11A               Status: Onsite
        Group: Basin 16                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.030                 Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



--------------------------------------------------------------------------------
         Name: B16-12                  Node: S16-12                Status: Onsite
        Group: Basin 16                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.640                 Time Shift(hrs): 0.00
          Curve Number: 93.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



--------------------------------------------------------------------------------
         Name: B16-14                  Node: S16-14                Status: Onsite
        Group: Basin 16                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.550                 Time Shift(hrs): 0.00
          Curve Number: 93.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



--------------------------------------------------------------------------------
         Name: B16-14B                 Node: S16-14B               Status: Onsite
        Group: Basin 16                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
```

Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.070 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B16-16 Node: S16-16 Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.630 Time Shift(hrs): 0.00
Curve Number: 93.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B16-18 Node: S16-18 Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.420 Time Shift(hrs): 0.00
Curve Number: 88.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B16-1A Node: S16-1A Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.530 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B16-3 Node: POND16-1 Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.370 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B16-5 Node: S16-5 Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.380 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B16-7 Node: S16-7 Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.170 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B16-8 Node: S16-8 Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.200 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX16-13 Node: POND16-1 Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.350 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX16-2 Node: POND16-1 Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 4.150 Time Shift(hrs): 0.00
Curve Number: 66.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX16-3 Node: POND16-1 Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 3.630 Time Shift(hrs): 0.00
Curve Number: 75.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX16-5 Node: POND16-1 Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.330 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

==========
==== Nodes ==========
==========

Name: EX16-2 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 7.000
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
1.940	0.0004

Name: GWT_16 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	1.450
108.00	1.450

Name: MIAMI_CANAL_3.0 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	1.450
108.00	1.450

Name: POND16-1 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 7.000
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
1.940	0.0004
1.950	1.7700
2.820	1.8400
5.000	2.0000
6.000	2.0800

Name: S16-1 Base Flow(cfs): 0.000 Init Stage(ft): 21.350
Group: Basin 16 Warn Stage(ft): 24.790
Type: Stage/Area

Stage(ft)	Area(ac)
19.350	0.0004
24.790	0.0004

Name: S16-10 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 7.060
Type: Stage/Area

Stage(ft)	Area(ac)

1.450	0.0004
7.060	0.0004

Name: S16-11 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 5.830
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.830	0.0004

Name: S16-11A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 6.240
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.240	0.0004

Name: S16-12 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 4.940
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.940	0.0004

Name: S16-13 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 5.230
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0005
5.230	0.0005

Name: S16-14 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 4.950
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.950	0.0004

Name: S16-14A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 6.540
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.540	0.0004

Name: S16-14B Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 6.280
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.280	0.0004

Name: S16-15 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 5.200
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.200	0.0004

Name: S16-16 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 4.890
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.890	0.0004

Name: S16-17 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 5.390
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.390	0.0004

Name: S16-18 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 5.020
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.020	0.0004

Name: S16-1A Base Flow(cfs): 0.000 Init Stage(ft): 24.100
Group: Basin 16 Warn Stage(ft): 27.520
Type: Stage/Area

Stage(ft)	Area(ac)
22.100	0.0004
27.520	0.0004

Name: S16-5 Base Flow(cfs): 0.000 Init Stage(ft): 7.150

Group: Basin 16 Warn Stage(ft): 16.240
Type: Stage/Area

Stage(ft)	Area(ac)
5.150	0.0004
16.240	0.0004

Name: S16-7 Base Flow(cfs): 0.000 Init Stage(ft): 7.250
Group: Basin 16 Warn Stage(ft): 13.560
Type: Stage/Area

Stage(ft)	Area(ac)
5.250	0.0004
13.560	0.0004

Name: S16-8 Base Flow(cfs): 0.000 Init Stage(ft): 7.350
Group: Basin 16 Warn Stage(ft): 10.750
Type: Stage/Area

Stage(ft)	Area(ac)
5.350	0.0004
10.750	0.0004

Name: S16-9 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 8.190
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
8.190	0.0004

==========
==== Operating Tables ====
==========

Name: E_OPT_16 Group: Basin 16
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.450	1.45	0.00
1.450	2.20	0.03
1.450	3.90	0.10
1.450	5.45	0.10
2.200	2.20	0.00
2.200	3.90	0.08
2.200	5.45	0.10

==========
==== Pipes ====
==========

Name: P16-2_OUT From Node: EX16-2 Length(ft): 171.00
Group: Basin 16 To Node: MIAMI_CANAL_3.0 Count: 1
Friction Equation: Automatic
UPSTREAM DOWNSTREAM Solution Algorithm: Most Restrictive
Geometry: Circular Circular Flow: Both

Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	1.00
Invert(ft):	-1.360	-1.860	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S16-10_S16-9	From Node: S16-10	Length(ft):	87.00
Group:	Basin 16	To Node: S16-9	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	0.10
Invert(ft):	-0.850	-0.950	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S16-11_S16-10	From Node: S16-11	Length(ft):	104.00
Group:	Basin 16	To Node: S16-10	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	0.10
Invert(ft):	-0.750	-0.850	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S16-11A_S16-11	From Node: S16-11A	Length(ft):	33.00
Group:	Basin 16	To Node: S16-11	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	0.10
Invert(ft):	-0.650	-0.750	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S16-12_S16-11A	From Node:	S16-12	Length(ft): 189.00
Group:	Basin 16	To Node:	S16-11A	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	24.00	24.00		Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00		Exit Loss Coef: 0.10
Invert(ft):	-0.550	-0.650		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S16-13_S16-14	From Node:	S16-13	Length(ft): 2.00
Group:	Basin 16	To Node:	S16-14	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	24.00	24.00		Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00		Exit Loss Coef: 0.10
Invert(ft):	-0.250	-0.250		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S16-14_S16-14A	From Node:	S16-14	Length(ft): 8.00
Group:	Basin 16	To Node:	S16-14A	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	24.00	24.00		Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00		Exit Loss Coef: 1.46
Invert(ft):	-0.250	-0.350		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S16-14A_S16-12	From Node: S16-14A	Length(ft): 226.00
Group:	Basin 16	To Node: S16-12	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 0.10
Invert(ft):	-0.350	-0.550	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S16-14B_S16-14A	From Node: S16-14B	Length(ft): 35.00
Group:	Basin 16	To Node: S16-14A	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.10
Invert(ft):	1.300	1.200	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S16-15_S16-13	From Node: S16-15	Length(ft): 185.00
Group:	Basin 16	To Node: S16-13	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 1.35
Rise(in):	24.00	24.00	Exit Loss Coef: 1.46
Invert(ft):	0.930	0.930	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

```
         Name: S16-16_S16-15       From Node: S16-16             Length(ft): 3.00
        Group: Basin 16              To Node: S16-15                  Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                            Flow: Both
     Span(in): 18.00          18.00                     Entrance Loss Coef: 0.50
     Rise(in): 18.00          18.00                         Exit Loss Coef: 1.46
   Invert(ft): -0.150         -0.250                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: S16-17_S16-15       From Node: S16-17             Length(ft): 250.00
        Group: Basin 16              To Node: S16-15                  Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                            Flow: Both
     Span(in): 24.00          24.00                     Entrance Loss Coef: 1.35
     Rise(in): 24.00          24.00                         Exit Loss Coef: 0.10
   Invert(ft): 0.930          0.930                         Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: S16-18_S16-17       From Node: S16-18             Length(ft): 3.00
        Group: Basin 16              To Node: S16-17                  Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                            Flow: Both
     Span(in): 18.00          18.00                     Entrance Loss Coef: 0.50
     Rise(in): 18.00          18.00                         Exit Loss Coef: 1.46
   Invert(ft): -0.150         -0.050                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: S16-1_POND16-1      From Node: S16-1              Length(ft): 60.00
        Group: Basin 16              To Node: POND16-1                Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                            Flow: Both
     Span(in): 18.00          18.00                     Entrance Loss Coef: 0.50
```

Rise(in):	18.00	18.00	Exit Loss Coef:	1.00
Invert(ft):	21.350	1.950	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S16-1A_S16-1	From Node: S16-1A	Length(ft):	145.00
Group:	Basin 16	To Node: S16-1	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	24.100	21.350	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S16-5_POND16-1	From Node: S16-5	Length(ft):	29.00
Group:	Basin 16	To Node: POND16-1	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.00
Invert(ft):	7.150	1.950	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S16-7_S16-5	From Node: S16-7	Length(ft):	95.00
Group:	Basin 16	To Node: S16-5	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	7.250	7.150	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: S16-8_S16-7	From Node: S16-8	Length(ft): 91.00	
Group: Basin 16	To Node: S16-7	Count: 1	
		Friction Equation: Automatic	
UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive	
Geometry: Circular	Circular	Flow: Both	
Span(in): 18.00	18.00	Entrance Loss Coef: 0.50	
Rise(in): 18.00	18.00	Exit Loss Coef: 0.10	
Invert(ft): 7.350	7.250	Bend Loss Coef: 0.00	
Manning's N: 0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw	
Top Clip(in): 0.000	0.000	Inlet Ctrl Spec: Use dn	
Bot Clip(in): 0.000	0.000	Stabilizer Option: None	

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: S16-9_EX16-2	From Node: S16-9	Length(ft): 889.00	
Group: Basin 16	To Node: EX16-2	Count: 1	
		Friction Equation: Automatic	
UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive	
Geometry: Circular	Circular	Flow: Both	
Span(in): 24.00	24.00	Entrance Loss Coef: 0.50	
Rise(in): 24.00	24.00	Exit Loss Coef: 1.46	
Invert(ft): 0.440	-1.360	Bend Loss Coef: 0.00	
Manning's N: 0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw	
Top Clip(in): 0.000	0.000	Inlet Ctrl Spec: Use dn	
Bot Clip(in): 0.000	0.000	Stabilizer Option: None	

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

==========
==== Weirs ==========
==========

Name: WEX16-2	From Node: POND16-1		
Group: Basin 16	To Node: EX16-2		
Flow: Both	Count: 1		
Type: Horizontal	Geometry: Rectangular		
Span(in): 37.00			
Rise(in): 24.00			
Invert(ft): 2.820			
Control Elevation(ft): 2.820			
	TABLE		
Bottom Clip(in): 0.000			
Top Clip(in): 0.000			
Weir Discharge Coef: 3.200			
Orifice Discharge Coef: 0.600			

```
================================================================================================
==== Rating Curves ============================================================================
================================================================================================

         Name: S16-13_EXF          From Node: S16-13                 Count: 85
        Group: Basin 16              To Node: GWT_16                  Flow: Both

              TABLE           ELEV ON(ft)     ELEV OFF(ft)
         #1: E_OPT_16         1.450           1.450
         #2:                  0.000           0.000
         #3:                  0.000           0.000
         #4:                  0.000           0.000


------------------------------------------------------------------------------------------------
         Name: S16-15_EXF          From Node: S16-15                 Count: 201
        Group: Basin 16              To Node: GWT_16                  Flow: Both

              TABLE           ELEV ON(ft)     ELEV OFF(ft)
         #1: E_OPT_16         1.450           1.450
         #2:                  0.000           0.000
         #3:                  0.000           0.000
         #4:                  0.000           0.000


------------------------------------------------------------------------------------------------
         Name: S16-17_EXF          From Node: S16-17                 Count: 117
        Group: Basin 16              To Node: GWT_16                  Flow: Both

              TABLE           ELEV ON(ft)     ELEV OFF(ft)
         #1: E_OPT_16         1.450           1.450
         #2:                  0.000           0.000
         #3:                  0.000           0.000
         #4:                  0.000           0.000


================================================================================================
==== Hydrology Simulations ====================================================================
================================================================================================

         Name: 100YR-1HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 1.00
          Rainfall File: Fdot-1
    Rainfall Amount(in): 5.00

Time(hrs)       Print Inc(min)
--------------- ---------------
1.000           1.00
1.330           1.00

------------------------------------------------------------------------------------------------
         Name: 100YR-24HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Fdot-24
    Rainfall Amount(in): 13.44

Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.00
16.000          1.00
24.000          5.00
24.330          5.00

------------------------------------------------------------------------------------------------
```

```
         Name: 100YR-8HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 8.00
          Rainfall File: Fdot-8
    Rainfall Amount(in): 9.60

Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           5.00
6.000           1.00
8.000           5.00
8.330           5.00

------------------------------------------------------------------------------------------------
         Name: 10YR-1HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 1.00
          Rainfall File: Fdot-1
    Rainfall Amount(in): 3.50

Time(hrs)       Print Inc(min)
--------------- ---------------
1.000           1.00
1.330           1.00

------------------------------------------------------------------------------------------------
         Name: 10YR-24HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Fdot-24
    Rainfall Amount(in): 8.88

Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.00
16.000          1.00
24.000          5.00
24.330          5.00

------------------------------------------------------------------------------------------------
         Name: 10YR-8HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 8.00
          Rainfall File: Fdot-8
    Rainfall Amount(in): 6.40

Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           5.00
6.000           1.00
8.000           5.00
8.330           5.00

------------------------------------------------------------------------------------------------
         Name: 25YR-72HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 72.00
          Rainfall File: Sfwmd72
    Rainfall Amount(in): 14.00

Time(hrs)       Print Inc(min)
--------------- ---------------
48.000          15.00
56.000          5.00
64.000          1.00
```

72.000 5.00
72.330 5.00

==========
==== Routing Simulations ==========
==========

Name: 100YR-1HR Hydrology Sim: 100YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 25.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
1.000	1.000
25.000	15.000

Group	Run
Basin 16	Yes

Name: 100YR-24HR Hydrology Sim: 100YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 48.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 24HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
48.000	15.000

Group	Run
Basin 16	Yes

Name: 100YR-8HR Hydrology Sim: 100YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 36.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 8HR Boundary Flows:

Time(hrs)	Print Inc(min)

2.000	5.000
6.000	1.000
8.000	5.000
36.000	15.000

Group	Run
Basin 16	Yes

Name: 10YR-1HR Hydrology Sim: 10YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.01000
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 25.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
1.000	1.000
25.000	15.000

Group	Run
Basin 16	Yes

Name: 10YR-24HR Hydrology Sim: 10YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 48.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 24HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
48.000	15.000

Group	Run
Basin 16	Yes

Name: 10YR-8HR Hydrology Sim: 10YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 36.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 8HR Boundary Flows:

Time(hrs)	Print Inc(min)
2.000	5.000
6.000	1.000
8.000	5.000
36.000	15.000

Group	Run
Basin 16	Yes

Name: 25YR-72HR Hydrology Sim: 25YR-72HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 96.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 72HR Boundary Flows:

Time(hrs)	Print Inc(min)
48.000	15.000
56.000	5.000
64.000	1.000
72.000	5.000
96.000	5.000

Group	Run
Basin 16	Yes

==========
==== Boundary Conditions ====
==========

Name: 8HR Node: GWT_16 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.450
1.000	1.470
2.000	1.550
3.000	1.660
4.000	1.980
5.000	2.100
6.000	2.140
7.000	2.180
8.000	2.200
12.000	1.450
36.000	1.450

Name: 24HR Node: GWT_16 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.450
1.000	1.460
2.000	1.470
3.000	1.500
4.000	1.520
5.000	1.540
6.000	1.570
7.000	1.600

8.000	1.630
9.000	1.680
10.000	1.720
11.000	1.780
12.000	1.860
13.000	1.910
14.000	1.950
15.000	2.000
16.000	2.040
17.000	2.070
18.000	2.100
19.000	2.130
20.000	2.150
21.000	2.170
22.000	2.190
23.000	2.190
24.000	2.200
36.000	1.450
48.000	1.450

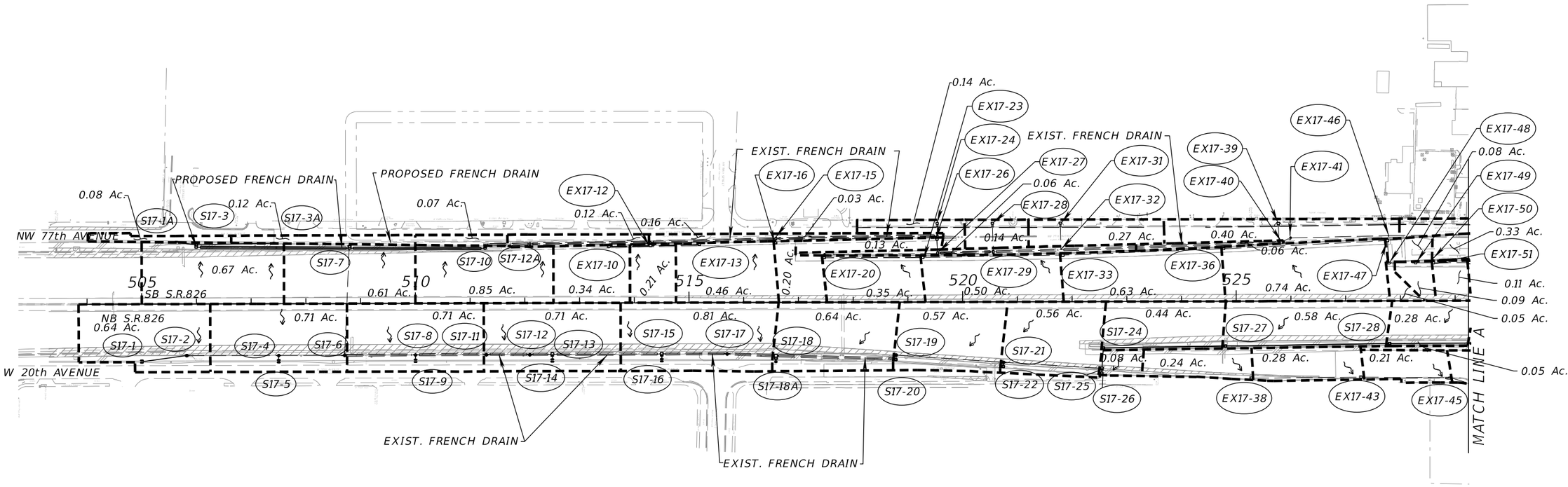
Name: 72HR Node: GWT_16 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.450
24.000	1.530
36.000	1.590
48.000	1.650
49.000	1.650
50.000	1.660
51.000	1.670
52.000	1.670
53.000	1.680
54.000	1.690
55.000	1.710
56.000	1.720
57.000	1.740
57.500	1.750
58.000	1.770
58.500	1.780
59.000	1.800
59.500	1.820
60.000	2.010
60.500	2.050
61.000	2.070
61.500	2.090
62.000	2.100
62.500	2.110
63.000	2.120
64.000	2.130
65.000	2.140
66.000	2.150
68.000	2.170
70.000	2.190
72.000	2.200
96.000	1.450

Basin 17

Drainage Maps

PRE-DEVELOPMENT CONDITIONS



BASIN 17 TOTAL AREA = 28.47 ACRES
SUB-BASIN 17A TOTAL AREA = 14.98 ACRES
SUB-BASIN 17B TOTAL AREA = 0.99 ACRES
SUB-BASIN 17C TOTAL AREA = 1.99 ACRES
SUB-BASIN 17D TOTAL AREA = 4.32 ACRES
SUB-BASIN 17E TOTAL AREA = 4.30 ACRES
SUB-BASIN 17F TOTAL AREA = 1.89 ACRES

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

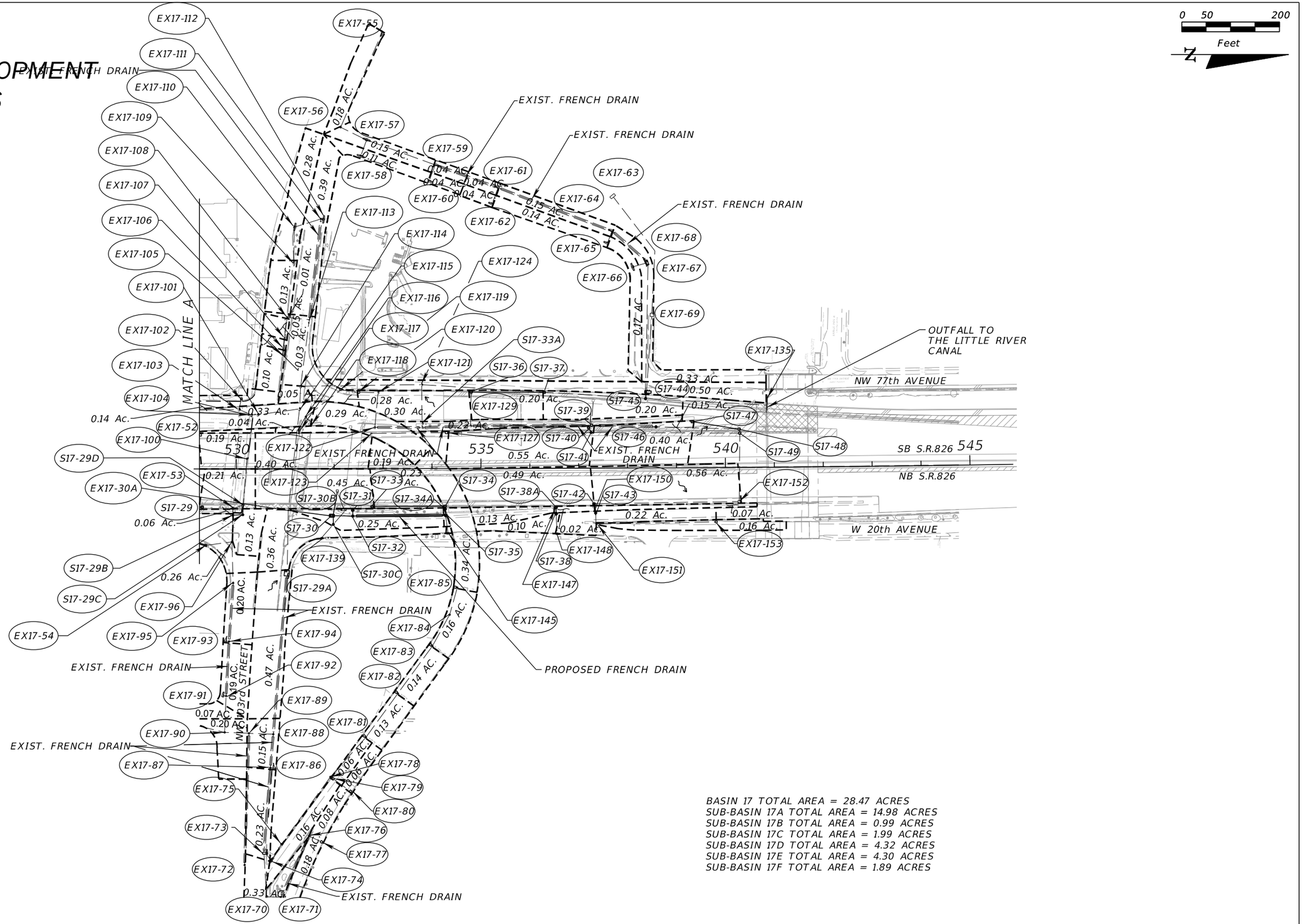
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
826	MIAMI-DADE	432687-1-52-01

DRAINAGE MAP (BASIN 17)

SHEET NO. J-1159

PRE-DEVELOPMENT CONDITIONS



BASIN 17 TOTAL AREA = 28.47 ACRES
SUB-BASIN 17A TOTAL AREA = 14.98 ACRES
SUB-BASIN 17B TOTAL AREA = 0.99 ACRES
SUB-BASIN 17C TOTAL AREA = 1.99 ACRES
SUB-BASIN 17D TOTAL AREA = 4.32 ACRES
SUB-BASIN 17E TOTAL AREA = 4.30 ACRES
SUB-BASIN 17F TOTAL AREA = 1.89 ACRES

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
826	MIAMI-DADE	432687-1-52-01

DRAINAGE MAP (BASIN 17)

SHEET NO. J-1160

Curve Number Calculations

PRE-DEVELOPMENT CONDITIONS
AREA BREAKDOWN (BASIN B-17)

SUB-BASIN	TOTAL DRAINAGE AREA (ACRES)	PERVIOUS DRAINAGE AREA (ACRES)	PERVIOUS AREA CURVE NUMBER	IMPERVIOUS DRAINAGE AREA (ACRES)	IMPERVIOUS AREA CURVE NUMBER	COMPOSITE CURVE NUMBER
B17-1	0.64	0.02	61	0.62	96	95
B17-1A	0.08	0.00	61	0.08	96	96
B17-3	0.67	0.00	61	0.67	96	96
B17-3A	0.12	0.00	61	0.12	96	96
B17-5	0.71	0.03	61	0.68	96	95
B17-7	0.61	0.00	61	0.61	96	96
B17-9	0.71	0.04	61	0.67	96	94
B17-10	0.67	0.04	61	0.63	96	94
B17-14	0.71	0.04	61	0.67	96	94
B17-16	0.81	0.05	61	0.76	96	94
B17-18	0.64	0.03	61	0.61	96	94
B17-20	0.57	0.05	61	0.52	96	93
B17-22	0.56	0.00	61	0.56	96	96
B17-24	0.44	0.00	61	0.44	96	96
B17-26	0.08	0.00	61	0.08	96	96
B17-27	0.58	0.00	61	0.58	96	96
B17-28	0.28	0.00	61	0.28	96	96
B17-29	0.21	0.00	61	0.21	96	96
B17-12A	0.12	0.05	61	0.07	96	81
BX17-10	0.34	0.00	61	0.34	96	96
BX17-12	0.21	0.00	61	0.21	96	96
BX17-13	0.46	0.00	61	0.46	96	96
BX17-15	0.16	0.10	61	0.06	96	74
BX17-16	0.20	0.00	61	0.20	96	96
BX17-20	0.35	0.00	61	0.35	96	96
BX17-23	0.50	0.00	61	0.50	96	96
BX17-24	0.14	0.00	61	0.14	96	96
BX17-26	0.13	0.00	61	0.13	96	96
BX17-27	0.06	0.06	61	0.00	96	61
BX17-28	0.14	0.00	61	0.14	96	96
BX17-31	0.27	0.03	61	0.24	96	92
BX17-33	0.63	0.00	61	0.63	96	96
BX17-36	0.74	0.00	61	0.74	96	96
BX17-39	0.40	0.04	61	0.36	96	93
BX17-47	0.08	0.00	61	0.08	96	96
BX17-48	0.05	0.00	61	0.05	96	96
BX17-49	0.09	0.00	61	0.09	96	96
BX17-50	0.33	0.00	61	0.33	96	96
BX17-51	0.11	0.00	61	0.11	96	96
BX17-52	0.19	0.00	61	0.19	96	96
BX17-102	0.19	0.04	61	0.15	96	89
Total Sub-Basin B-17A	**14.98**	**0.62**	**61**	**14.36**	**96**	**95**

PRE-DEVELOPMENT CONDITIONS
AREA BREAKDOWN (BASIN B-17)

SUB-BASIN	TOTAL DRAINAGE AREA (ACRES)	PERVIOUS DRAINAGE AREA (ACRES)	PERVIOUS AREA CURVE NUMBER	IMPERVIOUS DRAINAGE AREA (ACRES)	IMPERVIOUS AREA CURVE NUMBER	COMPOSITE CURVE NUMBER
BX17-105	0.10	0.00	61	0.10	96	96
BX17-106	0.03	0.00	61	0.03	96	96
BX17-107	0.05	0.00	61	0.05	96	96
BX17-108	0.01	0.00	61	0.01	96	96
BX17-109	0.13	0.00	61	0.13	96	96
BX17-110	0.28	0.07	61	0.21	96	87
BX17-112	0.39	0.01	61	0.38	96	95
Total Sub-Basin B-17B	**0.99**	**0.08**	**61**	**0.91**	**96**	**93**
B17-31	0.25	0.03	61	0.22	96	92
B17-33	0.45	0.00	61	0.45	96	96
B17-34	0.23	0.00	61	0.23	96	96
B17-34A	0.13	0.04	61	0.09	96	85
BX17-139	0.36	0.00	61	0.36	96	96
BX17-145	0.10	0.00	61	0.10	96	96
B17-38A	0.02	0.02	61	0.00	96	61
BX17-148	0.22	0.00	61	0.22	96	96
BX17-150	0.07	0.07	61	0.00	96	61
BX17-153	0.16	0.00	61	0.16	96	96
Total Sub-Basin B-17C	**1.99**	**0.16**	**61**	**1.83**	**96**	**93**
BX17-38	0.24	0.00	61	0.24	96	96
BX17-43	0.28	0.00	61	0.28	96	96
BX17-45	0.21	0.00	61	0.21	96	96
BX17-54	0.23	0.00	61	0.23	96	96
BX17-70	0.33	0.09	61	0.24	96	86
BX17-71	0.18	0.00	61	0.18	96	96
BX17-73	0.23	0.00	61	0.23	96	96
BX17-74	0.16	0.00	61	0.16	96	96
BX17-77	0.08	0.00	61	0.08	96	96
BX17-79	0.06	0.00	61	0.06	96	96
BX17-80	0.06	0.00	61	0.06	96	96
BX17-81	0.13	0.00	61	0.13	96	96
BX17-82	0.14	0.00	61	0.14	96	96
BX17-83	0.16	0.00	61	0.16	96	96
BX17-85	0.34	0.00	61	0.34	96	96
BX17-86	0.15	0.00	61	0.15	96	96
BX17-90	0.20	0.00	61	0.20	96	96
BX17-91	0.07	0.01	61	0.06	96	91
BX17-92	0.19	0.00	61	0.19	96	96
BX17-93	0.20	0.00	61	0.20	96	96
B17-29A	0.47	0.00	61	0.47	96	96
B17-29D	0.16	0.00	61	0.16	96	96
BX17-99	0.05	0.04	61	0.01	96	68
Total Sub-Basin B-17D	**4.32**	**0.14**	**61**	**4.18**	**96**	**95**
B17-33A	0.22	0.05	61	0.17	96	88
B17-36	0.20	0.00	61	0.20	96	96
B17-37	0.33	0.00	61	0.33	96	96
B17-40	0.55	0.00	61	0.55	96	96
B17-42	0.49	0.00	61	0.49	96	96

PRE-DEVELOPMENT CONDITIONS
AREA BREAKDOWN (BASIN B-17)

SUB-BASIN	TOTAL DRAINAGE AREA (ACRES)	PERVIOUS DRAINAGE AREA (ACRES)	PERVIOUS AREA CURVE NUMBER	IMPERVIOUS DRAINAGE AREA (ACRES)	IMPERVIOUS AREA CURVE NUMBER	COMPOSITE CURVE NUMBER
B17-47	0.40	0.00	61	0.40	96	96
BX17-117	0.04	0.00	61	0.04	96	96
BX17-118	0.29	0.00	61	0.29	96	96
BX17-119	0.28	0.00	61	0.28	96	96
BX17-120	0.30	0.00	61	0.30	96	96
BX17-123	0.40	0.00	61	0.40	96	96
BX17-127	0.24	0.00	61	0.24	96	96
BX17-152	0.56	0.00	61	0.56	96	96
Total Sub-Basin B-17E	**4.30**	**0.05**	**61**	**4.25**	**96**	**96**
B17-44	0.50	0.10	61	0.40	96	89
BX17-55	0.18	0.00	61	0.18	96	96
BX17-57	0.15	0.00	61	0.15	96	96
BX17-58	0.11	0.01	61	0.10	96	93
BX17-59	0.04	0.00	61	0.04	96	96
BX17-60	0.04	0.01	61	0.03	96	87
BX17-61	0.04	0.00	61	0.04	96	96
BX17-62	0.04	0.01	61	0.03	96	87
BX17-64	0.15	0.00	61	0.15	96	96
BX17-65	0.14	0.05	61	0.09	96	84
BX17-66	0.17	0.06	61	0.11	96	84
BX17-67	0.33	0.03	61	0.30	96	93
Total Sub-Basin B-17F	**1.89**	**0.27**	**61**	**1.62**	**96**	**91**
Total Basin B-17	**28.47**	**1.32**	**61**	**27.15**	**96**	**94**

Average Hydraulic Conductivity

Average Hydraulic Conductivity

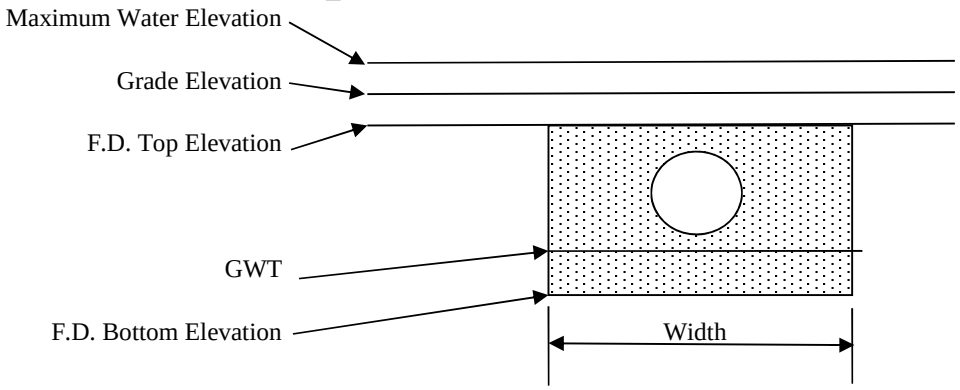
Basin B-17		
Percolation Test	P-29	P-30
Average Flow to 10 ft. depth (gpm)	0.20	14.27
Depth to Water Table (ft)	2.90	2.40
Head Maintained (ft)	1.90	1.40
Borehole Diameter (ft)	0.604	0.604
Borehole Depth (ft)	10.00	10.00
Du (ft)	1.90	1.40
Average Flow (cfs)	0.0004	0.0318
Ds (ft)	7.10	7.60
Hydraulic Conductivity K (cfs/ft2-ft head)	1.50E-05	1.42E-03
Average Hydraulic Conductivity K	**7.16E-04**	

Rating Curve Calculations

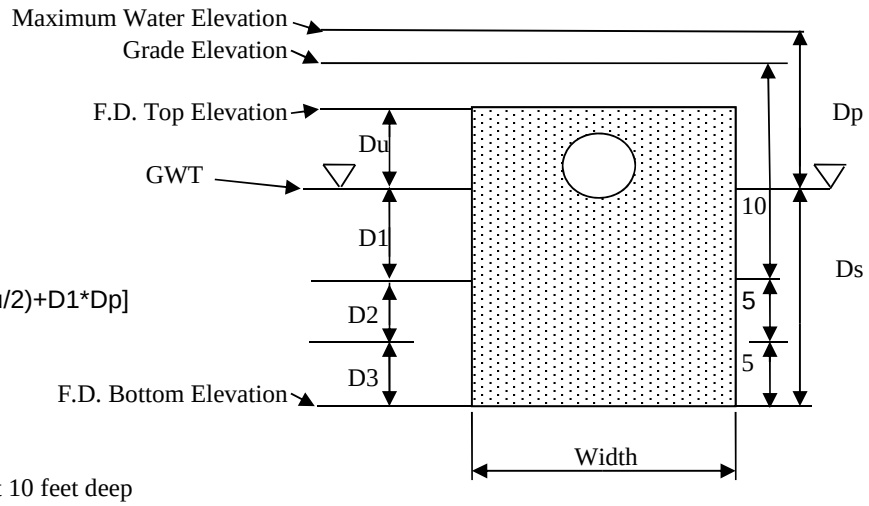
Made by: _____ _____
Checked by: _____ _____

Determination of Rating Curve

Proposed Exfiltration Trench: E_OPT-17A



Maximum Water Elevation =	**5.45**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**4.45**	ft.NAVD	
F.D.Top Elevation =	**3.45**	ft.NAVD	
Ground Water Table =	**1.45**	ft.NAVD	
F.D. Bottom Elevation =	**-10.06**	ft.NAVD	
Width =	**5.00**	feet.	
Pipe Diameter =	**24**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**7.16E-04**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K15 =	**7.16E-04**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____
Checked by: _____ _____

Determination of Rating Curve

Proposed Exfiltration Trench: E_OPT-17A

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs/ft)	(cfs/ft)
1.45	0.000	0.000
2.20	0.012	0.000
3.45	0.036	0.023
5.45	0.075	0.062

Rating Curve (Q)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs)	(cfs)
1.45	0.00	0.00
2.20	0.01	0.00
3.45	0.04	0.02
5.45	0.07	0.06

Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

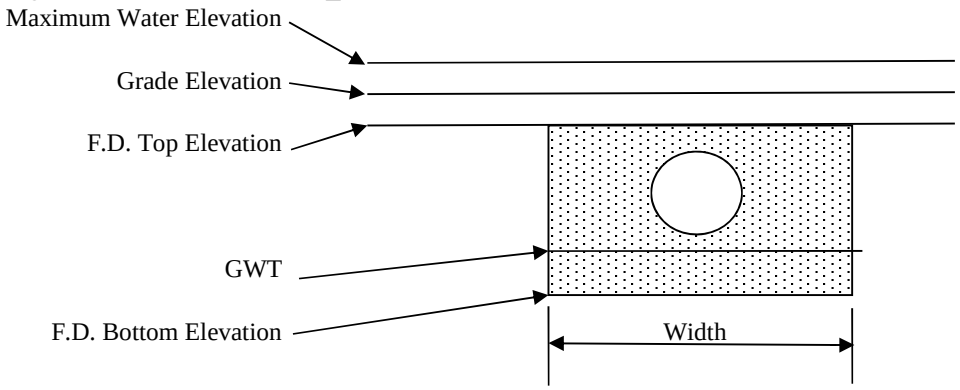
Rating Curve Adjusted (Q)

Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.45	1.45	0.00
1.45	2.20	0.01
1.45	3.45	0.04
1.45	5.45	0.07
2.20	2.20	0.00
2.20	3.45	0.02
2.20	5.45	0.06

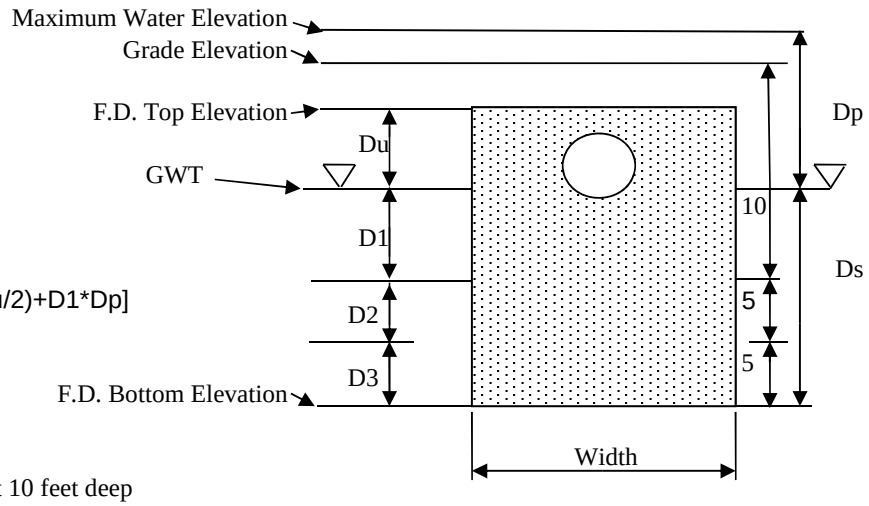
Made by: _____ _____
Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-17B



Maximum Water Elevation =	**5.45**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**4.45**	ft.NAVD	
F.D.Top Elevation =	**2.95**	ft.NAVD	
Ground Water Table =	**1.45**	ft.NAVD	
F.D. Bottom Elevation =	**-9.56**	ft.NAVD	
Width =	**5.00**	feet.	
Pipe Diameter =	**18**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**7.16E-04**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K15 =	**7.16E-04**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____

Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-17B

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs/ft)	(cfs/ft)
1.45	0.000	0.000
2.20	0.012	0.000
3.45	0.034	0.022
5.45	0.070	0.058

Rating Curve (Q)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs)	(cfs)
1.45	0.00	0.00
2.20	0.01	0.00
3.45	0.03	0.02
5.45	0.07	0.06

Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

Rating Curve Adjusted (Q)

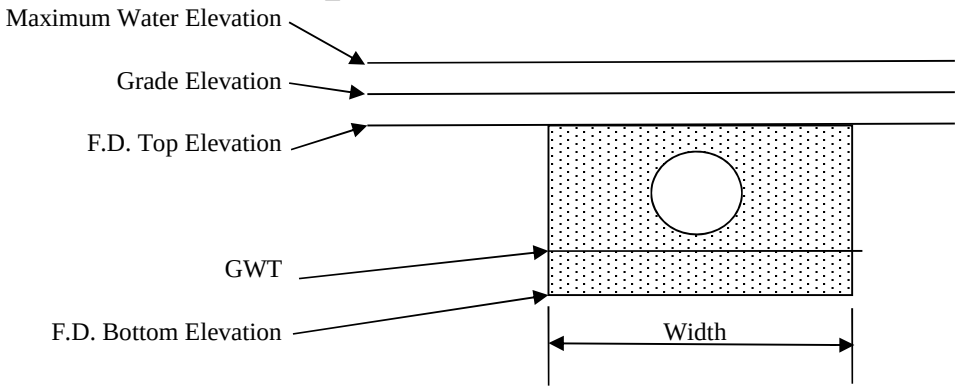
Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.45	1.45	0.00
1.45	2.20	0.01
1.45	3.45	0.03
1.45	5.45	0.07
2.20	2.20	0.00
2.20	3.45	0.02
2.20	5.45	0.06

Made by: _____

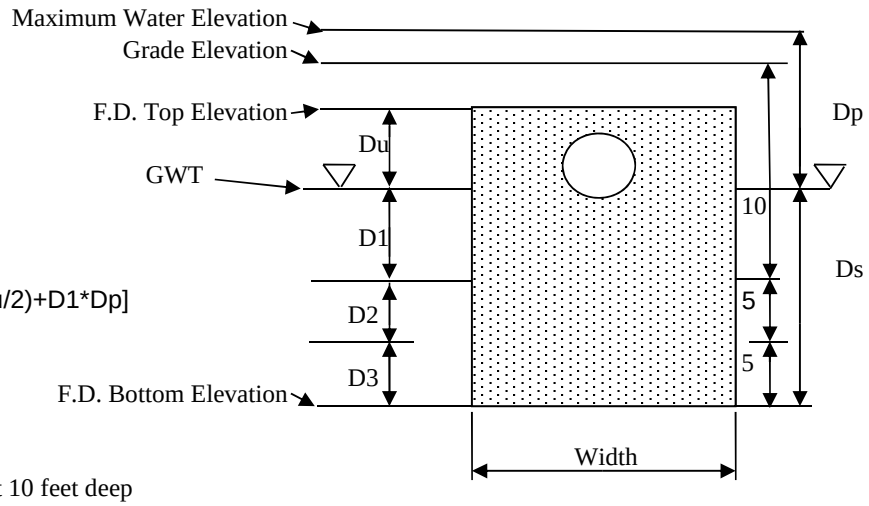
Checked by: _____

Determination of Rating Curve

Proposed Exfiltration Trench: E_OPT-17C



Maximum Water Elevation =	**5.45**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**4.45**	ft.NAVD	
F.D.Top Elevation =	**3.45**	ft.NAVD	
Ground Water Table =	**1.45**	ft.NAVD	
F.D. Bottom Elevation =	**-11.56**	ft.NAVD	
Width =	**4.00**	feet.	
Pipe Diameter =	**24**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**7.16E-04**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K15 =	**0.00E+00**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____

Checked by: _____ _____

Determination of Rating Curve

Proposed Exfiltration Trench: E_OPT-17C

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs/ft)	(cfs/ft)
1.45	0.000	0.000
2.20	0.013	0.000
3.45	0.040	0.026
5.45	0.083	0.069

Rating Curve (Q)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs)	(cfs)
1.45	0.00	0.00
2.20	0.01	0.00
3.45	0.04	0.03
5.45	0.08	0.07

Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

Rating Curve Adjusted (Q)

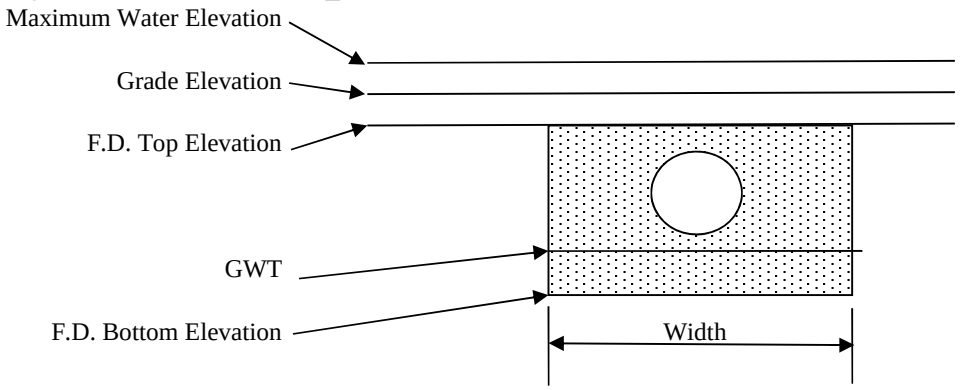
Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.45	1.45	0.00
1.45	2.20	0.01
1.45	3.45	0.04
1.45	5.45	0.08
2.20	2.20	0.00
2.20	3.45	0.03
2.20	5.45	0.07

Made by: _____ _____

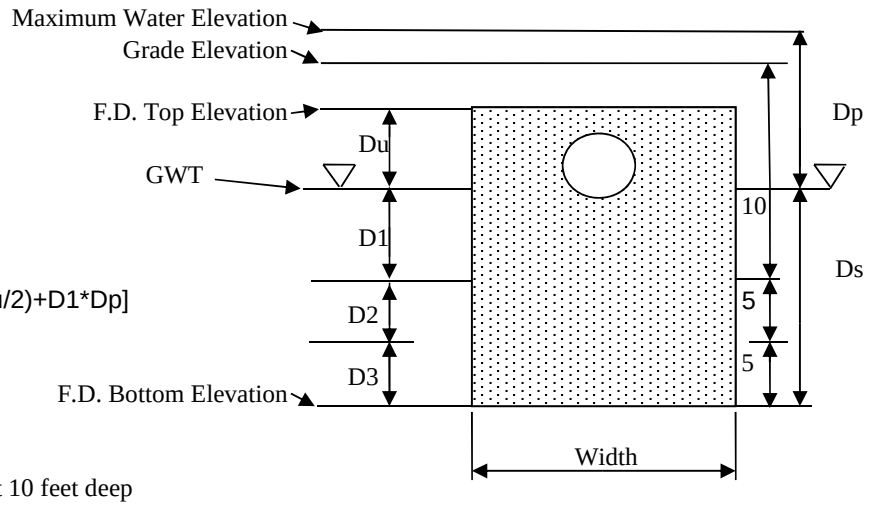
Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-17D



Maximum Water Elevation =	**5.45**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**4.45**	ft.NAVD	
F.D.Top Elevation =	**3.95**	ft.NAVD	
Ground Water Table =	**1.45**	ft.NAVD	
F.D. Bottom Elevation =	**-8.56**	ft.NAVD	
Width =	**5.00**	feet.	
Pipe Diameter =	**30**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**7.16E-04**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K15 =	**7.16E-04**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____

Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-17D

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs/ft)	(cfs/ft)
1.45	0.000	0.000
2.20	0.009	0.000
3.45	0.031	0.020
5.45	0.067	0.056

Rating Curve (Q)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs)	(cfs)
1.45	0.00	0.00
2.20	0.01	0.00
3.45	0.03	0.02
5.45	0.07	0.06

Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

Rating Curve Adjusted (Q)

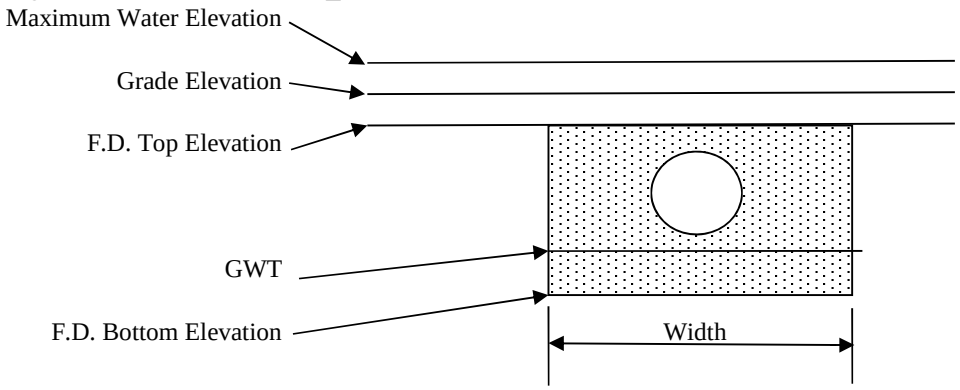
Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.45	1.45	0.00
1.45	2.20	0.01
1.45	3.45	0.03
1.45	5.45	0.07
2.20	2.20	0.00
2.20	3.45	0.02
2.20	5.45	0.06

Made by: _____ _____

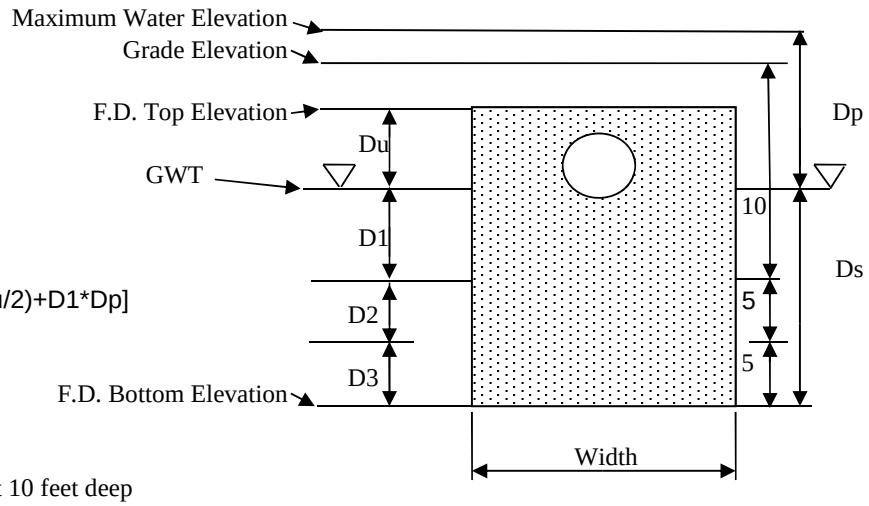
Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-17E



Maximum Water Elevation =	**5.45**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**4.45**	ft.NAVD	
F.D.Top Elevation =	**3.45**	ft.NAVD	
Ground Water Table =	**1.45**	ft.NAVD	
F.D. Bottom Elevation =	**-8.66**	ft.NAVD	
Width =	**5.00**	feet.	
Pipe Diameter =	**30**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**7.16E-04**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K15 =	**7.16E-04**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____

Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-17E

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs/ft)	(cfs/ft)
1.45	0.000	0.000
2.20	0.010	0.000
3.45	0.032	0.021
5.45	0.067	0.055

Rating Curve (Q)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs)	(cfs)
1.45	0.00	0.00
2.20	0.01	0.00
3.45	0.03	0.02
5.45	0.07	0.06

Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

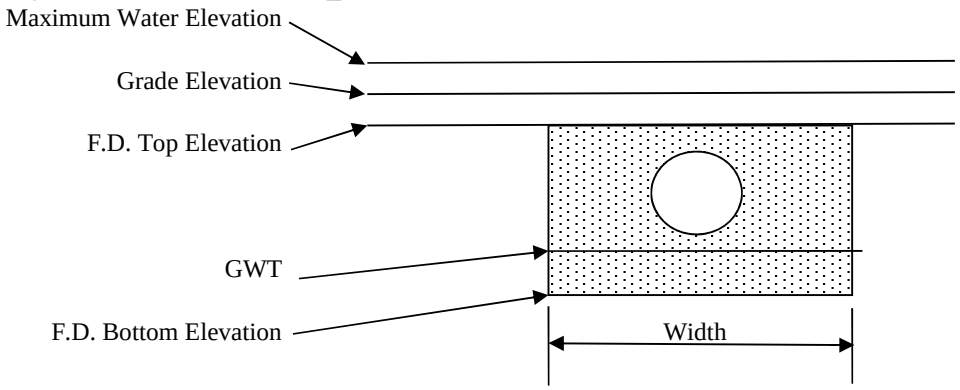
Rating Curve Adjusted (Q)

Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.45	1.45	0.00
1.45	2.20	0.01
1.45	3.45	0.03
1.45	5.45	0.07
2.20	2.20	0.00
2.20	3.45	0.02
2.20	5.45	0.06

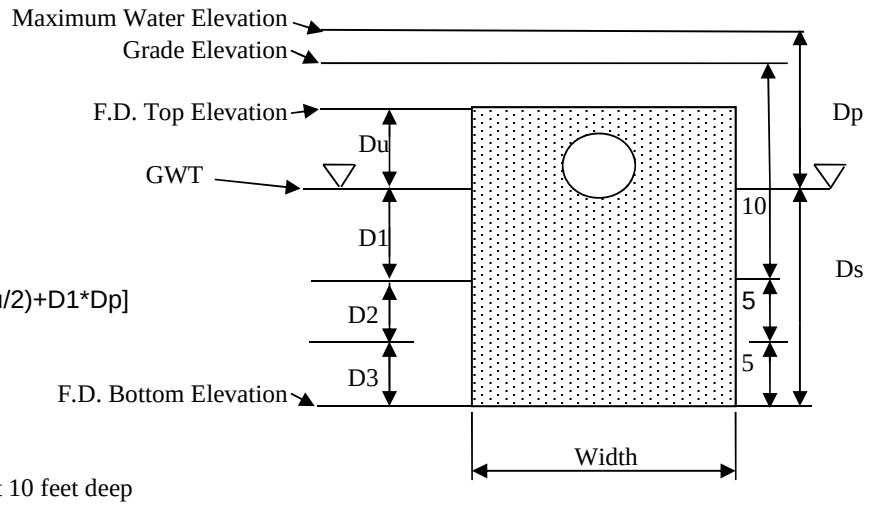
Made by: _____ _____
Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-17F



Maximum Water Elevation =	**5.45**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**4.45**	ft.NAVD	
F.D.Top Elevation =	**2.95**	ft.NAVD	
Ground Water Table =	**1.45**	ft.NAVD	
F.D. Bottom Elevation =	**-9.56**	ft.NAVD	
Width =	**4.00**	feet.	
Pipe Diameter =	**18**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**7.16E-04**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K15 =	**7.16E-04**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____

Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-17F

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs/ft)	(cfs/ft)
1.45	0.000	0.000
2.20	0.012	0.000
3.45	0.034	0.022
5.45	0.070	0.058

Rating Curve (Q)

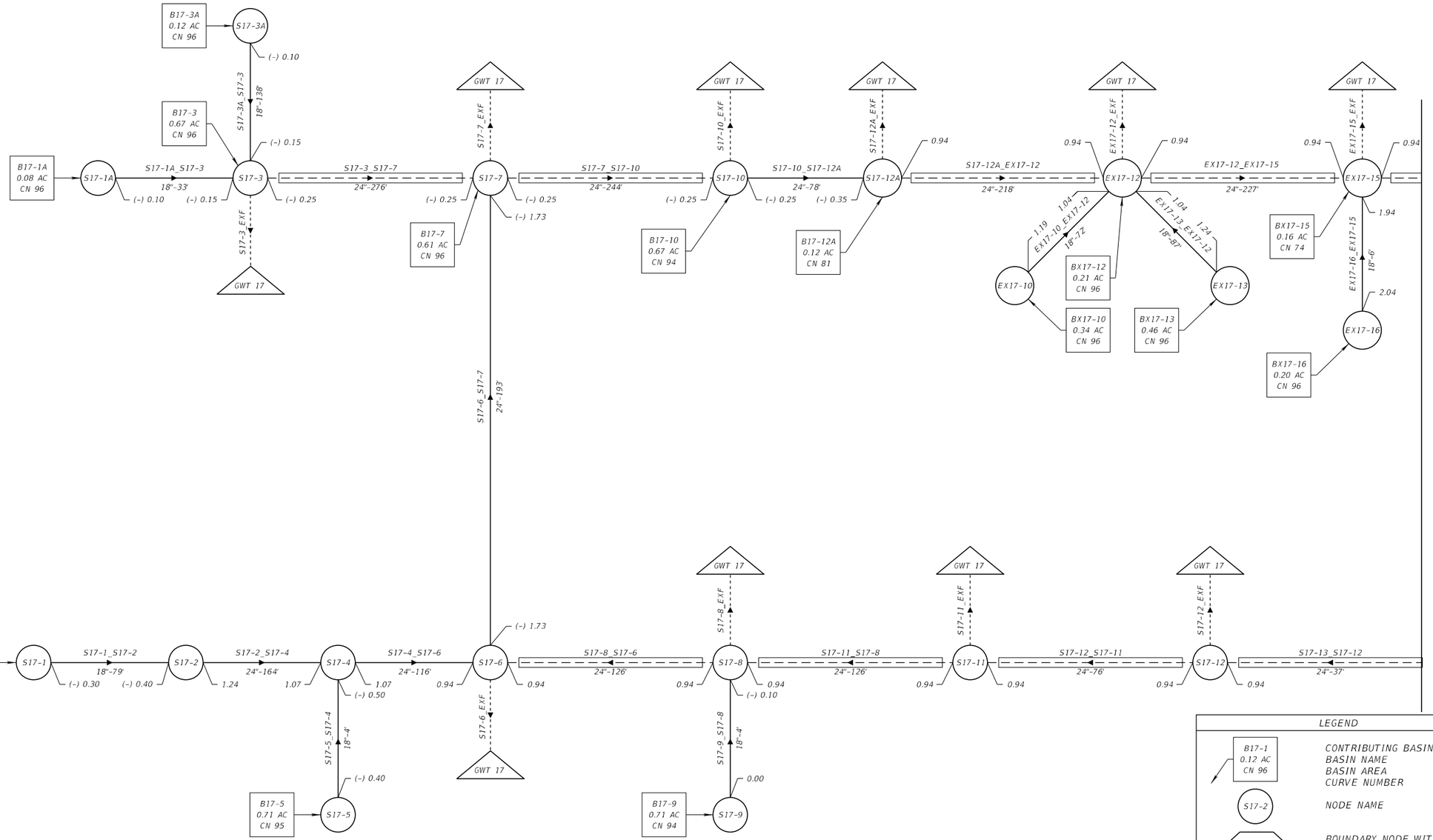
Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs)	(cfs)
1.45	0.00	0.00
2.20	0.01	0.00
3.45	0.03	0.02
5.45	0.07	0.06

Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

Rating Curve Adjusted (Q)

Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.45	1.45	0.00
1.45	2.20	0.01
1.45	3.45	0.03
1.45	5.45	0.07
2.20	2.20	0.00
2.20	3.45	0.02
2.20	5.45	0.06

Nodal Diagram



PRE-DEVELOPMENT CONDITIONS

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

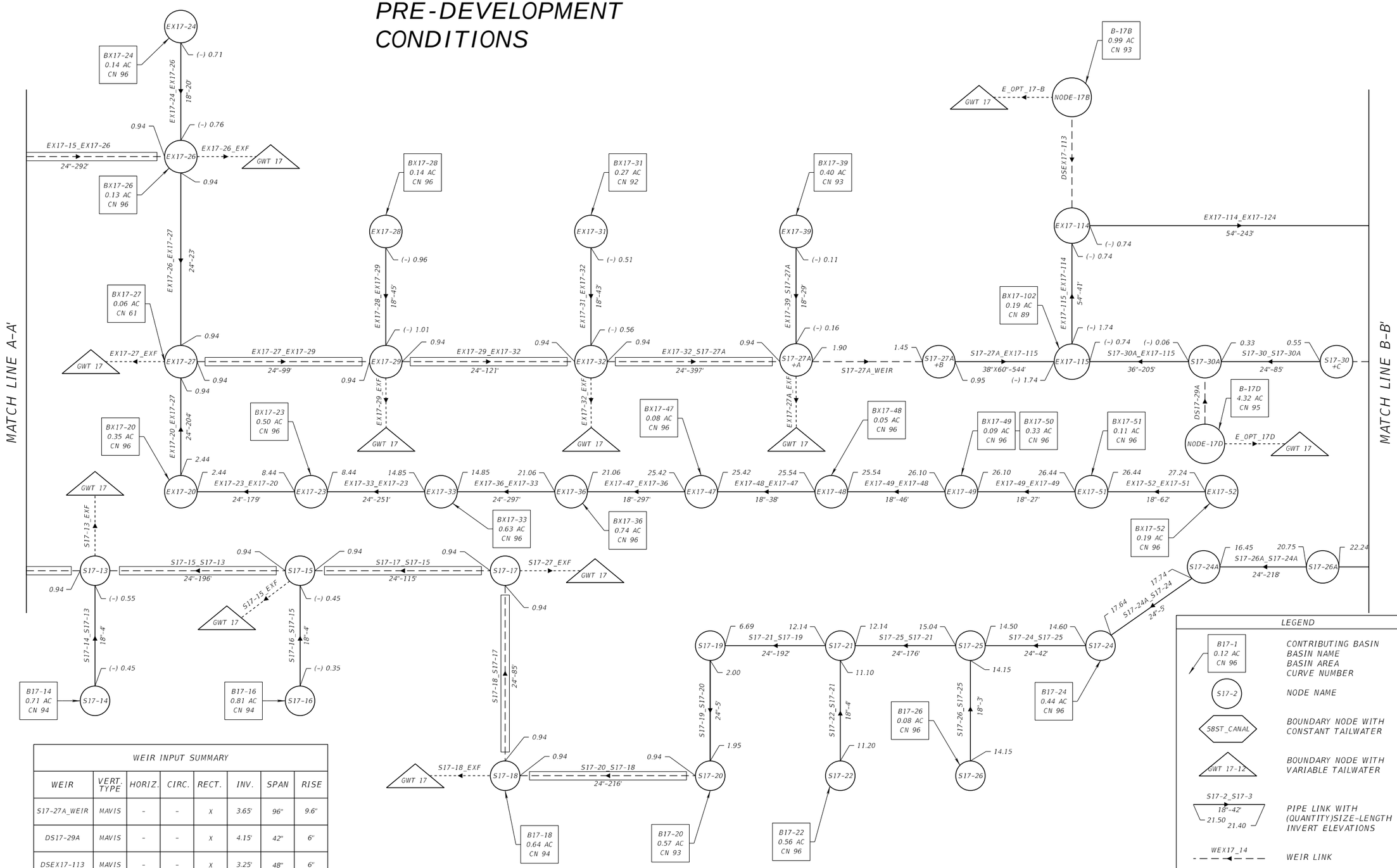
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
826	MIAMI-DADE	447165-1-52-01 441830-1-52-01 441831-1-52-01

NODAL DIAGRAM BASIN 17

SHEET NO.

AMATHURA 11/10/2020 2:19:19 PM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\44716515201\zz_working\AM's Work

PRE-DEVELOPMENT CONDITIONS



WEIR INPUT SUMMARY							
WEIR	VERT. TYPE	HORIZ.	CIRC.	RECT.	INV.	SPAN	RISE
S17-27A_WEIR	MAVIS	-	-	X	3.65'	96"	9.6"
DS17-29A	MAVIS	-	-	X	4.15'	42"	6"
DSEX17-113	MAVIS	-	-	X	3.25'	48"	6"

LEGEND

- B17-1 / 0.12 AC / CN 96 — CONTRIBUTING BASIN, BASIN NAME, BASIN AREA, CURVE NUMBER
- S17-2 — NODE NAME
- 58ST_CANAL — BOUNDARY NODE WITH CONSTANT TAILWATER
- GWT 17-12 — BOUNDARY NODE WITH VARIABLE TAILWATER
- S17-2_S17-3 / 18"-42" / 21.50 / 21.40 — PIPE LINK WITH (QUANTITY)SIZE-LENGTH, INVERT ELEVATIONS
- WEX17_14 — WEIR LINK
- AREA 1_EXF — RATING CURVE LINK

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

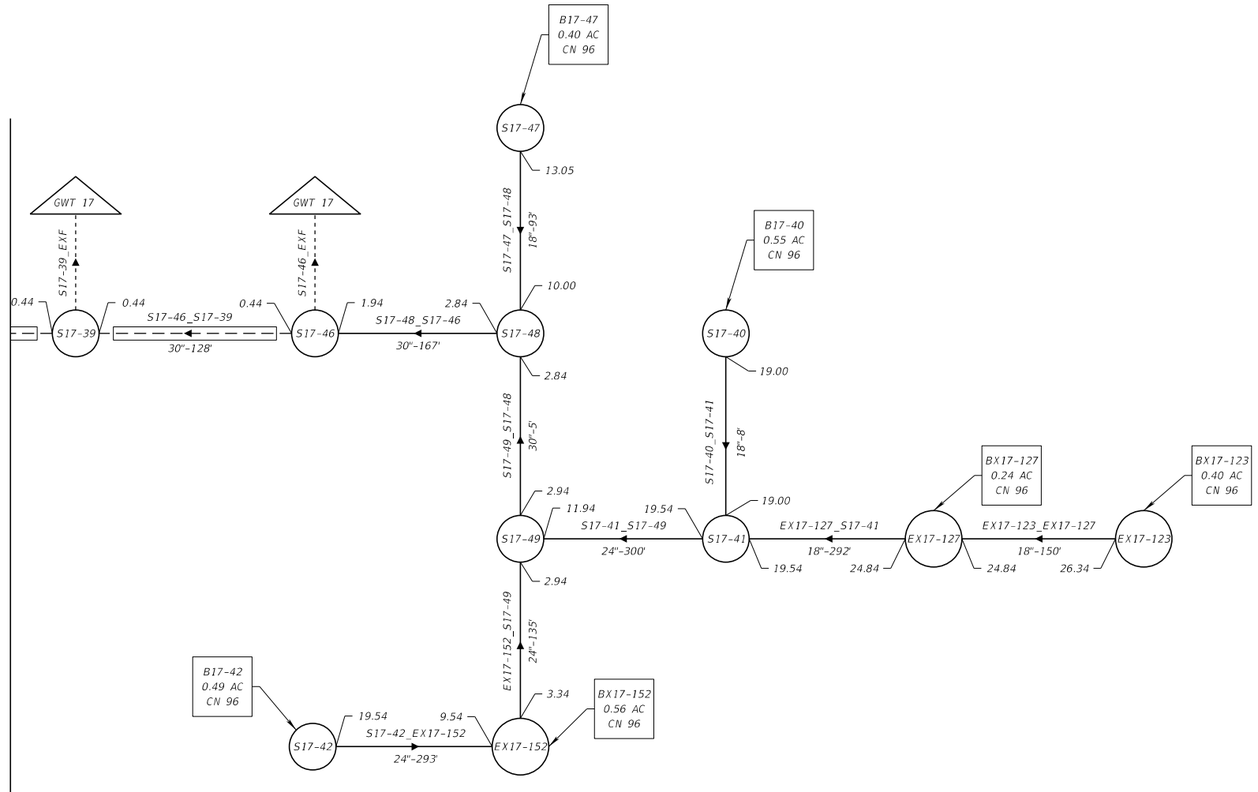
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
826	MIAMI-DADE	447165-1-52-01 441830-1-52-01 441831-1-52-01

NODAL DIAGRAM BASIN 17

SHEET NO.

AMATHURA 11/10/2020 2:19:21 PM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\44716515201\zz_working\AM's Work

MATCH LINE C-C'



LEGEND

B17-1 / 0.12 AC / CN 96	CONTRIBUTING BASIN BASIN NAME BASIN AREA CURVE NUMBER
S17-2	NODE NAME
58ST_CANAL	BOUNDARY NODE WITH CONSTANT TAILWATER
GWT 17-12	BOUNDARY NODE WITH VARIABLE TAILWATER
S17-2_S17-3 / 18"-42' / 21.50 / 21.40	PIPE LINK WITH (QUANTITY)SIZE-LENGTH INVERT ELEVATIONS
WEX17_14	WEIR LINK
AREA 1_EXF	RATING CURVE LINK

PRE-DEVELOPMENT CONDITIONS

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

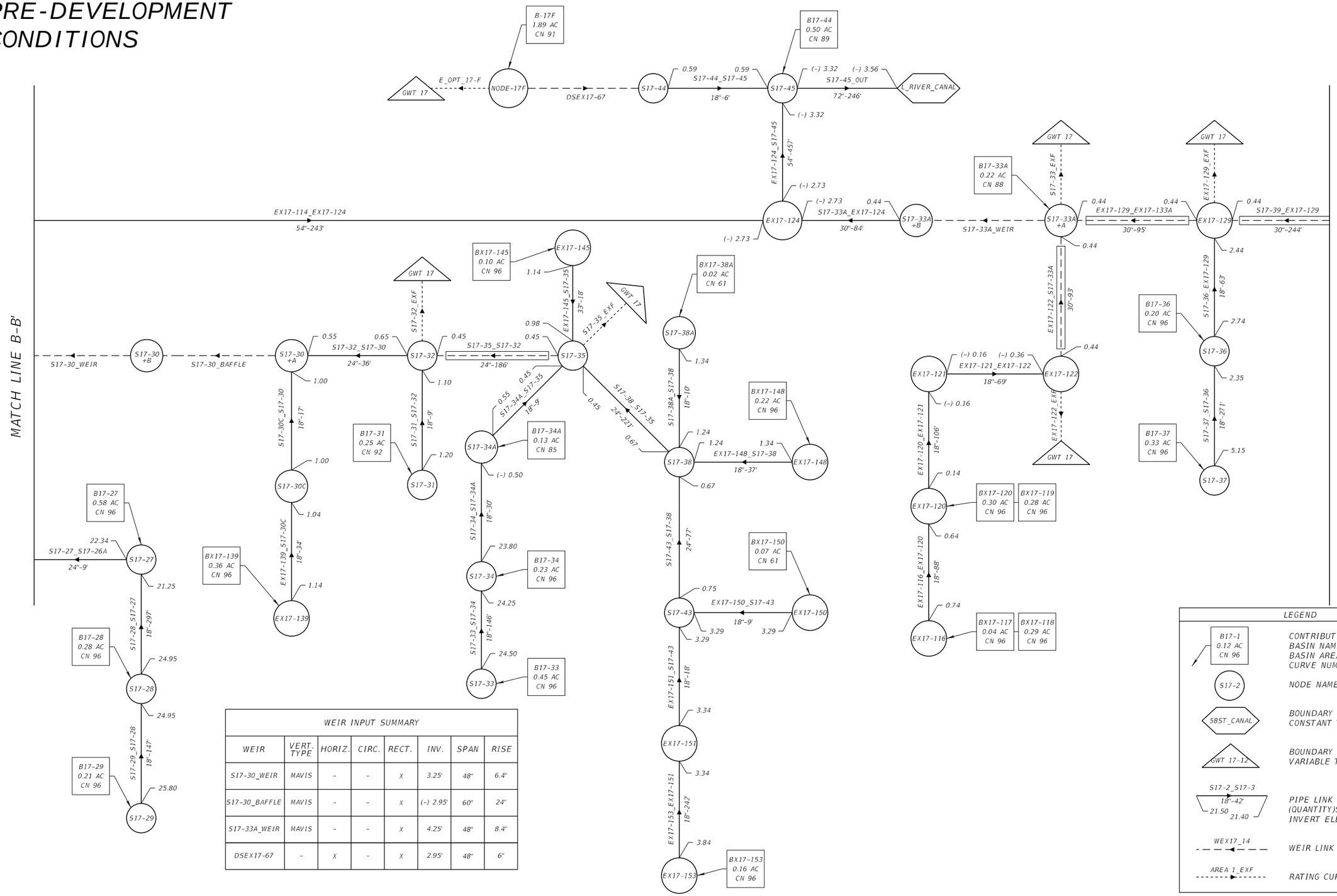
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
826	MIAMI-DADE	447165-1-52-01 441830-1-52-01 441831-1-52-01

NODAL DIAGRAM
BASIN 17

SHEET NO.

PRE-DEVELOPMENT CONDITIONS



WEIR INPUT SUMMARY							
WEIR	VERT. TYPE	HORIZ.	CIRC.	RECT.	INV.	SPAN	RISE
S17-30_WEIR	MAVIS	-	-	X	3.25'	48"	6.4"
S17-30_BAFFLE	MAVIS	-	-	X	(-) 2.95'	60"	24"
S17-33A_WEIR	MAVIS	-	-	X	4.25'	48"	8.4"
DSEX17-67	-	X	-	X	2.95'	48"	6"

LEGEND

B17-1 0.12 AC CN 96	CONTRIBUTING BASIN BASIN NAME BASIN AREA CURVE NUMBER
S17-2	NODE NAME
58ST_CANAL	BOUNDARY NODE WITH CONSTANT TAILWATER
GWT 17-12	BOUNDARY NODE WITH VARIABLE TAILWATER
S17-2_S17-3 18"-42' 21.50 21.40	PIPE LINK WITH (QUANTITY)SIZE-LENGTH INVERT ELEVATIONS
WEX17_14	WEIR LINK
AREA 1_EXF	RATING CURVE LINK

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
826	MIAMI-DADE	447165-1-52-01 441830-1-52-01 441831-1-52-01

NODAL DIAGRAM BASIN 17

SHEET NO.

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
EX17-10	Basin 17	25YR-72HR	60.05	3.84	5.19	0.0010	116	60.02	2.11	60.03	2.08
EX17-114	Basin 17	25YR-72HR	60.05	1.48	6.52	0.0043	681	60.04	7.87	60.05	7.86
EX17-115	Basin 17	25YR-72HR	60.06	1.49	6.32	-0.0031	801	60.06	6.38	60.06	6.37
EX17-116	Basin 17	25YR-72HR	60.05	5.53	6.00	0.0018	116	60.02	2.05	60.05	2.01
EX17-12	Basin 17	25YR-72HR	60.05	3.79	4.92	-0.0025	141	60.02	7.42	60.03	7.38
EX17-120	Basin 17	25YR-72HR	60.05	5.48	4.73	0.0018	120	60.02	5.58	60.04	5.55
EX17-121	Basin 17	25YR-72HR	60.05	5.00	4.97	0.0016	120	60.04	5.55	60.04	5.53
EX17-122	Basin 17	25YR-72HR	60.06	4.61	5.13	0.0020	121	60.04	5.53	60.05	5.52
EX17-123	Basin 17	25YR-72HR	60.02	27.17	30.74	0.0003	223	60.02	2.48	60.02	2.48
EX17-124	Basin 17	25YR-72HR	60.06	1.47	6.49	0.0018	878	60.05	10.27	60.05	10.27
EX17-127	Basin 17	25YR-72HR	60.04	25.93	29.06	0.0004	417	60.02	3.96	60.03	3.95
EX17-129	Basin 17	25YR-72HR	60.06	4.58	8.05	0.0019	137	60.07	7.90	60.07	7.91
EX17-13	Basin 17	25YR-72HR	60.05	3.90	5.36	0.0010	116	60.02	2.85	60.03	2.82
EX17-139	Basin 17	25YR-72HR	60.05	3.91	5.41	0.0010	114	60.02	2.23	60.02	2.22
EX17-145	Basin 17	25YR-72HR	60.06	4.03	5.14	0.0011	114	60.02	0.62	60.99	0.67
EX17-148	Basin 17	25YR-72HR	60.06	4.11	7.46	0.0010	114	60.02	1.36	60.03	1.35
EX17-15	Basin 17	25YR-72HR	60.05	3.78	5.07	-0.0106	139	59.89	8.46	59.73	3.17
EX17-150	Basin 17	25YR-72HR	60.06	4.11	9.39	0.0005	120	60.02	0.35	60.12	0.35
EX17-151	Basin 17	25YR-72HR	60.06	4.18	9.18	0.0003	304	60.00	1.53	60.09	1.50
EX17-152	Basin 17	25YR-72HR	60.06	5.12	16.96	-0.0008	416	60.02	6.50	60.03	6.53
EX17-153	Basin 17	25YR-72HR	60.06	4.35	6.13	0.0002	287	60.02	0.99	60.00	0.97
EX17-16	Basin 17	25YR-72HR	60.05	3.79	6.28	-0.0121	113	60.02	1.24	59.89	6.27
EX17-20	Basin 17	25YR-72HR	60.06	6.15	6.88	-0.0017	258	60.04	18.76	60.06	18.68
EX17-23	Basin 17	25YR-72HR	60.05	10.86	13.26	0.0008	352	60.04	16.66	60.05	16.63
EX17-24	Basin 17	25YR-72HR	60.06	3.98	5.11	0.0011	114	60.02	0.87	60.06	0.84
EX17-26	Basin 17	25YR-72HR	60.06	3.97	5.64	0.0013	130	59.66	0.79	73.34	0.21
EX17-27	Basin 17	25YR-72HR	60.06	4.15	5.86	0.0014	129	60.05	11.01	60.06	11.00
EX17-28	Basin 17	25YR-72HR	60.06	3.80	5.27	0.0011	115	60.02	0.87	60.05	0.84
EX17-29	Basin 17	25YR-72HR	60.06	3.79	5.41	0.0009	126	60.06	10.25	60.07	10.25
EX17-31	Basin 17	25YR-72HR	60.06	3.59	5.69	-0.0048	115	60.02	1.66	60.03	1.64
EX17-32	Basin 17	25YR-72HR	60.06	3.56	6.13	0.0010	141	60.06	8.90	60.06	8.91
EX17-33	Basin 17	25YR-72HR	60.05	16.92	20.25	0.0007	454	60.03	13.63	60.04	13.59
EX17-36	Basin 17	25YR-72HR	60.04	22.70	26.10	0.0006	556	60.03	9.78	60.04	9.75
EX17-39	Basin 17	25YR-72HR	60.05	3.56	6.41	0.0041	114	60.02	2.47	60.02	2.44
EX17-47	Basin 17	25YR-72HR	60.05	26.74	30.65	0.0005	291	60.03	5.24	60.05	5.23
EX17-48	Basin 17	25YR-72HR	60.04	27.06	30.46	0.0006	151	60.03	4.76	60.04	4.75
EX17-49	Basin 17	25YR-72HR	60.03	27.29	30.78	0.0026	161	60.02	5.19	60.03	4.45
EX17-51	Basin 17	25YR-72HR	60.03	27.29	30.94	0.0026	172	60.02	1.86	60.03	2.59
EX17-52	Basin 17	25YR-72HR	60.02	27.78	31.46	0.0002	156	60.02	1.18	60.02	1.18
GWT-17	Basin 17	25YR-72HR	72.00	2.20	99.00	0.0001	0	60.04	157.21	0.00	0.00
L_RIVER_CANAL	Basin 17	25YR-72HR	0.00	1.45	99.00	0.0000	560	60.06	14.12	0.00	0.00
NODE-17B	Basin 17	25YR-72HR	60.02	3.50	6.95	0.0010	113	60.02	6.11	60.02	6.11
NODE-17D	Basin 17	25YR-72HR	60.02	3.44	4.69	0.0008	113	60.02	26.76	60.02	26.76
NODE-17F	Basin 17	25YR-72HR	60.02	3.09	5.96	0.0007	113	60.02	8.55	60.02	8.55
S17-1	Basin 17	25YR-72HR	60.05	4.73	4.74	0.0014	116	60.02	3.96	60.03	3.91
S17-10	Basin 17	25YR-72HR	60.05	3.87	3.91	0.0009	129	60.02	7.05	60.03	7.03
S17-11	Basin 17	25YR-72HR	60.05	4.16	5.24	0.0011	123	60.11	3.70	60.13	3.82
S17-12	Basin 17	25YR-72HR	60.05	4.22	5.41	0.0011	119	60.05	5.26	60.08	5.28
S17-12A	Basin 17	25YR-72HR	60.05	3.80	4.49	0.0009	128	60.02	4.42	60.03	4.39
S17-13	Basin 17	25YR-72HR	60.05	4.34	5.57	0.0011	125	60.04	9.57	60.05	9.56
S17-14	Basin 17	25YR-72HR	60.05	4.49	4.74	0.0012	113	60.02	4.39	60.02	4.34

Qpre = 14.12 cfs

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S17-15	Basin 17	25YR-72HR	60.06	4.54	5.44	0.0012	129	60.05	11.75	60.06	11.75
S17-16	Basin 17	25YR-72HR	60.05	4.72	4.80	0.0012	113	60.02	5.01	60.02	4.95
S17-17	Basin 17	25YR-72HR	60.06	4.80	6.11	0.0013	123	60.07	11.20	60.08	11.24
S17-18	Basin 17	25YR-72HR	60.07	5.44	6.40	0.0018	128	60.06	20.13	60.07	20.13
S17-19	Basin 17	25YR-72HR	60.07	7.45	11.63	-0.0120	256	60.05	13.13	60.43	13.51
S17-1A	Basin 17	25YR-72HR	60.05	3.94	5.40	0.0040	114	60.02	0.50	0.03	0.78
S17-2	Basin 17	25YR-72HR	60.05	4.52	5.35	0.0018	124	60.03	3.91	60.05	3.89
S17-20	Basin 17	25YR-72HR	60.07	7.04	10.87	0.0242	124	60.07	16.37	60.08	16.38
S17-21	Basin 17	25YR-72HR	60.05	14.16	17.13	0.0050	329	60.04	13.14	60.05	13.13
S17-22	Basin 17	25YR-72HR	60.05	14.25	16.60	-0.0131	113	60.02	3.47	59.19	6.31
S17-24	Basin 17	25YR-72HR	60.05	16.95	22.00	0.0007	120	60.04	9.26	60.04	9.25
S17-24A	Basin 17	25YR-72HR	60.05	19.02	20.95	0.0005	319	60.04	6.58	60.05	6.57
S17-25	Basin 17	25YR-72HR	60.05	16.69	19.85	0.0006	259	60.04	9.73	60.05	9.73
S17-26	Basin 17	25YR-72HR	60.05	16.69	19.40	0.0006	113	60.02	0.50	60.07	0.49
S17-26A	Basin 17	25YR-72HR	60.04	22.03	25.38	0.0005	328	60.03	6.59	60.04	6.58
S17-27	Basin 17	25YR-72HR	60.03	23.97	26.25	0.0007	332	60.02	6.60	60.03	6.59
S17-27A+A	Basin 17	25YR-72HR	60.06	3.50	6.58	-0.0010	134	60.05	4.86	60.05	4.85
S17-27A+B	Basin 17	25YR-72HR	60.05	1.49	6.58	0.0002	948	0.00	0.00	72.34	0.19
S17-28	Basin 17	25YR-72HR	60.04	25.88	29.97	0.0004	427	60.02	3.03	60.04	3.02
S17-29	Basin 17	25YR-72HR	60.03	26.38	30.83	0.0002	218	60.02	1.30	60.02	1.30
S17-3	Basin 17	25YR-72HR	60.05	3.94	4.78	-0.0026	133	60.03	5.33	60.04	5.31
S17-30+A	Basin 17	25YR-72HR	60.05	3.82	5.31	-0.0033	115	60.05	5.24	59.77	7.10
S17-30+B	Basin 17	25YR-72HR	60.05	3.80	5.31	-0.0041	113	59.77	7.10	60.05	5.24
S17-30+C	Basin 17	25YR-72HR	60.06	1.83	5.31	0.0004	195	60.05	5.24	60.06	5.24
S17-30A	Basin 17	25YR-72HR	60.06	1.51	6.60	0.0008	494	60.06	5.24	60.06	5.24
S17-30C	Basin 17	25YR-72HR	60.05	3.86	5.38	0.0011	115	60.02	2.22	60.03	2.20
S17-31	Basin 17	25YR-72HR	60.05	3.88	4.75	0.0010	113	60.02	1.54	60.02	1.52
S17-32	Basin 17	25YR-72HR	60.05	3.86	5.06	0.0026	124	60.05	6.51	60.06	6.51
S17-33	Basin 17	25YR-72HR	60.03	25.62	30.26	0.0005	211	60.02	2.79	60.03	2.78
S17-33A+A	Basin 17	25YR-72HR	60.06	4.58	6.86	0.0021	125	60.06	5.96	60.06	5.95
S17-33A+B	Basin 17	25YR-72HR	60.06	1.48	6.86	-0.0009	192	60.06	2.43	60.06	2.44
S17-34	Basin 17	25YR-72HR	60.03	24.35	28.80	-0.0030	238	60.02	4.21	60.03	4.20
S17-34A	Basin 17	25YR-72HR	60.05	4.23	4.80	-0.0032	130	60.03	4.98	60.04	4.96
S17-35	Basin 17	25YR-72HR	60.06	4.03	5.75	-0.0012	135	60.06	8.75	60.06	8.76
S17-36	Basin 17	25YR-72HR	60.06	4.71	7.50	0.0010	303	60.02	3.28	60.04	3.22
S17-37	Basin 17	25YR-72HR	60.03	5.89	10.95	0.0003	311	60.02	2.05	60.03	2.04
S17-38	Basin 17	25YR-72HR	60.06	4.09	8.03	0.0017	130	60.07	3.50	60.11	3.32
S17-38A	Basin 17	25YR-72HR	60.06	4.09	4.80	0.0013	113	60.02	0.10	59.95	0.39
S17-39	Basin 17	25YR-72HR	60.07	4.64	9.50	0.0020	136	60.07	12.74	60.08	12.59
S17-3A	Basin 17	25YR-72HR	60.05	3.95	5.32	0.0030	118	60.02	0.74	60.08	0.74
S17-4	Basin 17	25YR-72HR	60.05	4.45	5.42	0.0013	127	60.04	8.21	60.05	8.20
S17-40	Basin 17	25YR-72HR	60.04	20.99	23.62	0.0005	113	60.02	3.41	60.02	3.40
S17-41	Basin 17	25YR-72HR	60.04	20.90	24.18	0.0005	596	60.03	7.33	60.04	7.31
S17-42	Basin 17	25YR-72HR	60.03	20.34	26.04	0.0003	384	60.02	3.04	60.02	3.03
S17-43	Basin 17	25YR-72HR	60.06	4.10	9.50	0.0017	137	60.10	1.84	60.11	1.92
S17-44	Basin 17	25YR-72HR	60.09	1.49	5.96	0.0001	14524	60.02	1.50	60.10	0.96
S17-45	Basin 17	25YR-72HR	60.06	1.46	16.05	0.0014	29793	60.05	14.16	60.06	14.12
S17-46	Basin 17	25YR-72HR	60.07	4.99	20.65	-0.0161	165	60.07	18.07	60.07	15.72
S17-47	Basin 17	25YR-72HR	60.02	13.86	18.06	0.0003	180	60.02	2.48	60.02	2.48
S17-48	Basin 17	25YR-72HR	60.07	5.00	15.63	0.0174	340	60.06	19.66	60.07	18.07
S17-49	Basin 17	25YR-72HR	60.06	5.01	15.63	0.0075	419	60.03	13.81	60.07	17.24

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S17-5	Basin 17	25YR-72HR	60.05	4.59	4.74	0.0013	113	60.02	4.40	60.02	4.34
S17-6	Basin 17	25YR-72HR	60.05	4.16	5.28	0.0014	135	60.02	8.80	60.07	8.54
S17-7	Basin 17	25YR-72HR	60.05	3.93	4.94	-0.0011	149	60.04	10.89	60.05	10.88
S17-8	Basin 17	25YR-72HR	60.05	4.16	5.35	0.0016	126	60.05	4.61	60.02	4.91
S17-9	Basin 17	25YR-72HR	60.05	4.30	4.74	0.0012	113	60.02	4.39	60.02	4.35

```
================================================================================
==== Basins ====================================================================
================================================================================

         Name: B-17B                   Node: NODE-17B              Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.990                 Time Shift(hrs): 0.00
         Curve Number: 93.00             Max Allowable Q(cfs): 999999.000
              DCIA(%): 0.00


--------------------------------------------------------------------------------
         Name: B-17D                   Node: NODE-17D              Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 4.320                 Time Shift(hrs): 0.00
         Curve Number: 95.00             Max Allowable Q(cfs): 999999.000
              DCIA(%): 0.00


--------------------------------------------------------------------------------
         Name: B-17F                   Node: NODE-17F              Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 1.390                 Time Shift(hrs): 0.00
         Curve Number: 91.00             Max Allowable Q(cfs): 999999.000
              DCIA(%): 0.00


--------------------------------------------------------------------------------
         Name: B17-1                   Node: S17-1                 Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.640                 Time Shift(hrs): 0.00
         Curve Number: 95.00             Max Allowable Q(cfs): 999999.000
              DCIA(%): 0.00


--------------------------------------------------------------------------------
         Name: B17-10                  Node: S17-10                Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.670                 Time Shift(hrs): 0.00
         Curve Number: 94.00             Max Allowable Q(cfs): 999999.000
              DCIA(%): 0.00


--------------------------------------------------------------------------------
         Name: B17-12A                 Node: S17-12A               Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
```

Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.120 Time Shift(hrs): 0.00
Curve Number: 81.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-14 Node: S17-14 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.710 Time Shift(hrs): 0.00
Curve Number: 94.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-16 Node: S17-16 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.810 Time Shift(hrs): 0.00
Curve Number: 94.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-18 Node: S17-18 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.640 Time Shift(hrs): 0.00
Curve Number: 94.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-1A Node: S17-1A Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.080 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-20 Node: S17-20 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.570 Time Shift(hrs): 0.00
Curve Number: 93.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-22 Node: S17-22 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

```
        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.560                  Time Shift(hrs): 0.00
            Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: B17-24                   Node: S17-24                Status: Onsite
        Group: Basin 17                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.440                  Time Shift(hrs): 0.00
            Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: B17-26                   Node: S17-26                Status: Onsite
        Group: Basin 17                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.080                  Time Shift(hrs): 0.00
            Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: B17-27                   Node: S17-27                Status: Onsite
        Group: Basin 17                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.580                  Time Shift(hrs): 0.00
            Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: B17-28                   Node: S17-28                Status: Onsite
        Group: Basin 17                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.280                  Time Shift(hrs): 0.00
            Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: B17-29                   Node: S17-29                Status: Onsite
        Group: Basin 17                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.210                  Time Shift(hrs): 0.00
            Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

Name: B17-3	Node: S17-3	Status: Onsite
Group: Basin 17	Type: SCS Unit Hydrograph CN	
Unit Hydrograph: Uh256	Peaking Factor: 256.0	
Rainfall File:	Storm Duration(hrs): 0.00	
Rainfall Amount(in): 0.000	Time of Conc(min): 10.00	
Area(ac): 0.670	Time Shift(hrs): 0.00	
Curve Number: 96.00	Max Allowable Q(cfs): 999999.000	
DCIA(%): 0.00		

Name: B17-31	Node: S17-31	Status: Onsite
Group: Basin 17	Type: SCS Unit Hydrograph CN	
Unit Hydrograph: Uh256	Peaking Factor: 256.0	
Rainfall File:	Storm Duration(hrs): 0.00	
Rainfall Amount(in): 0.000	Time of Conc(min): 10.00	
Area(ac): 0.250	Time Shift(hrs): 0.00	
Curve Number: 92.00	Max Allowable Q(cfs): 999999.000	
DCIA(%): 0.00		

Name: B17-33	Node: S17-33	Status: Onsite
Group: Basin 17	Type: SCS Unit Hydrograph CN	
Unit Hydrograph: Uh256	Peaking Factor: 256.0	
Rainfall File:	Storm Duration(hrs): 0.00	
Rainfall Amount(in): 0.000	Time of Conc(min): 10.00	
Area(ac): 0.450	Time Shift(hrs): 0.00	
Curve Number: 96.00	Max Allowable Q(cfs): 999999.000	
DCIA(%): 0.00		

Name: B17-33A	Node: S17-33A+A	Status: Onsite
Group: Basin 17	Type: SCS Unit Hydrograph CN	
Unit Hydrograph: Uh256	Peaking Factor: 256.0	
Rainfall File:	Storm Duration(hrs): 0.00	
Rainfall Amount(in): 0.000	Time of Conc(min): 10.00	
Area(ac): 0.220	Time Shift(hrs): 0.00	
Curve Number: 88.00	Max Allowable Q(cfs): 999999.000	
DCIA(%): 0.00		

Name: B17-34	Node: S17-34	Status: Onsite
Group: Basin 17	Type: SCS Unit Hydrograph CN	
Unit Hydrograph: Uh256	Peaking Factor: 256.0	
Rainfall File:	Storm Duration(hrs): 0.00	
Rainfall Amount(in): 0.000	Time of Conc(min): 10.00	
Area(ac): 0.230	Time Shift(hrs): 0.00	
Curve Number: 96.00	Max Allowable Q(cfs): 999999.000	
DCIA(%): 0.00		

Name: B17-34A	Node: S17-34A	Status: Onsite
Group: Basin 17	Type: SCS Unit Hydrograph CN	
Unit Hydrograph: Uh256	Peaking Factor: 256.0	
Rainfall File:	Storm Duration(hrs): 0.00	
Rainfall Amount(in): 0.000	Time of Conc(min): 10.00	
Area(ac): 0.130	Time Shift(hrs): 0.00	
Curve Number: 85.00	Max Allowable Q(cfs): 999999.000	
DCIA(%): 0.00		

Name: B17-36 Node: S17-36 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.200 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-37 Node: S17-37 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.330 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-38A Node: S17-38A Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.020 Time Shift(hrs): 0.00
Curve Number: 61.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-3A Node: S17-3A Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.120 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-40 Node: S17-40 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.550 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-42 Node: S17-42 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00

Area(ac): 0.490 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-44 Node: S17-45 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.500 Time Shift(hrs): 0.00
Curve Number: 89.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-47 Node: S17-47 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.400 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-5 Node: S17-5 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.710 Time Shift(hrs): 0.00
Curve Number: 95.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-7 Node: S17-7 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.610 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-9 Node: S17-9 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.710 Time Shift(hrs): 0.00
Curve Number: 94.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-10 Node: EX17-10 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.340 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-102 Node: EX17-115 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.190 Time Shift(hrs): 0.00
Curve Number: 89.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-117 Node: EX17-116 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.040 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-118 Node: EX17-116 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.290 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-119 Node: EX17-120 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.280 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-12 Node: EX17-12 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.210 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-120 Node: EX17-120 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.300 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-123 Node: EX17-123 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.400 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-127 Node: EX17-127 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.240 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-13 Node: EX17-13 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.460 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-139 Node: EX17-139 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.360 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-145 Node: EX17-145 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.100 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

```
-------------------------------------------------------------------------------------------------
         Name: BX17-147                Node: EX17-151               Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
              Area(ac): 0.090                  Time Shift(hrs): 0.00
          Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: BX17-148                Node: EX17-148               Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
              Area(ac): 0.220                  Time Shift(hrs): 0.00
          Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: BX17-15                 Node: EX17-15                Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
              Area(ac): 0.160                  Time Shift(hrs): 0.00
          Curve Number: 74.00              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: BX17-150                Node: EX17-150               Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
              Area(ac): 0.070                  Time Shift(hrs): 0.00
          Curve Number: 61.00              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: BX17-152                Node: EX17-152               Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
              Area(ac): 0.560                  Time Shift(hrs): 0.00
          Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: BX17-153                Node: EX17-153               Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
              Area(ac): 0.160                  Time Shift(hrs): 0.00
```

Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-16 Node: EX17-16 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.200 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-20 Node: EX17-20 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.350 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-23 Node: EX17-23 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.500 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-24 Node: EX17-24 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.140 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-26 Node: EX17-26 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.130 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-27 Node: EX17-27 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0

```
         Rainfall File:                    Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
              Area(ac): 0.060                  Time Shift(hrs): 0.00
          Curve Number: 61.00              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
          Name: BX17-28                Node: EX17-28               Status: Onsite
         Group: Basin 17               Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                 Peaking Factor: 256.0
          Rainfall File:                   Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
              Area(ac): 0.140                  Time Shift(hrs): 0.00
          Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
          Name: BX17-31                Node: EX17-31               Status: Onsite
         Group: Basin 17               Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                 Peaking Factor: 256.0
          Rainfall File:                   Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
              Area(ac): 0.270                  Time Shift(hrs): 0.00
          Curve Number: 92.00              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
          Name: BX17-33                Node: EX17-33               Status: Onsite
         Group: Basin 17               Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                 Peaking Factor: 256.0
          Rainfall File:                   Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
              Area(ac): 0.630                  Time Shift(hrs): 0.00
          Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
          Name: BX17-36                Node: EX17-36               Status: Onsite
         Group: Basin 17               Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                 Peaking Factor: 256.0
          Rainfall File:                   Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
              Area(ac): 0.740                  Time Shift(hrs): 0.00
          Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
          Name: BX17-39                Node: EX17-39               Status: Onsite
         Group: Basin 17               Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                 Peaking Factor: 256.0
          Rainfall File:                   Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
              Area(ac): 0.400                  Time Shift(hrs): 0.00
          Curve Number: 93.00              Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
          Name: BX17-47                Node: EX17-47               Status: Onsite
```

Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.080 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-48 Node: EX17-48 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.050 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-49 Node: EX17-49 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.090 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-50 Node: EX17-49 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.330 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-51 Node: EX17-51 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.110 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-52 Node: EX17-52 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.190 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

==========
==== Nodes ==========
==========

Name: EX17-10 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.190
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.190	0.0004

Name: EX17-114 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.520
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.450	0.0004

Name: EX17-115 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.320
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.450	0.0004

Name: EX17-116 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.000
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.000	0.0004

Name: EX17-12 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.920
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.920	0.0004

Name: EX17-120 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.730
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.730	0.0004

Name: EX17-121 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.970
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.970	0.0004

Name: EX17-122 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.130
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.130	0.0004

Name: EX17-123 Base Flow(cfs): 0.000 Init Stage(ft): 26.340
Group: Basin 17 Warn Stage(ft): 30.740
Type: Stage/Area

Stage(ft)	Area(ac)
24.340	0.0004
30.740	0.0004

Name: EX17-124 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.490
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.450	0.0004

Name: EX17-127 Base Flow(cfs): 0.000 Init Stage(ft): 24.840
Group: Basin 17 Warn Stage(ft): 29.060
Type: Stage/Area

Stage(ft)	Area(ac)
22.840	0.0004
29.060	0.0004

Name: EX17-129 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 8.050
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
8.050	0.0004

Name: EX17-13 Base Flow(cfs): 0.000 Init Stage(ft): 1.450

Group: Basin 17 Warn Stage(ft): 5.360
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.360	0.0004

Name: EX17-139 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.410
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.410	0.0004

Name: EX17-145 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.140
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.140	0.0004

Name: EX17-148 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 7.460
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
7.460	0.0004

Name: EX17-15 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.070
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.070	0.0004

Name: EX17-150 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 9.390
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
9.390	0.0004

Name: EX17-151 Base Flow(cfs): 0.000 Init Stage(ft): 3.340
Group: Basin 17 Warn Stage(ft): 9.180
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
9.180	0.0004

Name: EX17-152 Base Flow(cfs): 0.000 Init Stage(ft): 3.340
Group: Basin 17 Warn Stage(ft): 16.960
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
16.960	0.0004

Name: EX17-153 Base Flow(cfs): 0.000 Init Stage(ft): 3.840
Group: Basin 17 Warn Stage(ft): 6.130
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.130	0.0004

Name: EX17-16 Base Flow(cfs): 0.000 Init Stage(ft): 2.040
Group: Basin 17 Warn Stage(ft): 6.280
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.280	0.0004

Name: EX17-20 Base Flow(cfs): 0.000 Init Stage(ft): 2.440
Group: Basin 17 Warn Stage(ft): 6.880
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.880	0.0004

Name: EX17-23 Base Flow(cfs): 0.000 Init Stage(ft): 8.440
Group: Basin 17 Warn Stage(ft): 13.260
Type: Stage/Area

Stage(ft)	Area(ac)
6.440	0.0004
13.260	0.0004

Name: EX17-24 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.110
Type: Stage/Area

Stage(ft)	Area(ac)

1.450	0.0004
5.110	0.0004

Name: EX17-26 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.640
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.640	0.0004

Name: EX17-27 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.860
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.860	0.0004

Name: EX17-28 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.270
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.270	0.0004

Name: EX17-29 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.410
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.410	0.0004

Name: EX17-31 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.690
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.690	0.0004

Name: EX17-32 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.130
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.130	0.0004

Name: EX17-33 Base Flow(cfs): 0.000 Init Stage(ft): 14.850
Group: Basin 17 Warn Stage(ft): 20.250
Type: Stage/Area

Stage(ft)	Area(ac)
12.850	0.0004
20.250	0.0004

Name: EX17-36 Base Flow(cfs): 0.000 Init Stage(ft): 21.060
Group: Basin 17 Warn Stage(ft): 26.100
Type: Stage/Area

Stage(ft)	Area(ac)
19.060	0.0004
26.100	0.0004

Name: EX17-39 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.410
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.410	0.0004

Name: EX17-47 Base Flow(cfs): 0.000 Init Stage(ft): 25.420
Group: Basin 17 Warn Stage(ft): 30.650
Type: Stage/Area

Stage(ft)	Area(ac)
23.420	0.0004
30.650	0.0004

Name: EX17-48 Base Flow(cfs): 0.000 Init Stage(ft): 25.540
Group: Basin 17 Warn Stage(ft): 30.460
Type: Stage/Area

Stage(ft)	Area(ac)
23.540	0.0004
30.460	0.0004

Name: EX17-49 Base Flow(cfs): 0.000 Init Stage(ft): 26.100
Group: Basin 17 Warn Stage(ft): 30.780
Type: Stage/Area

Stage(ft)	Area(ac)
24.100	0.0004
30.780	0.0004

Name: EX17-51 Base Flow(cfs): 0.000 Init Stage(ft): 26.440

Group: Basin 17 Warn Stage(ft): 30.940
Type: Stage/Area

Stage(ft)	Area(ac)
24.440	0.0004
30.940	0.0004

Name: EX17-52 Base Flow(cfs): 0.000 Init Stage(ft): 27.240
Group: Basin 17 Warn Stage(ft): 31.460
Type: Stage/Area

Stage(ft)	Area(ac)
25.240	0.0004
31.460	0.0004

Name: GWT-17 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	1.450
108.00	1.450

Name: L_RIVER_CANAL Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	1.450
108.00	1.450

Name: NODE-17B Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.950
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.450	0.0004
4.950	0.0040

Name: NODE-17D Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.690
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.450	0.0004
4.950	0.0040

Name: NODE-17F Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.960

Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.450	0.0004
4.950	0.0040

Name: S17-1 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.740
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.740	0.0004

Name: S17-10 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 3.910
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
3.910	0.0004

Name: S17-11 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.240
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.240	0.0004

Name: S17-12 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.410
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.410	0.0004

Name: S17-12A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.490
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.490	0.0004

Name: S17-13 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.570
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.570	0.0004

Name: S17-14 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.740
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.740	0.0004

Name: S17-15 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.440
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.440	0.0004

Name: S17-16 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.800
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.800	0.0004

Name: S17-17 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.110
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.110	0.0004

Name: S17-18 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.400
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.400	0.0004

Name: S17-19 Base Flow(cfs): 0.000 Init Stage(ft): 2.000
Group: Basin 17 Warn Stage(ft): 11.630
Type: Stage/Area

Stage(ft)	Area(ac)

1.450	0.0004
11.630	0.0004

Name: S17-1A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.400
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.400	0.0004

Name: S17-2 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.350
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.350	0.0004

Name: S17-20 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 10.870
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
10.870	0.0004

Name: S17-21 Base Flow(cfs): 0.000 Init Stage(ft): 11.100
Group: Basin 17 Warn Stage(ft): 17.130
Type: Stage/Area

Stage(ft)	Area(ac)
9.100	0.0004
17.130	0.0004

Name: S17-22 Base Flow(cfs): 0.000 Init Stage(ft): 11.200
Group: Basin 17 Warn Stage(ft): 16.600
Type: Stage/Area

Stage(ft)	Area(ac)
7.200	0.0004
16.600	0.0004

Name: S17-24 Base Flow(cfs): 0.000 Init Stage(ft): 14.600
Group: Basin 17 Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)
12.600	0.0004
22.000	0.0004

Name: S17-24A Base Flow(cfs): 0.000 Init Stage(ft): 16.450
Group: Basin 17 Warn Stage(ft): 20.950
Type: Stage/Area

Stage(ft)	Area(ac)
15.740	0.0004
20.950	0.0004

Name: S17-25 Base Flow(cfs): 0.000 Init Stage(ft): 14.150
Group: Basin 17 Warn Stage(ft): 19.850
Type: Stage/Area

Stage(ft)	Area(ac)
12.150	0.0004
19.850	0.0004

Name: S17-26 Base Flow(cfs): 0.000 Init Stage(ft): 14.150
Group: Basin 17 Warn Stage(ft): 19.400
Type: Stage/Area

Stage(ft)	Area(ac)
10.150	0.0004
19.400	0.0004

Name: S17-26A Base Flow(cfs): 0.000 Init Stage(ft): 20.750
Group: Basin 17 Warn Stage(ft): 25.380
Type: Stage/Area

Stage(ft)	Area(ac)
20.240	0.0004
25.380	0.0004

Name: S17-27 Base Flow(cfs): 0.000 Init Stage(ft): 21.250
Group: Basin 17 Warn Stage(ft): 26.250
Type: Stage/Area

Stage(ft)	Area(ac)
18.750	0.0004
26.250	0.0004

Name: S17-27A+A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.580
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.580	0.0004

Name: S17-27A+B Base Flow(cfs): 0.000 Init Stage(ft): 1.450

Group: Basin 17 Warn Stage(ft): 6.580
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.580	0.0004

Name: S17-28 Base Flow(cfs): 0.000 Init Stage(ft): 24.950
Group: Basin 17 Warn Stage(ft): 29.970
Type: Stage/Area

Stage(ft)	Area(ac)
22.950	0.0004
29.970	0.0004

Name: S17-29 Base Flow(cfs): 0.000 Init Stage(ft): 25.800
Group: Basin 17 Warn Stage(ft): 30.830
Type: Stage/Area

Stage(ft)	Area(ac)
23.800	0.0004
30.830	0.0004

Name: S17-3 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.780
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.780	0.0004

Name: S17-30+A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.310
Type: Stage/Area

Stage(ft)	Area(ac)
-2.950	0.0004
1.450	0.0004
5.310	0.0004

Name: S17-30+B Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.310
Type: Stage/Area

Stage(ft)	Area(ac)
-2.950	0.0004
1.450	0.0004
5.310	0.0004

Name: S17-30+C Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.310

Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.310	0.0004

Name: S17-30A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.600
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.600	0.0004

Name: S17-30C Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.380
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.380	0.0004

Name: S17-31 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.750
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.750	0.0004

Name: S17-32 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.060
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.060	0.0004

Name: S17-33 Base Flow(cfs): 0.000 Init Stage(ft): 24.500
Group: Basin 17 Warn Stage(ft): 30.260
Type: Stage/Area

Stage(ft)	Area(ac)
22.500	0.0004
30.260	0.0004

Name: S17-33A+A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.860
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.860	0.0004

Name: S17-33A+B Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.860
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.860	0.0004

Name: S17-34 Base Flow(cfs): 0.000 Init Stage(ft): 23.800
Group: Basin 17 Warn Stage(ft): 28.800
Type: Stage/Area

Stage(ft)	Area(ac)
22.800	0.0004
28.800	0.0004

Name: S17-34A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.800
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.800	0.0004

Name: S17-35 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.750
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.750	0.0004

Name: S17-36 Base Flow(cfs): 0.000 Init Stage(ft): 2.350
Group: Basin 17 Warn Stage(ft): 7.500
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
7.500	0.0004

Name: S17-37 Base Flow(cfs): 0.000 Init Stage(ft): 5.150
Group: Basin 17 Warn Stage(ft): 10.950
Type: Stage/Area

Stage(ft)	Area(ac)

3.150	0.0004
10.950	0.0004

Name: S17-38 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 8.030
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
8.030	0.0004

Name: S17-38A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.800
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.800	0.0004

Name: S17-39 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 9.500
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
9.500	0.0004

Name: S17-3A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.320
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.320	0.0004

Name: S17-4 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.420
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.420	0.0004

Name: S17-40 Base Flow(cfs): 0.000 Init Stage(ft): 19.000
Group: Basin 17 Warn Stage(ft): 23.620
Type: Stage/Area

Stage(ft)	Area(ac)
17.000	0.0004
23.620	0.0004

Name: S17-41 Base Flow(cfs): 0.000 Init Stage(ft): 19.000
Group: Basin 17 Warn Stage(ft): 24.180
Type: Stage/Area

Stage(ft)	Area(ac)
17.540	0.0004
24.180	0.0004

Name: S17-42 Base Flow(cfs): 0.000 Init Stage(ft): 19.540
Group: Basin 17 Warn Stage(ft): 26.040
Type: Stage/Area

Stage(ft)	Area(ac)
17.540	0.0004
26.040	0.0004

Name: S17-43 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 9.500
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
9.500	0.0004

Name: S17-44 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.960
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.3333
5.960	0.3333

Name: S17-45 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 16.050
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.6667
16.050	0.6667

Name: S17-46 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 20.650
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
20.650	0.0004

Name: S17-47 Base Flow(cfs): 0.000 Init Stage(ft): 13.050
Group: Basin 17 Warn Stage(ft): 18.060

Type: Stage/Area

Stage(ft)	Area(ac)
11.050	0.0004
18.060	0.0004

Name: S17-48 Base Flow(cfs): 0.000 Init Stage(ft): 2.840
Group: Basin 17 Warn Stage(ft): 15.630
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
15.630	0.0004

Name: S17-49 Base Flow(cfs): 0.000 Init Stage(ft): 2.940
Group: Basin 17 Warn Stage(ft): 15.630
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
15.630	0.0004

Name: S17-5 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.740
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.740	0.0004

Name: S17-6 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.280
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.280	0.0004

Name: S17-7 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.940
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.940	0.0004

Name: S17-8 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.350
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.350	0.0004

Name: S17-9 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.740
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.740	0.0004

==========

==== Operating Tables ==========

==========

Name: E_OPT-17A Group: Basin 17
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.450	1.45	0.00
1.450	2.20	0.01
1.450	3.45	0.04
1.450	5.45	0.07
2.200	2.20	0.00
2.200	3.45	0.02
2.200	5.45	0.06

Name: E_OPT-17B Group: Basin 17
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.450	1.45	0.00
1.450	2.20	0.01
1.450	3.45	0.03
1.450	5.45	0.07
2.200	2.20	0.00
2.200	3.45	0.02
2.200	5.45	0.06

Name: E_OPT-17C Group: Basin 17
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.450	1.45	0.00
1.450	2.20	0.01
1.450	3.45	0.04
1.450	5.45	0.08
2.200	2.20	0.00
2.200	3.45	0.03
2.200	5.45	0.07

Name: E_OPT-17D Group: Basin 17
Type: Rating Curve

Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.450	1.45	0.00
1.450	2.20	0.01
1.450	3.45	0.03
1.450	5.45	0.07
2.200	2.20	0.00
2.200	3.45	0.02
2.200	5.45	0.06

Name: E_OPT-17E Group: Basin 17
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.450	1.45	0.00
1.450	2.20	0.01
1.450	3.45	0.03
1.450	5.45	0.07
2.200	2.20	0.00
2.200	3.45	0.02
2.200	5.45	0.06

Name: E_OPT-17F Group: Basin 17
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.450	1.45	0.00
1.450	2.20	0.01
1.450	3.45	0.03
1.450	5.45	0.07
2.200	2.20	0.00
2.200	3.45	0.02
2.200	5.45	0.06

==========
==== Pipes ====
==========

Name: E17-123_E17-127 From Node: EX17-123 Length(ft): 150.00
Group: Basin 17 To Node: EX17-127 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	18.00	18.00	Flow:	Both
Rise(in):	18.00	18.00	Entrance Loss Coef:	0.50
Invert(ft):	26.340	24.840	Exit Loss Coef:	0.10
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

```
         Name: EX17-10_EX17-12     From Node: EX17-10           Length(ft): 72.00
        Group: Basin 17              To Node: EX17-12                Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                             Flow: Both
     Span(in): 18.00          18.00                     Entrance Loss Coef: 0.50
     Rise(in): 18.00          18.00                         Exit Loss Coef: 1.46
   Invert(ft): 1.190          1.040                         Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: EX17-114_EX17-1     From Node: EX17-114          Length(ft): 243.00
        Group: Basin 17              To Node: EX17-124               Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                             Flow: Both
     Span(in): 54.00          54.00                     Entrance Loss Coef: 0.50
     Rise(in): 54.00          54.00                         Exit Loss Coef: 0.10
   Invert(ft): -0.740         -2.730                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: EX17-115_EX17-1     From Node: EX17-115          Length(ft): 41.00
        Group: Basin 17              To Node: EX17-114               Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                             Flow: Both
     Span(in): 54.00          54.00                     Entrance Loss Coef: 0.50
     Rise(in): 54.00          54.00                         Exit Loss Coef: 0.10
   Invert(ft): -1.740         -0.740                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: EX17-116_EX17-1     From Node: EX17-116          Length(ft): 88.00
        Group: Basin 17              To Node: EX17-120               Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                             Flow: Both
     Span(in): 18.00          18.00                     Entrance Loss Coef: 0.50
```

Rise(in):	18.00	18.00	Exit Loss Coef:	0.10
Invert(ft):	0.740	0.640	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: EX17-120_EX17-1 From Node: EX17-120 Length(ft): 106.00
Group: Basin 17 To Node: EX17-121 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	18.00	18.00	Flow:	Both
Rise(in):	18.00	18.00	Entrance Loss Coef:	0.50
Invert(ft):	0.140	-0.160	Exit Loss Coef:	1.46
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: EX17-121_EX17-1 From Node: EX17-121 Length(ft): 69.00
Group: Basin 17 To Node: EX17-122 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	18.00	18.00	Flow:	Both
Rise(in):	18.00	18.00	Entrance Loss Coef:	0.50
Invert(ft):	-0.160	-0.360	Exit Loss Coef:	1.46
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: EX17-122_S17-33 From Node: EX17-122 Length(ft): 93.00
Group: Basin 17 To Node: S17-33A+A Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	30.00	30.00	Flow:	Both
Rise(in):	30.00	30.00	Entrance Loss Coef:	1.35
Invert(ft):	0.440	0.440	Exit Loss Coef:	1.46
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-124_S17-45	From Node:	EX17-124	Length(ft): 457.00
Group:	Basin 17	To Node:	S17-45	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	54.00	54.00		Entrance Loss Coef: 0.50
Rise(in):	54.00	54.00		Exit Loss Coef: 0.10
Invert(ft):	-2.730	-3.320		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-127_S17-41	From Node:	EX17-127	Length(ft): 292.00
Group:	Basin 17	To Node:	S17-41	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	18.00	18.00		Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00		Exit Loss Coef: 0.10
Invert(ft):	24.840	19.540		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-129_S17-33	From Node:	EX17-129	Length(ft): 95.00
Group:	Basin 17	To Node:	S17-33A+A	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	30.00	30.00		Entrance Loss Coef: 1.35
Rise(in):	30.00	30.00		Exit Loss Coef: 0.10
Invert(ft):	0.440	0.440		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:

Circular Concrete: Square edge w/ headwall

Name:	EX17-12_EX17-15	From Node:	EX17-12
Group:	Basin 17	To Node:	EX17-15
	UPSTREAM	DOWNSTREAM	
Geometry:	Circular	Circular	
Span(in):	24.00	24.00	
Rise(in):	24.00	24.00	
Invert(ft):	0.940	0.940	
Manning's N:	0.012000	0.012000	
Top Clip(in):	0.000	0.000	
Bot Clip(in):	0.000	0.000	

Length(ft):	227.00
Count:	1
Friction Equation:	Automatic
Solution Algorithm:	Most Restrictive
Flow:	Both
Entrance Loss Coef:	1.35
Exit Loss Coef:	0.10
Bend Loss Coef:	0.00
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-139_17-30C	From Node:	EX17-139
Group:	Basin 17	To Node:	S17-30C
	UPSTREAM	DOWNSTREAM	
Geometry:	Circular	Circular	
Span(in):	18.00	18.00	
Rise(in):	18.00	18.00	
Invert(ft):	1.140	1.040	
Manning's N:	0.012000	0.012000	
Top Clip(in):	0.000	0.000	
Bot Clip(in):	0.000	0.000	

Length(ft):	34.00
Count:	1
Friction Equation:	Automatic
Solution Algorithm:	Most Restrictive
Flow:	Both
Entrance Loss Coef:	0.50
Exit Loss Coef:	0.10
Bend Loss Coef:	0.00
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-13_EX17-12	From Node:	EX17-13
Group:	Basin 17	To Node:	EX17-12
	UPSTREAM	DOWNSTREAM	
Geometry:	Circular	Circular	
Span(in):	18.00	18.00	
Rise(in):	18.00	18.00	
Invert(ft):	1.240	1.040	
Manning's N:	0.012000	0.012000	
Top Clip(in):	0.000	0.000	
Bot Clip(in):	0.000	0.000	

Length(ft):	87.00
Count:	1
Friction Equation:	Automatic
Solution Algorithm:	Most Restrictive
Flow:	Both
Entrance Loss Coef:	0.50
Exit Loss Coef:	1.46
Bend Loss Coef:	0.00
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-145_S17-35	From Node:	EX17-145

Length(ft):	33.00

Group: Basin 17 To Node: S17-35 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	1.140	0.980
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Solution Algorithm: Most Restrictive
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 1.46
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: EX17-148_S17-38 From Node: EX17-148 Length(ft): 37.00
Group: Basin 17 To Node: S17-38 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	1.340	1.240
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Solution Algorithm: Most Restrictive
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 1.46
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: EX17-150_S17-43 From Node: EX17-150 Length(ft): 9.00
Group: Basin 17 To Node: S17-43 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	3.290	3.290
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Solution Algorithm: Most Restrictive
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 1.46
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: EX17-151_S17-43 From Node: EX17-151 Length(ft): 18.00
Group: Basin 17 To Node: S17-43 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00

Solution Algorithm: Most Restrictive
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 1.46

Invert(ft):	3.340	3.290	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: EX17-152_S17-49 From Node: EX17-152 Length(ft): 135.00
Group: Basin 17 To Node: S17-49 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	24.00	24.00	Flow:	Both
Rise(in):	24.00	24.00	Entrance Loss Coef:	0.50
Invert(ft):	3.340	2.940	Exit Loss Coef:	0.10
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: EX17-153_EX17-1 From Node: EX17-153 Length(ft): 242.00
Group: Basin 17 To Node: EX17-151 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	18.00	18.00	Flow:	Both
Rise(in):	18.00	18.00	Entrance Loss Coef:	0.50
Invert(ft):	3.840	3.340	Exit Loss Coef:	1.46
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: EX17-15_EX17-26 From Node: EX17-15 Length(ft): 292.00
Group: Basin 17 To Node: EX17-26 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	24.00	24.00	Flow:	Both
Rise(in):	24.00	24.00	Entrance Loss Coef:	1.35
Invert(ft):	0.940	0.940	Exit Loss Coef:	1.46
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-16_EX17-15	From Node:	EX17-16	Length(ft): 6.00
Group:	Basin 17	To Node:	EX17-15	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Always Inlet
Geometry:	Circular	Circular		Flow: Both
Span(in):	18.00	18.00		Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00		Exit Loss Coef: 1.46
Invert(ft):	2.040	1.940		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-20_EX17-27	From Node:	EX17-20	Length(ft): 204.00
Group:	Basin 17	To Node:	EX17-27	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	24.00	24.00		Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00		Exit Loss Coef: 0.10
Invert(ft):	2.440	0.940		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-23_EX17-20	From Node:	EX17-23	Length(ft): 179.00
Group:	Basin 17	To Node:	EX17-20	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	24.00	24.00		Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00		Exit Loss Coef: 1.46
Invert(ft):	8.440	2.440		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-24_EX17-26	From Node: EX17-24	Length(ft): 20.00
Group:	Basin 17	To Node: EX17-26	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.10
Invert(ft):	-0.710	-0.760	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-26_EX17-27	From Node: EX17-26	Length(ft): 23.00
Group:	Basin 17	To Node: EX17-27	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 1.46
Invert(ft):	0.940	0.940	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-27_EX17-29	From Node: EX17-27	Length(ft): 99.00
Group:	Basin 17	To Node: EX17-29	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 0.10
Invert(ft):	0.940	0.940	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-28_EX17-29	From Node: EX17-28	Length(ft): 45.00
Group:	Basin 17	To Node: EX17-29	Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	-0.960	-1.010
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Automatic
Solution Algorithm: Most Restrictive
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 1.46
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: EX17-29_EX17-32 From Node: EX17-29 Length(ft): 121.00
Group: Basin 17 To Node: EX17-32 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	24.00	24.00
Rise(in):	24.00	24.00
Invert(ft):	0.940	0.940
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Automatic
Solution Algorithm: Most Restrictive
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.10
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: EX17-31_EX17-32 From Node: EX17-31 Length(ft): 43.00
Group: Basin 17 To Node: EX17-32 Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	-0.510	-0.560
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Automatic
Solution Algorithm: Most Restrictive
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 1.46
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: EX17-32_EX17-27 From Node: EX17-32 Length(ft): 397.00
Group: Basin 17 To Node: S17-27A+A Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	24.00	24.00
Rise(in):	24.00	24.00
Invert(ft):	0.940	0.940

Friction Equation: Automatic
Solution Algorithm: Most Restrictive
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.10
Bend Loss Coef: 0.00

Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-33_EX17-23	From Node: EX17-33	Length(ft): 251.00
Group:	Basin 17	To Node: EX17-23	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 0.10
Invert(ft):	14.850	8.440	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-36_EX17-33	From Node: EX17-36	Length(ft): 297.00
Group:	Basin 17	To Node: EX17-33	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 0.10
Invert(ft):	21.060	14.850	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-39_EX17-27	From Node: EX17-39	Length(ft): 29.00
Group:	Basin 17	To Node: S17-27A+A	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 1.46
Invert(ft):	-0.110	-0.160	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-47_EX17-36	From Node:	EX17-47	Length(ft): 297.00
Group:	Basin 17	To Node:	EX17-36	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	18.00	18.00		Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00		Exit Loss Coef: 0.10
Invert(ft):	25.420	21.060		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-48_EX17-47	From Node:	EX17-48	Length(ft): 38.00
Group:	Basin 17	To Node:	EX17-47	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	18.00	18.00		Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00		Exit Loss Coef: 1.46
Invert(ft):	25.540	25.420		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-49_EX17-48	From Node:	EX17-49	Length(ft): 46.00
Group:	Basin 17	To Node:	EX17-48	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Always Inlet
Geometry:	Circular	Circular		Flow: Both
Span(in):	18.00	18.00		Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00		Exit Loss Coef: 1.46
Invert(ft):	26.100	25.540		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

```
-------------------------------------------------------------------------------------------------
         Name: EX17-51_EX17-49     From Node: EX17-51           Length(ft): 27.00
        Group: Basin 17              To Node: EX17-49                Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Always Inlet
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 18.00          18.00                     Entrance Loss Coef: 0.50
     Rise(in): 18.00          18.00                         Exit Loss Coef: 0.10
   Invert(ft): 26.440         26.100                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: EX17-52_EX17-51     From Node: EX17-52           Length(ft): 62.00
        Group: Basin 17              To Node: EX17-51                Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Always Inlet
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 18.00          18.00                     Entrance Loss Coef: 0.50
     Rise(in): 18.00          18.00                         Exit Loss Coef: 0.10
   Invert(ft): 27.240         26.440                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: S17-10_S17-12A      From Node: S17-10            Length(ft): 78.00
        Group: Basin 17              To Node: S17-12A                Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 24.00          24.00                     Entrance Loss Coef: 1.35
     Rise(in): 24.00          24.00                         Exit Loss Coef: 0.10
   Invert(ft): -0.250         -0.350                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: S17-11_S17-8        From Node: S17-11            Length(ft): 126.00
        Group: Basin 17              To Node: S17-8                  Count: 1
                                                          Friction Equation: Automatic
```

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	24.00	24.00	Flow:	Both
Rise(in):	24.00	24.00	Entrance Loss Coef:	1.35
Invert(ft):	0.940	0.940	Exit Loss Coef:	0.10
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-12_S17-11	From Node:	S17-12	Length(ft):	76.00
Group:	Basin 17	To Node:	S17-11	Count:	1
				Friction Equation:	Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	24.00	24.00	Flow:	Both
Rise(in):	24.00	24.00	Entrance Loss Coef:	1.35
Invert(ft):	0.940	0.940	Exit Loss Coef:	0.10
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-12A_EX17-12	From Node:	S17-12A	Length(ft):	218.00
Group:	Basin 17	To Node:	EX17-12	Count:	1
				Friction Equation:	Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	24.00	24.00	Flow:	Both
Rise(in):	24.00	24.00	Entrance Loss Coef:	1.35
Invert(ft):	0.940	0.940	Exit Loss Coef:	0.10
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-13_S17-12	From Node:	S17-13	Length(ft):	37.00
Group:	Basin 17	To Node:	S17-12	Count:	1
				Friction Equation:	Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	24.00	24.00	Flow:	Both
Rise(in):	24.00	24.00	Entrance Loss Coef:	1.35
Invert(ft):	0.940	0.940	Exit Loss Coef:	0.10
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
			Outlet Ctrl Spec:	Use dc or tw

Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-14_S17-13	From Node: S17-14	Length(ft): 4.00
Group:	Basin 17	To Node: S17-13	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 1.46
Invert(ft):	-0.450	-0.550	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-15_S17-13	From Node: S17-15	Length(ft): 196.00
Group:	Basin 17	To Node: S17-13	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 1.35
Rise(in):	24.00	24.00	Exit Loss Coef: 0.10
Invert(ft):	0.940	0.940	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-16_S17-15	From Node: S17-16	Length(ft): 4.00
Group:	Basin 17	To Node: S17-15	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 1.46
Invert(ft):	-0.350	-0.450	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:

Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-17_S17-15	From Node: S17-17	Length(ft):	115.00
Group:	Basin 17	To Node: S17-15	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	1.35
Rise(in):	24.00	24.00	Exit Loss Coef:	0.10
Invert(ft):	0.940	0.940	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-18_S17-17	From Node: S17-18	Length(ft):	85.00
Group:	Basin 17	To Node: S17-17	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	1.35
Rise(in):	24.00	24.00	Exit Loss Coef:	0.10
Invert(ft):	0.940	0.940	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-19_S17-20	From Node: S17-19	Length(ft):	5.00
Group:	Basin 17	To Node: S17-20	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Always Inlet
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	1.46
Invert(ft):	2.000	1.950	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-1_S17-2	From Node:	S17-1	Length(ft): 79.00
Group:	Basin 17	To Node:	S17-2	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	18.00	18.00		Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00		Exit Loss Coef: 0.10
Invert(ft):	-0.300	-0.400		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-1A_S17-3	From Node:	S17-1A	Length(ft): 33.00
Group:	Basin 17	To Node:	S17-3	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	18.00	18.00		Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00		Exit Loss Coef: 1.46
Invert(ft):	-0.100	-0.150		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-20_S17-18	From Node:	S17-20	Length(ft): 216.00
Group:	Basin 17	To Node:	S17-18	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	24.00	24.00		Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00		Exit Loss Coef: 0.10
Invert(ft):	0.940	0.940		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-21_S17-19	From Node:	S17-21	Length(ft): 192.00
Group:	Basin 17	To Node:	S17-19	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive

Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	1.46
Invert(ft):	12.140	6.690	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-22_S17-21	From Node: S17-22	Length(ft):	4.00
Group:	Basin 17	To Node: S17-21	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Always Inlet
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	11.200	11.100	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-24_S17-25	From Node: S17-24	Length(ft):	42.00
Group:	Basin 17	To Node: S17-25	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	1.46
Invert(ft):	14.600	14.500	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-24A_S17-24	From Node: S17-24A	Length(ft):	5.00
Group:	Basin 17	To Node: S17-24	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	0.10
Invert(ft):	17.740	17.640	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn

Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-25_S17-21	From Node: S17-25	Length(ft): 176.00
Group:	Basin 17	To Node: S17-21	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 0.10
Invert(ft):	15.040	12.140	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-26_S17-25	From Node: S17-26	Length(ft): 3.00
Group:	Basin 17	To Node: S17-25	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 1.46
Invert(ft):	14.150	14.150	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-26A_S17-24A	From Node: S17-26A	Length(ft): 218.00
Group:	Basin 17	To Node: S17-24A	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 1.46
Invert(ft):	20.750	16.450	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: S17-27_S17-26A From Node: S17-27 Length(ft): 9.00
Group: Basin 17 To Node: S17-26A Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	24.00	24.00	Flow:	Both
Rise(in):	24.00	24.00	Entrance Loss Coef:	0.50
Invert(ft):	22.340	22.240	Exit Loss Coef:	1.46
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: S17-27A_EX17-11 From Node: S17-27A+B Length(ft): 544.00
Group: Basin 17 To Node: EX17-115 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Horz Ellipse	Horz Ellipse	Solution Algorithm:	Most Restrictive
Span(in):	60.00	60.00	Flow:	Both
Rise(in):	38.00	38.00	Entrance Loss Coef:	0.50
Invert(ft):	0.950	-1.740	Exit Loss Coef:	0.10
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

Downstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

Name: S17-28_S17-27 From Node: S17-28 Length(ft): 297.00
Group: Basin 17 To Node: S17-27 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	18.00	18.00	Flow:	Both
Rise(in):	18.00	18.00	Entrance Loss Coef:	0.50
Invert(ft):	24.950	21.250	Exit Loss Coef:	1.46
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-29_S17-28	From Node: S17-29	Length(ft): 147.00
Group:	Basin 17	To Node: S17-28	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.10
Invert(ft):	25.800	24.950	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-2_S17-4	From Node: S17-2	Length(ft): 164.00
Group:	Basin 17	To Node: S17-4	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 0.10
Invert(ft):	1.240	1.070	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-30_S17-30A	From Node: S17-30+C	Length(ft): 85.00
Group:	Basin 17	To Node: S17-30A	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 1.46
Invert(ft):	0.550	0.330	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-30A_17-115	From Node: S17-30A	Length(ft): 205.00
Group:	Basin 17	To Node: EX17-115	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both

Span(in):	36.00	36.00	Entrance Loss Coef:	0.50
Rise(in):	36.00	36.00	Exit Loss Coef:	0.10
Invert(ft):	-0.060	-0.740	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-30C_S17-30	From Node: S17-30C	Length(ft):	17.00
Group:	Basin 17	To Node: S17-30+A	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	1.000	1.000	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-31_S17-32	From Node: S17-31	Length(ft):	9.00
Group:	Basin 17	To Node: S17-32	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	1.200	1.100	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-32_S17-30	From Node: S17-32	Length(ft):	36.00
Group:	Basin 17	To Node: S17-30+A	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	1.35
Rise(in):	24.00	24.00	Exit Loss Coef:	0.10
Invert(ft):	0.650	0.550	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-33_S17-34	From Node:	S17-33	Length(ft):	146.00
Group:	Basin 17	To Node:	S17-34	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	1.46
Invert(ft):	24.500	24.250		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-33A_E17-124	From Node:	S17-33A+B	Length(ft):	84.00
Group:	Basin 17	To Node:	EX17-124	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	30.00	30.00		Entrance Loss Coef:	0.50
Rise(in):	30.00	30.00		Exit Loss Coef:	1.46
Invert(ft):	0.440	-2.730		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-34_S17-34A	From Node:	S17-34	Length(ft):	30.00
Group:	Basin 17	To Node:	S17-34A	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	1.46
Invert(ft):	23.800	-0.500		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-34A_S17-35	From Node: S17-34A	Length(ft): 9.00
Group:	Basin 17	To Node: S17-35	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 1.46
Invert(ft):	0.550	0.450	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-35_S17-32	From Node: S17-35	Length(ft): 186.00
Group:	Basin 17	To Node: S17-32	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 1.35
Rise(in):	24.00	24.00	Exit Loss Coef: 0.10
Invert(ft):	0.450	0.450	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-36_EX17-129	From Node: S17-36	Length(ft): 63.00
Group:	Basin 17	To Node: EX17-129	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 1.46
Invert(ft):	2.740	2.440	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

```
        Name: S17-37_S17-36       From Node: S17-37            Length(ft): 271.00
       Group: Basin 17              To Node: S17-36                 Count: 1
                                                          Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM                 Solution Algorithm: Most Restrictive
    Geometry: Circular       Circular                          Flow: Both
    Span(in): 18.00          18.00                      Entrance Loss Coef: 0.50
    Rise(in): 18.00          18.00                          Exit Loss Coef: 1.46
   Invert(ft): 5.150         2.350                          Bend Loss Coef: 0.00
  Manning's N: 0.012000      0.012000                    Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000         0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
        Name: S17-38_S17-35       From Node: S17-38            Length(ft): 221.00
       Group: Basin 17              To Node: S17-35                 Count: 1
                                                          Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM                 Solution Algorithm: Most Restrictive
    Geometry: Circular       Circular                          Flow: Both
    Span(in): 24.00          24.00                      Entrance Loss Coef: 0.50
    Rise(in): 24.00          24.00                          Exit Loss Coef: 0.10
   Invert(ft): 0.670         0.450                          Bend Loss Coef: 0.00
  Manning's N: 0.012000      0.012000                    Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000         0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
        Name: S17-38A_S17-38      From Node: S17-38A           Length(ft): 10.00
       Group: Basin 17              To Node: S17-38                 Count: 1
                                                          Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM                 Solution Algorithm: Most Restrictive
    Geometry: Circular       Circular                          Flow: Both
    Span(in): 18.00          18.00                      Entrance Loss Coef: 0.50
    Rise(in): 18.00          18.00                          Exit Loss Coef: 1.46
   Invert(ft): 1.340         1.240                          Bend Loss Coef: 0.00
  Manning's N: 0.012000      0.012000                    Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000         0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
        Name: S17-39_EX17-129     From Node: S17-39            Length(ft): 244.00
       Group: Basin 17              To Node: EX17-129               Count: 1
                                                          Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM                 Solution Algorithm: Most Restrictive
    Geometry: Circular       Circular                          Flow: Both
    Span(in): 30.00          30.00                      Entrance Loss Coef: 1.35
```

Rise(in):	30.00	30.00	Exit Loss Coef:	0.10
Invert(ft):	0.440	0.440	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-3_S17-7	From Node: S17-3	Length(ft):	276.00
Group:	Basin 17	To Node: S17-7	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	1.35
Rise(in):	24.00	24.00	Exit Loss Coef:	0.10
Invert(ft):	-0.250	-0.250	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-3A_S17-3	From Node: S17-3A	Length(ft):	138.00
Group:	Basin 17	To Node: S17-3	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	-0.100	-0.150	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-40_S17-41	From Node: S17-40	Length(ft):	8.00
Group:	Basin 17	To Node: S17-41	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	19.000	19.000	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-41_S17-49	From Node:	S17-41	Length(ft):	300.00
Group:	Basin 17	To Node:	S17-49	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00		Exit Loss Coef:	1.46
Invert(ft):	19.540	11.940		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-42_EX17-152	From Node:	S17-42	Length(ft):	293.00
Group:	Basin 17	To Node:	EX17-152	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00		Exit Loss Coef:	0.10
Invert(ft):	19.540	9.540		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-43_S17-38	From Node:	S17-43	Length(ft):	77.00
Group:	Basin 17	To Node:	S17-38	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00		Exit Loss Coef:	0.10
Invert(ft):	0.750	0.670		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:

Circular Concrete: Square edge w/ headwall

Name:	S17-44_S17-45	From Node:	S17-44
Group:	Basin 17	To Node:	S17-45
	UPSTREAM	DOWNSTREAM	
Geometry:	Circular	Circular	
Span(in):	18.00	18.00	
Rise(in):	18.00	18.00	
Invert(ft):	0.590	0.590	
Manning's N:	0.012000	0.012000	
Top Clip(in):	0.000	0.000	
Bot Clip(in):	0.000	0.000	

Length(ft):	6.00
Count:	1
Friction Equation:	Automatic
Solution Algorithm:	Most Restrictive
Flow:	Both
Entrance Loss Coef:	0.50
Exit Loss Coef:	1.46
Bend Loss Coef:	0.00
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-45_OUT	From Node:	S17-45
Group:	Basin 17	To Node:	L_RIVER_CANAL
	UPSTREAM	DOWNSTREAM	
Geometry:	Circular	Circular	
Span(in):	72.00	72.00	
Rise(in):	72.00	72.00	
Invert(ft):	-3.320	-3.560	
Manning's N:	0.012000	0.012000	
Top Clip(in):	0.000	0.000	
Bot Clip(in):	0.000	0.000	

Length(ft):	246.00
Count:	1
Friction Equation:	Automatic
Solution Algorithm:	Most Restrictive
Flow:	Both
Entrance Loss Coef:	0.50
Exit Loss Coef:	1.00
Bend Loss Coef:	0.00
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-46_S17-39	From Node:	S17-46
Group:	Basin 17	To Node:	S17-39
	UPSTREAM	DOWNSTREAM	
Geometry:	Circular	Circular	
Span(in):	30.00	30.00	
Rise(in):	30.00	30.00	
Invert(ft):	0.440	0.440	
Manning's N:	0.012000	0.012000	
Top Clip(in):	0.000	0.000	
Bot Clip(in):	0.000	0.000	

Length(ft):	128.00
Count:	1
Friction Equation:	Automatic
Solution Algorithm:	Most Restrictive
Flow:	Both
Entrance Loss Coef:	1.35
Exit Loss Coef:	0.10
Bend Loss Coef:	0.00
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-47_S17-48	From Node:	S17-47

Length(ft):	93.00

```
       Group: Basin 17             To Node: S17-48                Count: 1
                                                          Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
    Geometry: Circular       Circular                             Flow: Both
    Span(in): 18.00          18.00                   Entrance Loss Coef: 0.50
    Rise(in): 18.00          18.00                       Exit Loss Coef: 1.46
   Invert(ft): 13.050        10.000                      Bend Loss Coef: 0.00
  Manning's N: 0.012000      0.012000                 Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                     Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000         0.000                   Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


--------------------------------------------------------------------------------------------------
         Name: S17-48_S17-46       From Node: S17-48            Length(ft): 167.00
        Group: Basin 17              To Node: S17-46                Count: 1
                                                          Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM                Solution Algorithm: Always Inlet
    Geometry: Circular       Circular                             Flow: Both
    Span(in): 30.00          30.00                   Entrance Loss Coef: 0.50
    Rise(in): 30.00          30.00                       Exit Loss Coef: 0.10
   Invert(ft): 2.840         1.940                       Bend Loss Coef: 0.00
  Manning's N: 0.012000      0.012000                 Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                     Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000         0.000                   Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


--------------------------------------------------------------------------------------------------
         Name: S17-49_S17-48       From Node: S17-49            Length(ft): 5.00
        Group: Basin 17              To Node: S17-48                Count: 1
                                                          Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM                Solution Algorithm: Always Inlet
    Geometry: Circular       Circular                             Flow: Both
    Span(in): 30.00          30.00                   Entrance Loss Coef: 0.50
    Rise(in): 30.00          30.00                       Exit Loss Coef: 1.46
   Invert(ft): 2.940         2.840                       Bend Loss Coef: 0.00
  Manning's N: 0.012000      0.012000                 Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                     Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000         0.000                   Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


--------------------------------------------------------------------------------------------------
         Name: S17-4_S17-6         From Node: S17-4             Length(ft): 116.00
        Group: Basin 17              To Node: S17-6                 Count: 1
                                                          Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
    Geometry: Circular       Circular                             Flow: Both
    Span(in): 24.00          24.00                   Entrance Loss Coef: 0.50
    Rise(in): 24.00          24.00                       Exit Loss Coef: 1.46
```

Invert(ft):	1.070	0.940	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-5_S17-4	From Node: S17-5	Length(ft):	4.00
Group:	Basin 17	To Node: S17-4	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	-0.400	-0.500	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-6_S17-7	From Node: S17-6	Length(ft):	193.00
Group:	Basin 17	To Node: S17-7	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	1.46
Invert(ft):	-1.730	-1.730	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-7_S17-10	From Node: S17-7	Length(ft):	244.00
Group:	Basin 17	To Node: S17-10	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	1.35
Rise(in):	24.00	24.00	Exit Loss Coef:	0.10
Invert(ft):	-0.250	-0.250	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-8_S17-6	From Node:	S17-8	Length(ft):	126.00
Group:	Basin 17	To Node:	S17-6	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	1.35
Rise(in):	24.00	24.00		Exit Loss Coef:	1.46
Invert(ft):	0.940	0.940		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-9_S17-8	From Node:	S17-9	Length(ft):	4.00
Group:	Basin 17	To Node:	S17-8	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	1.46
Invert(ft):	0.000	-0.100		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

==========
==== Drop Structures ==========
==========

Name:	DS17-29A	From Node:	NODE-17D	Length(ft):	122.00
Group:	Basin 17	To Node:	S17-30A	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	30.00	30.00		Entrance Loss Coef:	0.500
Rise(in):	30.00	30.00		Exit Loss Coef:	0.100
Invert(ft):	0.950	0.450		Outlet Ctrl Spec:	Use dc or tw
Manning's N:	0.012000	0.012000		Inlet Ctrl Spec:	Use dn
Top Clip(in):	0.000	0.000		Solution Incs:	10
Bot Clip(in):	0.000	0.000			

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:

Circular Concrete: Square edge w/ headwall

*** Weir 1 of 1 for Drop Structure DS17-29A ***

TABLE

Count:	1	Bottom Clip(in):	0.000
Type:	Vertical: Mavis	Top Clip(in):	0.000
Flow:	Both	Weir Disc Coef:	3.200
Geometry:	Rectangular	Orifice Disc Coef:	0.600
Span(in):	42.00	Invert(ft):	4.150
Rise(in):	6.00	Control Elev(ft):	4.150

Name:	DSEX17-113	From Node:	NODE-17B
Group:	Basin 17	To Node:	EX17-114

Length(ft): 134.00
Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	24.00	24.00
Rise(in):	24.00	24.00
Invert(ft):	0.950	-0.740
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Automatic
Solution Algorithm: Most Restrictive
Flow: Both
Entrance Loss Coef: 0.500
Exit Loss Coef: 0.100
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 1 for Drop Structure DSEX17-113 ***

TABLE

Count:	1	Bottom Clip(in):	0.000
Type:	Vertical: Mavis	Top Clip(in):	0.000
Flow:	Both	Weir Disc Coef:	3.200
Geometry:	Rectangular	Orifice Disc Coef:	0.600
Span(in):	48.00	Invert(ft):	3.250
Rise(in):	6.00	Control Elev(ft):	3.250

Name:	DSEX17-67	From Node:	NODE-17F
Group:	Basin 17	To Node:	S17-44

Length(ft): 271.00
Count: 1

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	0.950	0.590
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Friction Equation: Automatic
Solution Algorithm: Most Restrictive
Flow: Both
Entrance Loss Coef: 0.500
Exit Loss Coef: 0.100
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 1 for Drop Structure DSEX17-67 ***

TABLE

Count:	1	Bottom Clip(in):	0.000
Type:	Horizontal	Top Clip(in):	0.000
Flow:	Both	Weir Disc Coef:	3.200
Geometry:	Rectangular	Orifice Disc Coef:	0.600

```
              Span(in): 48.00                    Invert(ft): 2.950
              Rise(in): 6.00                 Control Elev(ft): 2.950


================================================================================
==== Weirs =====================================================================
================================================================================

         Name: S17-27A_WEIR        From Node: S17-27A+A
        Group: Basin 17              To Node: S17-27A+B
         Flow: Both                    Count: 1
         Type: Vertical: Mavis      Geometry: Rectangular

                    Span(in): 96.00
                    Rise(in): 9.60
                  Invert(ft): 3.650
       Control Elevation(ft): 3.650
                                         TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 3.200
       Orifice Discharge Coef: 0.600



--------------------------------------------------------------------------------
         Name: S17-30_BAFFLE       From Node: S17-30+A
        Group: Basin 17              To Node: S17-30+B
         Flow: Both                    Count: 1
         Type: Vertical: Mavis      Geometry: Rectangular

                    Span(in): 60.00
                    Rise(in): 24.00
                  Invert(ft): -2.950
       Control Elevation(ft): -2.950
                                         TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 3.200
       Orifice Discharge Coef: 0.600



--------------------------------------------------------------------------------
         Name: S17-30_WEIR         From Node: S17-30+B
        Group: Basin 17              To Node: S17-30+C
         Flow: Both                    Count: 1
         Type: Vertical: Mavis      Geometry: Rectangular

                    Span(in): 48.00
                    Rise(in): 6.40
                  Invert(ft): 3.250
       Control Elevation(ft): 3.250
                                         TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 3.200
       Orifice Discharge Coef: 0.600



--------------------------------------------------------------------------------
         Name: S17-33A_WEIR        From Node: S17-33A+A
        Group: Basin 17              To Node: S17-33A+B
         Flow: Both                    Count: 1
         Type: Vertical: Mavis      Geometry: Rectangular

                    Span(in): 48.00
                    Rise(in): 8.40
                  Invert(ft): 4.250
       Control Elevation(ft): 4.250
                                         TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 3.200
```

Orifice Discharge Coef: 0.600

==========
==== Rating Curves ==========
==========

Name: E_OPT_17B From Node: NODE-17B Count: 190
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17B	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: E_OPT_17D From Node: NODE-17D Count: 1174
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17D	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: E_OPT_17F From Node: NODE-17F Count: 421
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17F	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: EX17-122_EXF From Node: EX17-122 Count: 39
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17E	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: EX17-129_EXF From Node: EX17-129 Count: 154
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17E	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: EX17-12_EXF From Node: EX17-12 Count: 207
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000

#4:	0.000	0.000

Name: EX17-15_EXF From Node: EX17-15 Count: 244
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: EX17-26_EXF From Node: EX17-26 Count: 138
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: EX17-27_EXF From Node: EX17-27 Count: 41
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: EX17-29_EXF From Node: EX17-29 Count: 94
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: EX17-32_EXF From Node: EX17-32 Count: 243
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-10_EXF From Node: S17-10 Count: 101
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

```
--------------------------------------------------------------------------------------------------
 Name: S17-11_EXF          From Node: S17-11                 Count: 85
Group: Basin 17              To Node: GWT-17                  Flow: Both

       TABLE           ELEV ON(ft)     ELEV OFF(ft)
  #1: E_OPT-17A        1.450           1.450
  #2:                  0.000           0.000
  #3:                  0.000           0.000
  #4:                  0.000           0.000


--------------------------------------------------------------------------------------------------
 Name: S17-12_EXF          From Node: S17-12                 Count: 40
Group: Basin 17              To Node: GWT-17                  Flow: Both

       TABLE           ELEV ON(ft)     ELEV OFF(ft)
  #1: E_OPT-17A        1.450           1.450
  #2:                  0.000           0.000
  #3:                  0.000           0.000
  #4:                  0.000           0.000


--------------------------------------------------------------------------------------------------
 Name: S17-12A_EXF         From Node: S17-12A                Count: 101
Group: Basin 17              To Node: GWT-17                  Flow: Both

       TABLE           ELEV ON(ft)     ELEV OFF(ft)
  #1: E_OPT-17A        1.450           1.450
  #2:                  0.000           0.000
  #3:                  0.000           0.000
  #4:                  0.000           0.000


--------------------------------------------------------------------------------------------------
 Name: S17-13_EXF          From Node: S17-13                 Count: 101
Group: Basin 17              To Node: GWT-17                  Flow: Both

       TABLE           ELEV ON(ft)     ELEV OFF(ft)
  #1: E_OPT-17A        1.450           1.450
  #2:                  0.000           0.000
  #3:                  0.000           0.000
  #4:                  0.000           0.000


--------------------------------------------------------------------------------------------------
 Name: S17-15_EXF          From Node: S17-15                 Count: 140
Group: Basin 17              To Node: GWT-17                  Flow: Both

       TABLE           ELEV ON(ft)     ELEV OFF(ft)
  #1: E_OPT-17A        1.450           1.450
  #2:                  0.000           0.000
  #3:                  0.000           0.000
  #4:                  0.000           0.000


--------------------------------------------------------------------------------------------------
 Name: S17-17_EXF          From Node: S17-17                 Count: 84
Group: Basin 17              To Node: GWT-17                  Flow: Both

       TABLE           ELEV ON(ft)     ELEV OFF(ft)
  #1: E_OPT-17A        1.450           1.450
  #2:                  0.000           0.000
  #3:                  0.000           0.000
  #4:                  0.000           0.000


--------------------------------------------------------------------------------------------------
 Name: S17-18_EXF          From Node: S17-18                 Count: 142
```

Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-27A_EXF From Node: S17-27A+A Count: 191
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-32_EXF From Node: S17-32 Count: 85
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17C	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-33A_EXF From Node: S17-33A+A Count: 78
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17E	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-35_EXF From Node: S17-35 Count: 85
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17C	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-39_EXF From Node: S17-39 Count: 170
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17E	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-3_EXF From Node: S17-3 Count: 130
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)

#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-46_EXF From Node: S17-46 Count: 56
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17E	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-6_EXF From Node: S17-6 Count: 55
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-7_EXF From Node: S17-7 Count: 231
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-8_EXF From Node: S17-8 Count: 110
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

==========
==== Hydrology Simulations ====
==========

Name: 100YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 5.00

Time(hrs)	Print Inc(min)
1.000	1.00
1.330	1.00

Name: 100YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 13.44

Time(hrs)	Print Inc(min)
8.000	5.00
16.000	1.00
24.000	5.00
24.330	5.00

Name: 100YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 9.60

Time(hrs)	Print Inc(min)
2.000	5.00
6.000	1.00
8.000	5.00
8.330	5.00

Name: 10YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 3.50

Time(hrs)	Print Inc(min)
1.000	1.00
1.330	1.00

Name: 10YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 8.88

Time(hrs)	Print Inc(min)
8.000	5.00
16.000	1.00
24.000	5.00
24.330	5.00

Name: 10YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 6.40

Time(hrs)	Print Inc(min)
2.000	5.00
6.000	1.00
8.000	5.00
8.330	5.00

```
--------------------------------------------------------------------------------------------------
         Name: 25YR-72HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 72.00
          Rainfall File: Sfwmd72
    Rainfall Amount(in): 14.00

Time(hrs)       Print Inc(min)
--------------- ---------------
48.000          15.00
56.000          5.00
64.000          1.00
72.000          5.00
72.330          5.00

==================================================================================================
==== Routing Simulations ========================================================================
==================================================================================================

         Name: 100YR-1HR          Hydrology Sim: 100YR-1HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: Yes         Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 25.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
1.000           1.000
25.000          15.000

Group           Run
--------------- -----
Basin 17        Yes


--------------------------------------------------------------------------------------------------
         Name: 100YR-24HR          Hydrology Sim: 100YR-24HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: Yes         Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 48.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages: 24HR                    Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.000
16.000          1.000
24.000          5.000
48.000          15.000

Group           Run
--------------- -----
Basin 17        Yes


--------------------------------------------------------------------------------------------------
         Name: 100YR-8HR          Hydrology Sim: 100YR-8HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP
```

```
     Execute: Yes         Restart: No            Patch: No
 Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
   Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 36.00
    Min Calc Time(sec): 0.5000               Max Calc Time(sec): 60.0000
       Boundary Stages: 8HR                     Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           5.000
6.000           1.000
8.000           5.000
36.000          15.000

Group           Run
--------------- -----
Basin 17        Yes


-------------------------------------------------------------------------------------------------------
         Name: 10YR-1HR           Hydrology Sim: 10YR-1HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

     Execute: Yes         Restart: No            Patch: No
 Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.01000
   Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 25.00
    Min Calc Time(sec): 0.5000               Max Calc Time(sec): 60.0000
       Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
1.000           1.000
25.000          15.000

Group           Run
--------------- -----
Basin 17        Yes


-------------------------------------------------------------------------------------------------------
         Name: 10YR-24HR          Hydrology Sim: 10YR-24HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

     Execute: Yes         Restart: No            Patch: No
 Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
   Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 48.00
    Min Calc Time(sec): 0.5000               Max Calc Time(sec): 60.0000
       Boundary Stages: 24HR                    Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.000
16.000          1.000
24.000          5.000
48.000          15.000

Group           Run
--------------- -----
Basin 17        Yes
```

```
-------------------------------------------------------------------------------------------------
         Name: 10YR-8HR           Hydrology Sim: 10YR-8HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 36.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages: 8HR                     Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           5.000
6.000           1.000
8.000           5.000
36.000          15.000

Group           Run
--------------- -----
Basin 17        Yes


-------------------------------------------------------------------------------------------------
         Name: 25YR-72HR          Hydrology Sim: 25YR-72HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 96.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages: 72HR                    Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.000
16.000          1.000
24.000          5.000
96.000          15.000

Group           Run
--------------- -----
Basin 17        Yes


===============================================================================================
==== Boundary Conditions ======================================================================
===============================================================================================

      Name: 8HR                  Node: GWT-17               Type: Stage

      Time(hrs)       Stage(ft)
--------------- ---------------
          0.000           1.450
          1.000           1.470
          2.000           1.550
          3.000           1.660
          4.000           1.980
          5.000           2.100
          6.000           2.140
          7.000           2.180
          8.000           2.200
         12.000           1.450
         36.000           1.450
```

Name: 24HR Node: GWT-17 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.450
1.000	1.460
2.000	1.470
3.000	1.500
4.000	1.520
5.000	1.540
6.000	1.570
7.000	1.600
8.000	1.630
9.000	1.680
10.000	1.720
11.000	1.780
12.000	1.860
13.000	1.910
14.000	1.950
15.000	2.000
16.000	2.040
17.000	2.070
18.000	2.100
19.000	2.130
20.000	2.150
21.000	2.170
22.000	2.190
23.000	2.190
24.000	2.200
36.000	1.450
48.000	1.450

Name: 72HR Node: GWT-17 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.450
24.000	1.530
36.000	1.590
48.000	1.650
49.000	1.650
50.000	1.660
51.000	1.670
52.000	1.670
53.000	1.680
54.000	1.690
55.000	1.710
56.000	1.720
57.000	1.740
57.500	1.750
58.000	1.770
58.500	1.780
59.000	1.800
59.500	1.820
60.000	2.010
60.500	2.050
61.000	2.070
61.500	2.090
62.000	2.100
62.500	2.110
63.000	2.120
64.000	2.130
65.000	2.140
66.000	2.150
68.000	2.170
70.000	2.190
72.000	2.200
96.000	1.450

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	0.00	0.0	0.0	0.0	0.0	0.00
25YR-72HR	0.08	0.0	-0.9	0.9	-0.0	-0.00
25YR-72HR	0.17	0.0	-3.7	3.7	-0.0	-0.00
25YR-72HR	0.25	0.0	-7.3	7.3	-0.0	-0.00
25YR-72HR	0.33	0.0	-11.1	11.1	-0.0	-0.00
25YR-72HR	0.42	0.0	-15.2	15.2	-0.0	-0.00
25YR-72HR	0.50	0.0	-19.3	19.3	-0.0	-0.00
25YR-72HR	0.58	0.0	-23.5	23.5	-0.0	-0.00
25YR-72HR	0.67	0.0	-27.6	27.6	-0.0	-0.00
25YR-72HR	0.75	0.0	-31.8	31.8	-0.0	-0.00
25YR-72HR	0.83	0.0	-36.0	36.0	-0.0	-0.00
25YR-72HR	0.92	0.0	-40.2	40.2	-0.0	-0.00
25YR-72HR	1.00	0.0	-44.4	44.4	-0.0	-0.00
25YR-72HR	1.08	0.0	-48.6	48.6	-0.0	-0.00
25YR-72HR	1.17	0.0	-52.8	52.8	-0.0	-0.00
25YR-72HR	1.25	0.0	-57.0	57.0	-0.0	-0.00
25YR-72HR	1.33	0.4	-61.2	61.6	-0.0	-0.00
25YR-72HR	1.42	1.5	-65.3	66.8	-0.0	-0.00
25YR-72HR	1.50	3.4	-69.1	72.5	-0.0	-0.00
25YR-72HR	1.58	7.7	-72.5	80.2	-0.0	-0.00
25YR-72HR	1.67	16.1	-75.1	91.2	-0.0	-0.00
25YR-72HR	1.75	28.5	-76.5	105.1	-0.0	-0.00
25YR-72HR	1.83	46.0	-76.1	122.1	-0.0	-0.00
25YR-72HR	1.92	69.5	-72.7	142.2	-0.0	-0.00
25YR-72HR	2.00	99.0	-65.8	164.9	-0.0	-0.00
25YR-72HR	2.08	135.1	-55.0	190.1	-0.0	-0.00
25YR-72HR	2.17	178.0	-39.7	217.8	-0.0	-0.00
25YR-72HR	2.25	228.0	-19.8	247.8	-0.0	-0.00
25YR-72HR	2.33	285.1	5.1	279.9	-0.0	-0.00
25YR-72HR	2.42	349.4	35.6	313.8	-0.0	-0.00
25YR-72HR	2.50	421.0	71.8	349.2	-0.0	-0.00
25YR-72HR	2.58	499.8	113.9	385.9	-0.0	-0.00
25YR-72HR	2.67	585.8	162.2	423.6	-0.0	-0.00
25YR-72HR	2.75	679.0	216.8	462.2	-0.0	-0.00
25YR-72HR	2.83	779.2	277.6	501.6	-0.0	-0.00
25YR-72HR	2.92	886.2	344.6	541.6	-0.0	-0.00
25YR-72HR	3.00	1000.1	417.9	582.2	-0.0	-0.00
25YR-72HR	3.08	1120.6	497.4	623.2	-0.0	-0.00
25YR-72HR	3.17	1247.5	582.8	664.7	-0.0	-0.00
25YR-72HR	3.25	1380.9	674.2	706.7	-0.0	-0.00
25YR-72HR	3.33	1520.5	771.4	749.1	-0.0	-0.00
25YR-72HR	3.42	1666.2	874.3	791.9	-0.0	-0.00
25YR-72HR	3.50	1818.0	982.8	835.2	-0.0	-0.00
25YR-72HR	3.58	1975.7	1096.8	879.0	-0.0	-0.00
25YR-72HR	3.67	2139.2	1216.0	923.1	-0.0	-0.00
25YR-72HR	3.75	2308.3	1340.6	967.8	-0.0	-0.00
25YR-72HR	3.83	2483.1	1470.2	1012.9	0.0	0.00
25YR-72HR	3.92	2663.1	1604.7	1058.4	0.0	0.00
25YR-72HR	4.00	2848.5	1744.2	1104.3	0.0	0.00
25YR-72HR	4.08	3039.1	1889.0	1150.1	0.0	0.00
25YR-72HR	4.17	3234.7	2063.9	1170.8	0.0	0.00
25YR-72HR	4.25	3435.4	2222.7	1212.7	0.0	0.00
25YR-72HR	4.33	3640.9	2387.8	1253.1	0.0	0.00
25YR-72HR	4.42	3851.1	2559.6	1291.5	0.0	0.00
25YR-72HR	4.50	4066.1	2738.1	1328.0	0.0	0.00
25YR-72HR	4.58	4285.6	2922.6	1363.0	0.0	0.00
25YR-72HR	4.67	4509.6	3112.8	1396.7	0.0	0.00
25YR-72HR	4.75	4738.0	3308.1	1429.9	0.0	0.00
25YR-72HR	4.83	4970.7	3508.1	1462.6	-0.0	-0.00
25YR-72HR	4.92	5207.6	3712.5	1495.1	-0.0	-0.00
25YR-72HR	5.00	5448.6	3921.1	1527.4	-0.0	-0.00
25YR-72HR	5.08	5693.7	4133.9	1559.8	-0.0	-0.00
25YR-72HR	5.17	5942.6	4350.4	1592.2	0.0	0.00
25YR-72HR	5.25	6195.5	4570.9	1624.6	0.0	0.00
25YR-72HR	5.33	6452.2	4795.1	1657.1	0.0	0.00
25YR-72HR	5.42	6712.5	5022.7	1689.8	0.0	0.00
25YR-72HR	5.50	6976.5	5253.9	1722.6	0.0	0.00
25YR-72HR	5.58	7244.0	5488.6	1755.4	0.0	0.00
25YR-72HR	5.67	7515.0	5726.7	1788.3	0.0	0.00
25YR-72HR	5.75	7789.4	5968.0	1821.4	0.0	0.00
25YR-72HR	5.83	8067.1	6212.7	1854.4	0.0	0.00
25YR-72HR	5.92	8348.1	6460.5	1887.7	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	6.00	8632.4	6711.4	1921.0	0.0	0.00
25YR-72HR	6.08	8919.8	6965.3	1954.5	0.0	0.00
25YR-72HR	6.17	9210.2	7222.2	1988.1	0.0	0.00
25YR-72HR	6.25	9503.8	7481.9	2021.8	0.0	0.00
25YR-72HR	6.33	9800.3	7744.6	2055.6	-0.0	-0.00
25YR-72HR	6.42	10099.6	8010.4	2089.2	-0.0	-0.00
25YR-72HR	6.50	10401.9	8279.6	2122.4	-0.0	-0.00
25YR-72HR	6.58	10707.0	8552.7	2154.3	-0.0	-0.00
25YR-72HR	6.67	11014.8	8830.1	2184.7	-0.0	-0.00
25YR-72HR	6.75	11325.3	9111.5	2213.9	-0.0	-0.00
25YR-72HR	6.83	11638.5	9397.2	2241.3	-0.0	-0.00
25YR-72HR	6.92	11954.3	9688.4	2265.9	-0.0	-0.00
25YR-72HR	7.00	12272.7	9985.8	2286.8	-0.0	-0.00
25YR-72HR	7.08	12593.5	10290.0	2303.5	-0.0	-0.00
25YR-72HR	7.17	12916.8	10600.2	2316.6	-0.0	-0.00
25YR-72HR	7.25	13242.6	10915.4	2327.2	-0.0	-0.00
25YR-72HR	7.33	13570.7	11234.6	2336.1	-0.0	-0.00
25YR-72HR	7.42	13901.2	11557.1	2344.1	-0.0	-0.00
25YR-72HR	7.50	14233.9	11882.6	2351.3	-0.0	-0.00
25YR-72HR	7.58	14569.0	12210.7	2358.2	-0.0	-0.00
25YR-72HR	7.67	14906.2	12541.3	2364.8	-0.0	-0.00
25YR-72HR	7.75	15245.6	12874.3	2371.3	-0.0	-0.00
25YR-72HR	7.83	15587.2	13209.5	2377.6	-0.0	-0.00
25YR-72HR	7.92	15930.8	13546.8	2384.0	-0.0	-0.00
25YR-72HR	8.00	16276.6	13886.4	2390.2	-0.0	-0.00
25YR-72HR	8.08	16624.4	14228.1	2396.3	-0.0	-0.00
25YR-72HR	8.10	16694.2	14296.7	2397.5	-0.0	-0.00
25YR-72HR	8.12	16764.1	14365.4	2398.7	-0.0	-0.00
25YR-72HR	8.13	16834.0	14434.2	2399.9	-0.0	-0.00
25YR-72HR	8.15	16904.1	14503.0	2401.1	-0.0	-0.00
25YR-72HR	8.17	16974.2	14571.8	2402.4	-0.0	-0.00
25YR-72HR	8.18	17044.4	14640.9	2403.5	-0.0	-0.00
25YR-72HR	8.20	17114.7	14710.0	2404.7	-0.0	-0.00
25YR-72HR	8.22	17185.0	14779.2	2405.8	-0.0	-0.00
25YR-72HR	8.23	17255.5	14848.4	2407.1	-0.0	-0.00
25YR-72HR	8.25	17326.0	14917.8	2408.2	-0.0	-0.00
25YR-72HR	8.27	17396.6	14987.2	2409.4	-0.0	-0.00
25YR-72HR	8.28	17467.3	15056.7	2410.6	-0.0	-0.00
25YR-72HR	8.30	17538.0	15126.2	2411.8	-0.0	-0.00
25YR-72HR	8.32	17608.8	15195.8	2413.0	-0.0	-0.00
25YR-72HR	8.33	17679.7	15265.5	2414.2	-0.0	-0.00
25YR-72HR	8.35	17750.7	15335.3	2415.4	-0.0	-0.00
25YR-72HR	8.37	17821.7	15405.1	2416.6	-0.0	-0.00
25YR-72HR	8.38	17892.9	15475.0	2417.8	-0.0	-0.00
25YR-72HR	8.40	17964.1	15545.0	2419.0	-0.0	-0.00
25YR-72HR	8.42	18035.4	15615.1	2420.2	-0.0	-0.00
25YR-72HR	8.43	18106.7	15685.3	2421.4	-0.0	-0.00
25YR-72HR	8.45	18178.1	15755.6	2422.5	-0.0	-0.00
25YR-72HR	8.47	18249.6	15825.9	2423.7	-0.0	-0.00
25YR-72HR	8.48	18321.2	15896.4	2424.8	-0.0	-0.00
25YR-72HR	8.50	18392.9	15966.9	2426.0	-0.0	-0.00
25YR-72HR	8.52	18464.6	16037.5	2427.1	-0.0	-0.00
25YR-72HR	8.53	18536.4	16108.1	2428.3	-0.0	-0.00
25YR-72HR	8.55	18608.3	16178.9	2429.4	-0.0	-0.00
25YR-72HR	8.57	18680.2	16249.7	2430.5	-0.0	-0.00
25YR-72HR	8.58	18752.3	16320.6	2431.6	-0.0	-0.00
25YR-72HR	8.60	18824.4	16391.6	2432.8	-0.0	-0.00
25YR-72HR	8.62	18896.5	16462.7	2433.9	-0.0	-0.00
25YR-72HR	8.63	18968.8	16533.8	2435.0	-0.0	-0.00
25YR-72HR	8.65	19041.1	16605.0	2436.1	-0.0	-0.00
25YR-72HR	8.67	19113.4	16676.2	2437.2	-0.0	-0.00
25YR-72HR	8.68	19185.9	16747.6	2438.3	-0.0	-0.00
25YR-72HR	8.70	19258.4	16819.0	2439.4	-0.0	-0.00
25YR-72HR	8.72	19331.0	16890.5	2440.5	-0.0	-0.00
25YR-72HR	8.73	19403.7	16962.1	2441.6	-0.0	-0.00
25YR-72HR	8.75	19476.4	17033.7	2442.7	-0.0	-0.00
25YR-72HR	8.77	19549.2	17105.4	2443.8	-0.0	-0.00
25YR-72HR	8.78	19622.1	17177.3	2444.9	-0.0	-0.00
25YR-72HR	8.80	19695.1	17249.1	2446.0	-0.0	-0.00
25YR-72HR	8.82	19768.1	17321.0	2447.1	-0.0	-0.00
25YR-72HR	8.83	19841.2	17393.0	2448.2	-0.0	-0.00
25YR-72HR	8.85	19914.3	17465.0	2449.3	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	8.87	19987.6	17537.1	2450.4	-0.0	-0.00
25YR-72HR	8.88	20060.9	17609.3	2451.6	-0.0	-0.00
25YR-72HR	8.90	20134.2	17681.5	2452.7	-0.0	-0.00
25YR-72HR	8.92	20207.7	17753.9	2453.8	-0.0	-0.00
25YR-72HR	8.93	20281.2	17826.3	2454.9	-0.0	-0.00
25YR-72HR	8.95	20354.7	17898.8	2456.0	-0.0	-0.00
25YR-72HR	8.97	20428.4	17971.3	2457.1	-0.0	-0.00
25YR-72HR	8.98	20502.1	18044.0	2458.1	-0.0	-0.00
25YR-72HR	9.00	20575.9	18116.7	2459.2	-0.0	-0.00
25YR-72HR	9.02	20649.7	18189.5	2460.2	-0.0	-0.00
25YR-72HR	9.03	20723.6	18262.3	2461.3	-0.0	-0.00
25YR-72HR	9.05	20797.6	18335.2	2462.4	-0.0	-0.00
25YR-72HR	9.07	20871.6	18408.2	2463.5	0.0	0.00
25YR-72HR	9.08	20945.7	18481.2	2464.5	0.0	0.00
25YR-72HR	9.10	21019.9	18554.3	2465.6	0.0	0.00
25YR-72HR	9.12	21094.2	18627.5	2466.6	0.0	0.00
25YR-72HR	9.13	21168.5	18700.7	2467.7	0.0	0.00
25YR-72HR	9.15	21242.8	18774.0	2468.8	0.0	0.00
25YR-72HR	9.17	21317.3	18847.4	2469.8	0.0	0.00
25YR-72HR	9.18	21391.8	18920.9	2470.9	0.0	0.00
25YR-72HR	9.20	21466.3	18994.4	2471.9	0.0	0.00
25YR-72HR	9.22	21541.0	19068.0	2473.0	0.0	0.00
25YR-72HR	9.23	21615.7	19141.7	2474.0	0.0	0.00
25YR-72HR	9.25	21690.4	19215.4	2475.1	0.0	0.00
25YR-72HR	9.27	21765.3	19289.2	2476.1	0.0	0.00
25YR-72HR	9.28	21840.2	19363.0	2477.1	0.0	0.00
25YR-72HR	9.30	21915.1	19437.0	2478.1	0.0	0.00
25YR-72HR	9.32	21990.1	19511.0	2479.2	0.0	0.00
25YR-72HR	9.33	22065.2	19585.0	2480.2	0.0	0.00
25YR-72HR	9.35	22140.4	19659.1	2481.2	0.0	0.00
25YR-72HR	9.37	22215.6	19733.3	2482.2	0.0	0.00
25YR-72HR	9.38	22290.8	19807.6	2483.2	0.0	0.00
25YR-72HR	9.40	22366.2	19881.8	2484.3	0.0	0.00
25YR-72HR	9.42	22441.6	19956.2	2485.4	0.0	0.00
25YR-72HR	9.43	22517.0	20030.6	2486.4	0.0	0.00
25YR-72HR	9.45	22592.5	20105.0	2487.5	0.0	0.00
25YR-72HR	9.47	22668.1	20179.5	2488.6	0.0	0.00
25YR-72HR	9.48	22743.8	20254.2	2489.5	0.0	0.00
25YR-72HR	9.50	22819.5	20328.9	2490.6	0.0	0.00
25YR-72HR	9.52	22895.2	20403.7	2491.6	0.0	0.00
25YR-72HR	9.53	22971.1	20478.4	2492.6	0.0	0.00
25YR-72HR	9.55	23047.0	20553.4	2493.6	0.0	0.00
25YR-72HR	9.57	23122.9	20628.3	2494.6	0.0	0.00
25YR-72HR	9.58	23198.9	20703.3	2495.6	0.0	0.00
25YR-72HR	9.60	23275.0	20778.4	2496.6	0.0	0.00
25YR-72HR	9.62	23351.1	20853.5	2497.6	0.0	0.00
25YR-72HR	9.63	23427.3	20928.7	2498.6	0.0	0.00
25YR-72HR	9.65	23503.6	21004.0	2499.6	0.0	0.00
25YR-72HR	9.67	23579.9	21079.3	2500.6	0.0	0.00
25YR-72HR	9.68	23656.2	21154.7	2501.6	0.0	0.00
25YR-72HR	9.70	23732.7	21230.1	2502.5	0.0	0.00
25YR-72HR	9.72	23809.1	21305.6	2503.6	0.0	0.00
25YR-72HR	9.73	23885.7	21381.1	2504.6	0.0	0.00
25YR-72HR	9.75	23962.3	21456.7	2505.6	-0.0	-0.00
25YR-72HR	9.77	24039.0	21532.4	2506.6	-0.0	-0.00
25YR-72HR	9.78	24115.7	21608.2	2507.5	-0.0	-0.00
25YR-72HR	9.80	24192.5	21683.9	2508.5	-0.0	-0.00
25YR-72HR	9.82	24269.3	21759.8	2509.6	-0.0	-0.00
25YR-72HR	9.83	24346.2	21835.7	2510.6	-0.0	-0.00
25YR-72HR	9.85	24423.2	21911.7	2511.5	-0.0	-0.00
25YR-72HR	9.87	24500.2	21987.7	2512.5	-0.0	-0.00
25YR-72HR	9.88	24577.3	22063.8	2513.4	-0.0	-0.00
25YR-72HR	9.90	24654.4	22139.9	2514.4	-0.0	-0.00
25YR-72HR	9.92	24731.6	22216.2	2515.4	-0.0	-0.00
25YR-72HR	9.93	24808.8	22292.4	2516.4	-0.0	-0.00
25YR-72HR	9.95	24886.1	22368.8	2517.3	-0.0	-0.00
25YR-72HR	9.97	24963.5	22445.2	2518.3	-0.0	-0.00
25YR-72HR	9.98	25040.9	22521.6	2519.2	-0.0	-0.00
25YR-72HR	10.00	25118.3	22598.1	2520.2	-0.0	-0.00
25YR-72HR	10.02	25195.9	22674.7	2521.1	-0.0	-0.00
25YR-72HR	10.03	25273.4	22751.3	2522.1	-0.0	-0.00
25YR-72HR	10.05	25351.1	22828.0	2523.1	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	10.07	25428.8	22904.8	2524.0	-0.0	-0.00
25YR-72HR	10.08	25506.5	22981.5	2525.0	-0.0	-0.00
25YR-72HR	10.10	25584.3	23058.3	2526.0	-0.0	-0.00
25YR-72HR	10.12	25662.2	23135.3	2526.9	-0.0	-0.00
25YR-72HR	10.13	25740.1	23212.2	2527.9	-0.0	-0.00
25YR-72HR	10.15	25818.0	23289.2	2528.8	-0.0	-0.00
25YR-72HR	10.17	25896.1	23366.3	2529.8	0.0	0.00
25YR-72HR	10.18	25974.1	23443.5	2530.7	0.0	0.00
25YR-72HR	10.20	26052.3	23520.6	2531.7	0.0	0.00
25YR-72HR	10.22	26130.5	23597.9	2532.6	0.0	0.00
25YR-72HR	10.23	26208.7	23675.2	2533.5	0.0	0.00
25YR-72HR	10.25	26287.0	23752.5	2534.5	0.0	0.00
25YR-72HR	10.27	26365.3	23829.9	2535.4	0.0	0.00
25YR-72HR	10.28	26443.7	23907.4	2536.4	0.0	0.00
25YR-72HR	10.30	26522.2	23984.9	2537.3	-0.0	-0.00
25YR-72HR	10.32	26600.7	24062.5	2538.2	-0.0	-0.00
25YR-72HR	10.33	26679.3	24140.1	2539.1	-0.0	-0.00
25YR-72HR	10.35	26757.9	24217.8	2540.1	-0.0	-0.00
25YR-72HR	10.37	26836.5	24295.6	2541.0	-0.0	-0.00
25YR-72HR	10.38	26915.2	24373.3	2541.9	-0.0	-0.00
25YR-72HR	10.40	26994.0	24451.2	2542.8	-0.0	-0.00
25YR-72HR	10.42	27072.8	24529.1	2543.8	-0.0	-0.00
25YR-72HR	10.43	27151.7	24607.0	2544.7	-0.0	-0.00
25YR-72HR	10.45	27230.6	24685.0	2545.6	-0.0	-0.00
25YR-72HR	10.47	27309.6	24763.1	2546.5	-0.0	-0.00
25YR-72HR	10.48	27388.6	24841.2	2547.4	-0.0	-0.00
25YR-72HR	10.50	27467.7	24919.3	2548.4	-0.0	-0.00
25YR-72HR	10.52	27546.9	24997.5	2549.4	-0.0	-0.00
25YR-72HR	10.53	27626.1	25075.8	2550.2	-0.0	-0.00
25YR-72HR	10.55	27705.3	25154.1	2551.2	-0.0	-0.00
25YR-72HR	10.57	27784.6	25232.5	2552.1	-0.0	-0.00
25YR-72HR	10.58	27863.9	25310.9	2553.0	-0.0	-0.00
25YR-72HR	10.60	27943.3	25389.4	2553.9	-0.0	-0.00
25YR-72HR	10.62	28022.7	25467.9	2554.8	-0.0	-0.00
25YR-72HR	10.63	28102.2	25546.5	2555.7	-0.0	-0.00
25YR-72HR	10.65	28181.8	25625.1	2556.6	-0.0	-0.00
25YR-72HR	10.67	28261.3	25703.8	2557.5	-0.0	-0.00
25YR-72HR	10.68	28341.0	25782.6	2558.4	-0.0	-0.00
25YR-72HR	10.70	28420.7	25861.3	2559.3	-0.0	-0.00
25YR-72HR	10.72	28500.4	25940.2	2560.2	-0.0	-0.00
25YR-72HR	10.73	28580.2	26019.1	2561.1	-0.0	-0.00
25YR-72HR	10.75	28660.0	26098.0	2562.0	-0.0	-0.00
25YR-72HR	10.77	28739.9	26177.0	2562.9	-0.0	-0.00
25YR-72HR	10.78	28819.9	26256.1	2563.8	-0.0	-0.00
25YR-72HR	10.80	28899.9	26335.1	2564.7	-0.0	-0.00
25YR-72HR	10.82	28979.9	26414.3	2565.6	-0.0	-0.00
25YR-72HR	10.83	29060.0	26493.4	2566.5	-0.0	-0.00
25YR-72HR	10.85	29140.1	26572.7	2567.4	-0.0	-0.00
25YR-72HR	10.87	29220.3	26651.9	2568.3	-0.0	-0.00
25YR-72HR	10.88	29300.5	26731.3	2569.2	-0.0	-0.00
25YR-72HR	10.90	29380.8	26810.7	2570.1	-0.0	-0.00
25YR-72HR	10.92	29461.1	26890.1	2571.0	-0.0	-0.00
25YR-72HR	10.93	29541.5	26969.6	2571.9	-0.0	-0.00
25YR-72HR	10.95	29621.9	27049.1	2572.8	-0.0	-0.00
25YR-72HR	10.97	29702.4	27128.7	2573.7	-0.0	-0.00
25YR-72HR	10.98	29782.9	27208.3	2574.6	-0.0	-0.00
25YR-72HR	11.00	29863.5	27288.0	2575.5	-0.0	-0.00
25YR-72HR	11.02	29944.1	27367.7	2576.3	-0.0	-0.00
25YR-72HR	11.03	30024.7	27447.5	2577.2	-0.0	-0.00
25YR-72HR	11.05	30105.4	27527.4	2578.1	-0.0	-0.00
25YR-72HR	11.07	30186.2	27607.2	2579.0	-0.0	-0.00
25YR-72HR	11.08	30267.0	27687.2	2579.8	-0.0	-0.00
25YR-72HR	11.10	30347.8	27767.1	2580.7	-0.0	-0.00
25YR-72HR	11.12	30428.7	27847.2	2581.6	-0.0	-0.00
25YR-72HR	11.13	30509.7	27927.2	2582.5	-0.0	-0.00
25YR-72HR	11.15	30590.6	28007.3	2583.3	-0.0	-0.00
25YR-72HR	11.17	30671.7	28087.5	2584.2	-0.0	-0.00
25YR-72HR	11.18	30752.7	28167.7	2585.0	-0.0	-0.00
25YR-72HR	11.20	30833.9	28248.0	2585.9	0.0	0.00
25YR-72HR	11.22	30915.0	28328.3	2586.8	0.0	0.00
25YR-72HR	11.23	30996.2	28408.6	2587.6	0.0	0.00
25YR-72HR	11.25	31077.5	28489.0	2588.5	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	11.27	31158.8	28569.4	2589.5	0.0	0.00
25YR-72HR	11.28	31240.2	28649.9	2590.3	0.0	0.00
25YR-72HR	11.30	31321.6	28730.4	2591.2	0.0	0.00
25YR-72HR	11.32	31403.0	28811.0	2592.0	0.0	0.00
25YR-72HR	11.33	31484.5	28891.6	2592.9	0.0	0.00
25YR-72HR	11.35	31566.0	28972.3	2593.7	0.0	0.00
25YR-72HR	11.37	31647.6	29053.0	2594.6	0.0	0.00
25YR-72HR	11.38	31729.2	29133.8	2595.4	0.0	0.00
25YR-72HR	11.40	31810.9	29214.6	2596.3	0.0	0.00
25YR-72HR	11.42	31892.6	29295.4	2597.1	0.0	0.00
25YR-72HR	11.43	31974.3	29376.4	2598.0	0.0	0.00
25YR-72HR	11.45	32056.1	29457.3	2598.9	0.0	0.00
25YR-72HR	11.47	32138.0	29538.3	2599.7	0.0	0.00
25YR-72HR	11.48	32219.9	29619.3	2600.6	0.0	0.00
25YR-72HR	11.50	32301.8	29700.4	2601.3	0.0	0.00
25YR-72HR	11.52	32383.8	29781.5	2602.2	0.0	0.00
25YR-72HR	11.53	32465.8	29862.8	2603.0	0.0	0.00
25YR-72HR	11.55	32547.8	29944.0	2603.9	0.0	0.00
25YR-72HR	11.57	32629.9	30025.2	2604.7	0.0	0.00
25YR-72HR	11.58	32712.1	30106.5	2605.6	0.0	0.00
25YR-72HR	11.60	32794.3	30187.9	2606.4	0.0	0.00
25YR-72HR	11.62	32876.5	30269.3	2607.2	0.0	0.00
25YR-72HR	11.63	32958.8	30350.7	2608.1	0.0	0.00
25YR-72HR	11.65	33041.1	30432.2	2608.9	0.0	0.00
25YR-72HR	11.67	33123.5	30513.7	2609.8	0.0	0.00
25YR-72HR	11.68	33205.9	30595.3	2610.6	0.0	0.00
25YR-72HR	11.70	33288.3	30676.9	2611.5	0.0	0.00
25YR-72HR	11.72	33370.8	30758.6	2612.2	0.0	0.00
25YR-72HR	11.73	33453.4	30840.2	2613.1	0.0	0.00
25YR-72HR	11.75	33535.9	30922.0	2613.9	0.0	0.00
25YR-72HR	11.77	33618.5	31003.8	2614.8	0.0	0.00
25YR-72HR	11.78	33701.2	31085.6	2615.6	0.0	0.00
25YR-72HR	11.80	33783.9	31167.5	2616.4	0.0	0.00
25YR-72HR	11.82	33866.7	31249.4	2617.3	0.0	0.00
25YR-72HR	11.83	33949.4	31331.4	2618.1	0.0	0.00
25YR-72HR	11.85	34032.3	31413.3	2618.9	0.0	0.00
25YR-72HR	11.87	34115.1	31495.4	2619.7	0.0	0.00
25YR-72HR	11.88	34198.0	31577.5	2620.6	0.0	0.00
25YR-72HR	11.90	34281.0	31659.6	2621.3	0.0	0.00
25YR-72HR	11.92	34364.0	31741.8	2622.2	0.0	0.00
25YR-72HR	11.93	34447.0	31824.0	2623.0	0.0	0.00
25YR-72HR	11.95	34530.1	31906.2	2623.8	0.0	0.00
25YR-72HR	11.97	34613.2	31988.6	2624.6	0.0	0.00
25YR-72HR	11.98	34696.4	32070.9	2625.5	0.0	0.00
25YR-72HR	12.00	34779.6	32153.3	2626.3	0.0	0.00
25YR-72HR	12.02	34862.8	32235.7	2627.1	0.0	0.00
25YR-72HR	12.03	34946.1	32318.2	2627.9	0.0	0.00
25YR-72HR	12.05	35029.4	32400.7	2628.7	0.0	0.00
25YR-72HR	12.07	35112.8	32483.2	2629.5	0.0	0.00
25YR-72HR	12.08	35196.2	32565.8	2630.3	0.0	0.00
25YR-72HR	12.10	35279.6	32648.4	2631.2	0.0	0.00
25YR-72HR	12.12	35363.1	32731.1	2631.9	0.0	0.00
25YR-72HR	12.13	35446.6	32813.8	2632.8	0.0	0.00
25YR-72HR	12.15	35530.1	32896.6	2633.6	0.0	0.00
25YR-72HR	12.17	35613.7	32979.4	2634.4	0.0	0.00
25YR-72HR	12.18	35697.4	33062.2	2635.2	0.0	0.00
25YR-72HR	12.20	35781.1	33145.1	2636.0	0.0	0.00
25YR-72HR	12.22	35864.8	33228.0	2636.8	0.0	0.00
25YR-72HR	12.23	35948.5	33311.0	2637.6	0.0	0.00
25YR-72HR	12.25	36032.3	33393.9	2638.4	0.0	0.00
25YR-72HR	12.27	36116.2	33477.0	2639.2	0.0	0.00
25YR-72HR	12.28	36200.0	33560.0	2640.0	0.0	0.00
25YR-72HR	12.30	36284.0	33643.2	2640.8	0.0	0.00
25YR-72HR	12.32	36367.9	33726.3	2641.6	0.0	0.00
25YR-72HR	12.33	36451.9	33809.5	2642.4	0.0	0.00
25YR-72HR	12.35	36535.9	33892.7	2643.2	0.0	0.00
25YR-72HR	12.37	36620.0	33976.0	2644.0	-0.0	-0.00
25YR-72HR	12.38	36704.1	34059.3	2644.8	-0.0	-0.00
25YR-72HR	12.40	36788.2	34142.6	2645.6	-0.0	-0.00
25YR-72HR	12.42	36872.4	34226.0	2646.4	-0.0	-0.00
25YR-72HR	12.43	36956.6	34309.4	2647.2	-0.0	-0.00
25YR-72HR	12.45	37040.9	34392.9	2648.0	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	12.47	37125.2	34476.4	2648.8	-0.0	-0.00
25YR-72HR	12.48	37209.5	34560.0	2649.6	-0.0	-0.00
25YR-72HR	12.50	37293.9	34643.5	2650.4	-0.0	-0.00
25YR-72HR	12.52	37378.3	34727.2	2651.2	-0.0	-0.00
25YR-72HR	12.53	37462.8	34810.8	2652.0	-0.0	-0.00
25YR-72HR	12.55	37547.2	34894.5	2652.7	-0.0	-0.00
25YR-72HR	12.57	37631.8	34978.2	2653.6	0.0	0.00
25YR-72HR	12.58	37716.3	35062.0	2654.3	0.0	0.00
25YR-72HR	12.60	37800.9	35145.8	2655.1	0.0	0.00
25YR-72HR	12.62	37885.5	35229.6	2655.9	0.0	0.00
25YR-72HR	12.63	37970.2	35313.5	2656.7	0.0	0.00
25YR-72HR	12.65	38054.9	35397.4	2657.5	0.0	0.00
25YR-72HR	12.67	38139.7	35481.4	2658.2	0.0	0.00
25YR-72HR	12.68	38224.4	35565.4	2659.1	0.0	0.00
25YR-72HR	12.70	38309.3	35649.5	2659.8	0.0	0.00
25YR-72HR	12.72	38394.1	35733.5	2660.6	0.0	0.00
25YR-72HR	12.73	38479.0	35817.6	2661.4	0.0	0.00
25YR-72HR	12.75	38563.9	35901.7	2662.2	0.0	0.00
25YR-72HR	12.77	38648.9	35985.9	2662.9	0.0	0.00
25YR-72HR	12.78	38733.9	36070.2	2663.7	0.0	0.00
25YR-72HR	12.80	38818.9	36154.4	2664.5	0.0	0.00
25YR-72HR	12.82	38904.0	36238.7	2665.3	0.0	0.00
25YR-72HR	12.83	38989.1	36323.0	2666.1	0.0	0.00
25YR-72HR	12.85	39074.2	36407.4	2666.8	0.0	0.00
25YR-72HR	12.87	39159.4	36491.8	2667.6	0.0	0.00
25YR-72HR	12.88	39244.6	36576.3	2668.4	0.0	0.00
25YR-72HR	12.90	39329.9	36660.7	2669.2	0.0	0.00
25YR-72HR	12.92	39415.2	36745.2	2669.9	0.0	0.00
25YR-72HR	12.93	39500.5	36829.8	2670.7	0.0	0.00
25YR-72HR	12.95	39585.8	36914.4	2671.5	0.0	0.00
25YR-72HR	12.97	39671.2	36999.0	2672.2	0.0	0.00
25YR-72HR	12.98	39756.7	37083.6	2673.0	0.0	0.00
25YR-72HR	13.00	39842.1	37168.4	2673.8	0.0	0.00
25YR-72HR	13.02	39927.6	37253.0	2674.6	0.0	0.00
25YR-72HR	13.03	40013.1	37337.8	2675.3	0.0	0.00
25YR-72HR	13.05	40098.7	37422.6	2676.1	0.0	0.00
25YR-72HR	13.07	40184.3	37507.5	2676.8	0.0	0.00
25YR-72HR	13.08	40269.9	37592.3	2677.6	0.0	0.00
25YR-72HR	13.10	40355.6	37677.3	2678.4	0.0	0.00
25YR-72HR	13.12	40441.3	37762.2	2679.2	0.0	0.00
25YR-72HR	13.13	40527.1	37847.1	2679.9	0.0	0.00
25YR-72HR	13.15	40612.8	37932.2	2680.7	0.0	0.00
25YR-72HR	13.17	40698.6	38017.2	2681.4	0.0	0.00
25YR-72HR	13.18	40784.5	38102.3	2682.2	0.0	0.00
25YR-72HR	13.20	40870.3	38187.4	2683.0	0.0	0.00
25YR-72HR	13.22	40956.3	38272.6	2683.7	0.0	0.00
25YR-72HR	13.23	41042.2	38357.7	2684.5	0.0	0.00
25YR-72HR	13.25	41128.2	38443.0	2685.2	0.0	0.00
25YR-72HR	13.27	41214.2	38528.2	2686.0	0.0	0.00
25YR-72HR	13.28	41300.2	38613.5	2686.7	0.0	0.00
25YR-72HR	13.30	41386.3	38698.8	2687.5	0.0	0.00
25YR-72HR	13.32	41472.4	38784.2	2688.3	0.0	0.00
25YR-72HR	13.33	41558.6	38869.5	2689.0	0.0	0.00
25YR-72HR	13.35	41644.7	38954.9	2689.8	0.0	0.00
25YR-72HR	13.37	41730.9	39040.4	2690.5	0.0	0.00
25YR-72HR	13.38	41817.2	39125.9	2691.3	0.0	0.00
25YR-72HR	13.40	41903.5	39211.4	2692.0	0.0	0.00
25YR-72HR	13.42	41989.8	39297.0	2692.8	0.0	0.00
25YR-72HR	13.43	42076.1	39382.6	2693.5	0.0	0.00
25YR-72HR	13.45	42162.5	39468.2	2694.3	0.0	0.00
25YR-72HR	13.47	42248.9	39553.9	2695.0	0.0	0.00
25YR-72HR	13.48	42335.3	39639.5	2695.8	0.0	0.00
25YR-72HR	13.50	42421.8	39725.3	2696.5	0.0	0.00
25YR-72HR	13.52	42508.3	39811.0	2697.3	0.0	0.00
25YR-72HR	13.53	42594.8	39896.8	2698.0	0.0	0.00
25YR-72HR	13.55	42681.4	39982.7	2698.7	0.0	0.00
25YR-72HR	13.57	42768.0	40068.5	2699.5	0.0	0.00
25YR-72HR	13.58	42854.7	40154.4	2700.2	0.0	0.00
25YR-72HR	13.60	42941.3	40240.3	2701.0	0.0	0.00
25YR-72HR	13.62	43028.0	40326.3	2701.7	0.0	0.00
25YR-72HR	13.63	43114.7	40412.2	2702.5	0.0	0.00
25YR-72HR	13.65	43201.5	40498.3	2703.2	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	13.67	43288.3	40584.3	2704.0	0.0	0.00
25YR-72HR	13.68	43375.1	40670.4	2704.7	0.0	0.00
25YR-72HR	13.70	43462.0	40756.5	2705.4	0.0	0.00
25YR-72HR	13.72	43548.9	40842.7	2706.2	0.0	0.00
25YR-72HR	13.73	43635.8	40928.9	2706.9	0.0	0.00
25YR-72HR	13.75	43722.7	41015.0	2707.7	0.0	0.00
25YR-72HR	13.77	43809.7	41101.3	2708.4	0.0	0.00
25YR-72HR	13.78	43896.7	41187.6	2709.2	0.0	0.00
25YR-72HR	13.80	43983.8	41273.9	2709.9	0.0	0.00
25YR-72HR	13.82	44070.9	41360.2	2710.6	0.0	0.00
25YR-72HR	13.83	44158.0	41446.6	2711.3	0.0	0.00
25YR-72HR	13.85	44245.1	41533.0	2712.1	0.0	0.00
25YR-72HR	13.87	44332.3	41619.5	2712.8	0.0	0.00
25YR-72HR	13.88	44419.5	41706.0	2713.5	0.0	0.00
25YR-72HR	13.90	44506.7	41792.4	2714.3	0.0	0.00
25YR-72HR	13.92	44594.0	41879.0	2715.0	0.0	0.00
25YR-72HR	13.93	44681.3	41965.5	2715.8	0.0	0.00
25YR-72HR	13.95	44768.6	42052.1	2716.4	0.0	0.00
25YR-72HR	13.97	44855.9	42138.7	2717.2	0.0	0.00
25YR-72HR	13.98	44943.3	42225.4	2717.9	0.0	0.00
25YR-72HR	14.00	45030.7	42312.1	2718.6	0.0	0.00
25YR-72HR	14.02	45118.2	42398.8	2719.4	0.0	0.00
25YR-72HR	14.03	45205.7	42485.6	2720.1	0.0	0.00
25YR-72HR	14.05	45293.2	42572.3	2720.8	0.0	0.00
25YR-72HR	14.07	45380.7	42659.2	2721.5	0.0	0.00
25YR-72HR	14.08	45468.3	42745.9	2722.3	0.0	0.00
25YR-72HR	14.10	45555.9	42832.9	2723.0	-0.0	-0.00
25YR-72HR	14.12	45643.5	42919.7	2723.8	-0.0	-0.00
25YR-72HR	14.13	45731.1	43006.7	2724.4	-0.0	-0.00
25YR-72HR	14.15	45818.8	43093.6	2725.2	-0.0	-0.00
25YR-72HR	14.17	45906.5	43180.6	2725.9	-0.0	-0.00
25YR-72HR	14.18	45994.3	43267.7	2726.6	-0.0	-0.00
25YR-72HR	14.20	46082.0	43354.7	2727.4	-0.0	-0.00
25YR-72HR	14.22	46169.8	43441.8	2728.0	-0.0	-0.00
25YR-72HR	14.23	46257.7	43528.9	2728.8	-0.0	-0.00
25YR-72HR	14.25	46345.5	43616.1	2729.5	-0.0	-0.00
25YR-72HR	14.27	46433.4	43703.2	2730.3	-0.0	-0.00
25YR-72HR	14.28	46521.4	43790.4	2730.9	-0.0	-0.00
25YR-72HR	14.30	46609.3	43877.6	2731.7	-0.0	-0.00
25YR-72HR	14.32	46697.3	43964.9	2732.4	-0.0	-0.00
25YR-72HR	14.33	46785.3	44052.2	2733.1	-0.0	-0.00
25YR-72HR	14.35	46873.3	44139.5	2733.8	-0.0	-0.00
25YR-72HR	14.37	46961.4	44226.9	2734.5	-0.0	-0.00
25YR-72HR	14.38	47049.5	44314.2	2735.3	-0.0	-0.00
25YR-72HR	14.40	47137.6	44401.7	2735.9	-0.0	-0.00
25YR-72HR	14.42	47225.7	44489.0	2736.7	-0.0	-0.00
25YR-72HR	14.43	47313.9	44576.6	2737.4	-0.0	-0.00
25YR-72HR	14.45	47402.1	44664.0	2738.1	-0.0	-0.00
25YR-72HR	14.47	47490.4	44751.6	2738.8	-0.0	-0.00
25YR-72HR	14.48	47578.6	44839.1	2739.5	-0.0	-0.00
25YR-72HR	14.50	47666.9	44926.7	2740.2	-0.0	-0.00
25YR-72HR	14.52	47755.2	45014.3	2740.9	-0.0	-0.00
25YR-72HR	14.53	47843.6	45101.9	2741.7	-0.0	-0.00
25YR-72HR	14.55	47932.0	45189.6	2742.3	-0.0	-0.00
25YR-72HR	14.57	48020.4	45277.3	2743.1	-0.0	-0.00
25YR-72HR	14.58	48108.8	45365.1	2743.8	-0.0	-0.00
25YR-72HR	14.60	48197.3	45452.8	2744.5	-0.0	-0.00
25YR-72HR	14.62	48285.8	45540.6	2745.2	-0.0	-0.00
25YR-72HR	14.63	48374.3	45628.4	2745.9	-0.0	-0.00
25YR-72HR	14.65	48462.8	45716.2	2746.6	-0.0	-0.00
25YR-72HR	14.67	48551.4	45804.1	2747.3	-0.0	-0.00
25YR-72HR	14.68	48640.0	45891.9	2748.1	-0.0	-0.00
25YR-72HR	14.70	48728.6	45979.9	2748.7	-0.0	-0.00
25YR-72HR	14.72	48817.3	46067.8	2749.5	-0.0	-0.00
25YR-72HR	14.73	48906.0	46155.8	2750.1	-0.0	-0.00
25YR-72HR	14.75	48994.7	46243.8	2750.9	-0.0	-0.00
25YR-72HR	14.77	49083.4	46331.9	2751.6	-0.0	-0.00
25YR-72HR	14.78	49172.2	46419.9	2752.3	-0.0	-0.00
25YR-72HR	14.80	49261.0	46508.0	2753.0	-0.0	-0.00
25YR-72HR	14.82	49349.8	46596.1	2753.7	-0.0	-0.00
25YR-72HR	14.83	49438.6	46684.2	2754.4	-0.0	-0.00
25YR-72HR	14.85	49527.5	46772.4	2755.1	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	14.87	49616.4	46860.6	2755.8	-0.0	-0.00
25YR-72HR	14.88	49705.3	46948.9	2756.5	-0.0	-0.00
25YR-72HR	14.90	49794.3	47037.1	2757.2	-0.0	-0.00
25YR-72HR	14.92	49883.3	47125.4	2757.9	-0.0	-0.00
25YR-72HR	14.93	49972.3	47213.7	2758.6	-0.0	-0.00
25YR-72HR	14.95	50061.3	47302.0	2759.3	-0.0	-0.00
25YR-72HR	14.97	50150.4	47390.4	2760.0	-0.0	-0.00
25YR-72HR	14.98	50239.5	47478.8	2760.7	-0.0	-0.00
25YR-72HR	15.00	50328.6	47567.2	2761.4	-0.0	-0.00
25YR-72HR	15.02	50417.7	47655.6	2762.1	-0.0	-0.00
25YR-72HR	15.03	50506.9	47744.1	2762.7	-0.0	-0.00
25YR-72HR	15.05	50596.1	47832.6	2763.5	-0.0	-0.00
25YR-72HR	15.07	50685.3	47921.1	2764.1	-0.0	-0.00
25YR-72HR	15.08	50774.5	48009.7	2764.9	-0.0	-0.00
25YR-72HR	15.10	50863.8	48098.3	2765.5	-0.0	-0.00
25YR-72HR	15.12	50953.1	48186.9	2766.2	-0.0	-0.00
25YR-72HR	15.13	51042.4	48275.5	2766.9	-0.0	-0.00
25YR-72HR	15.15	51131.8	48364.2	2767.6	-0.0	-0.00
25YR-72HR	15.17	51221.1	48452.8	2768.3	-0.0	-0.00
25YR-72HR	15.18	51310.5	48541.6	2769.0	-0.0	-0.00
25YR-72HR	15.20	51400.0	48630.2	2769.7	-0.0	-0.00
25YR-72HR	15.22	51489.4	48719.1	2770.4	-0.0	-0.00
25YR-72HR	15.23	51578.9	48807.8	2771.1	-0.0	-0.00
25YR-72HR	15.25	51668.4	48896.6	2771.8	-0.0	-0.00
25YR-72HR	15.27	51757.9	48985.4	2772.5	-0.0	-0.00
25YR-72HR	15.28	51847.5	49074.3	2773.2	-0.0	-0.00
25YR-72HR	15.30	51937.1	49163.2	2773.9	-0.0	-0.00
25YR-72HR	15.32	52026.7	49252.1	2774.6	-0.0	-0.00
25YR-72HR	15.33	52116.3	49341.1	2775.2	-0.0	-0.00
25YR-72HR	15.35	52206.0	49430.0	2776.0	-0.0	-0.00
25YR-72HR	15.37	52295.6	49519.0	2776.6	-0.0	-0.00
25YR-72HR	15.38	52385.3	49608.0	2777.4	-0.0	-0.00
25YR-72HR	15.40	52475.1	49697.1	2778.0	-0.0	-0.00
25YR-72HR	15.42	52564.8	49786.1	2778.7	-0.0	-0.00
25YR-72HR	15.43	52654.6	49875.2	2779.4	-0.0	-0.00
25YR-72HR	15.45	52744.4	49964.4	2780.1	-0.0	-0.00
25YR-72HR	15.47	52834.3	50053.5	2780.8	-0.0	-0.00
25YR-72HR	15.48	52924.1	50142.7	2781.4	-0.0	-0.00
25YR-72HR	15.50	53014.0	50231.8	2782.2	-0.0	-0.00
25YR-72HR	15.52	53103.9	50321.1	2782.8	-0.0	-0.00
25YR-72HR	15.53	53193.8	50410.3	2783.6	-0.0	-0.00
25YR-72HR	15.55	53283.8	50499.6	2784.2	-0.0	-0.00
25YR-72HR	15.57	53373.8	50588.9	2784.9	-0.0	-0.00
25YR-72HR	15.58	53463.8	50678.2	2785.6	-0.0	-0.00
25YR-72HR	15.60	53553.8	50767.5	2786.3	-0.0	-0.00
25YR-72HR	15.62	53643.9	50856.9	2787.0	-0.0	-0.00
25YR-72HR	15.63	53733.9	50946.3	2787.6	-0.0	-0.00
25YR-72HR	15.65	53824.0	51035.7	2788.4	-0.0	-0.00
25YR-72HR	15.67	53914.2	51125.2	2789.0	-0.0	-0.00
25YR-72HR	15.68	54004.3	51214.6	2789.7	-0.0	-0.00
25YR-72HR	15.70	54094.5	51304.1	2790.4	-0.0	-0.00
25YR-72HR	15.72	54184.7	51393.6	2791.1	-0.0	-0.00
25YR-72HR	15.73	54274.9	51483.1	2791.8	-0.0	-0.00
25YR-72HR	15.75	54365.2	51572.7	2792.4	-0.0	-0.00
25YR-72HR	15.77	54455.4	51662.3	2793.1	-0.0	-0.00
25YR-72HR	15.78	54545.7	51751.9	2793.8	-0.0	-0.00
25YR-72HR	15.80	54636.0	51841.5	2794.5	-0.0	-0.00
25YR-72HR	15.82	54726.4	51931.2	2795.1	-0.0	-0.00
25YR-72HR	15.83	54816.7	52020.9	2795.9	-0.0	-0.00
25YR-72HR	15.85	54907.1	52110.6	2796.5	-0.0	-0.00
25YR-72HR	15.87	54997.6	52200.3	2797.2	-0.0	-0.00
25YR-72HR	15.88	55088.0	52290.1	2797.9	-0.0	-0.00
25YR-72HR	15.90	55178.4	52379.9	2798.6	-0.0	-0.00
25YR-72HR	15.92	55268.9	52469.6	2799.3	-0.0	-0.00
25YR-72HR	15.93	55359.4	52559.5	2799.9	-0.0	-0.00
25YR-72HR	15.95	55450.0	52649.3	2800.7	-0.0	-0.00
25YR-72HR	15.97	55540.5	52739.2	2801.3	-0.0	-0.00
25YR-72HR	15.98	55631.1	52829.1	2802.0	-0.0	-0.00
25YR-72HR	16.00	55721.7	52919.0	2802.7	-0.0	-0.00
25YR-72HR	16.08	56175.1	53369.0	2806.1	-0.0	-0.00
25YR-72HR	16.17	56629.0	53819.5	2809.5	-0.0	-0.00
25YR-72HR	16.25	57083.5	54270.6	2812.9	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	16.33	57538.5	54722.2	2816.3	-0.0	-0.00
25YR-72HR	16.42	57994.1	55174.5	2819.6	-0.0	-0.00
25YR-72HR	16.50	58450.3	55627.4	2823.0	-0.0	-0.00
25YR-72HR	16.58	58907.0	56080.7	2826.3	-0.0	-0.00
25YR-72HR	16.67	59364.3	56534.6	2829.6	-0.0	-0.00
25YR-72HR	16.75	59822.1	56989.1	2832.9	-0.0	-0.00
25YR-72HR	16.83	60280.4	57444.2	2836.2	-0.0	-0.00
25YR-72HR	16.92	60739.2	57899.7	2839.5	-0.0	-0.00
25YR-72HR	17.00	61198.5	58355.7	2842.9	-0.0	-0.00
25YR-72HR	17.08	61658.4	58812.3	2846.1	-0.0	-0.00
25YR-72HR	17.17	62118.8	59269.4	2849.4	-0.0	-0.00
25YR-72HR	17.25	62579.7	59727.0	2852.7	-0.0	-0.00
25YR-72HR	17.33	63041.0	60185.1	2855.9	-0.0	-0.00
25YR-72HR	17.42	63502.9	60643.7	2859.2	-0.0	-0.00
25YR-72HR	17.50	63965.3	61102.8	2862.4	-0.0	-0.00
25YR-72HR	17.58	64428.1	61562.4	2865.7	-0.0	-0.00
25YR-72HR	17.67	64891.4	62022.5	2868.9	-0.0	-0.00
25YR-72HR	17.75	65355.2	62483.1	2872.1	-0.0	-0.00
25YR-72HR	17.83	65819.4	62944.2	2875.3	-0.0	-0.00
25YR-72HR	17.92	66284.2	63405.7	2878.5	-0.0	-0.00
25YR-72HR	18.00	66749.3	63867.7	2881.7	-0.0	-0.00
25YR-72HR	18.08	67215.0	64330.2	2884.8	-0.0	-0.00
25YR-72HR	18.17	67681.1	64793.1	2888.0	-0.0	-0.00
25YR-72HR	18.25	68147.6	65256.5	2891.1	-0.0	-0.00
25YR-72HR	18.33	68614.6	65720.2	2894.4	-0.0	-0.00
25YR-72HR	18.42	69082.0	66184.5	2897.5	-0.0	-0.00
25YR-72HR	18.50	69549.8	66649.2	2900.7	-0.0	-0.00
25YR-72HR	18.58	70018.1	67114.3	2903.8	-0.0	-0.00
25YR-72HR	18.67	70486.8	67579.8	2907.0	-0.0	-0.00
25YR-72HR	18.75	70955.9	68045.8	2910.2	-0.0	-0.00
25YR-72HR	18.83	71425.5	68512.2	2913.3	-0.0	-0.00
25YR-72HR	18.92	71895.4	68979.1	2916.3	-0.0	-0.00
25YR-72HR	19.00	72365.8	69446.3	2919.5	-0.0	-0.00
25YR-72HR	19.08	72836.6	69913.9	2922.7	-0.0	-0.00
25YR-72HR	19.17	73307.8	70382.0	2925.8	-0.0	-0.00
25YR-72HR	19.25	73779.3	70850.3	2929.0	-0.0	-0.00
25YR-72HR	19.33	74251.3	71319.2	2932.1	-0.0	-0.00
25YR-72HR	19.42	74723.7	71788.5	2935.1	-0.0	-0.00
25YR-72HR	19.50	75196.4	72258.2	2938.2	-0.0	-0.00
25YR-72HR	19.58	75669.6	72728.3	2941.3	-0.0	-0.00
25YR-72HR	19.67	76143.1	73198.6	2944.5	-0.0	-0.00
25YR-72HR	19.75	76617.0	73669.4	2947.6	-0.0	-0.00
25YR-72HR	19.83	77091.3	74140.6	2950.7	-0.0	-0.00
25YR-72HR	19.92	77565.9	74612.2	2953.7	-0.0	-0.00
25YR-72HR	20.00	78040.9	75084.1	2956.8	-0.0	-0.00
25YR-72HR	20.08	78516.3	75556.4	2959.8	-0.0	-0.00
25YR-72HR	20.17	78992.0	76029.2	2962.8	-0.0	-0.00
25YR-72HR	20.25	79468.1	76502.3	2965.8	-0.0	-0.00
25YR-72HR	20.33	79944.6	76975.7	2968.9	-0.0	-0.00
25YR-72HR	20.42	80421.3	77449.4	2971.9	-0.0	-0.00
25YR-72HR	20.50	80898.5	77923.5	2975.0	-0.0	-0.00
25YR-72HR	20.58	81376.0	78398.0	2978.0	-0.0	-0.00
25YR-72HR	20.67	81853.8	78872.8	2981.0	-0.0	-0.00
25YR-72HR	20.75	82332.0	79347.7	2984.3	-0.0	-0.00
25YR-72HR	20.83	82810.5	79823.1	2987.5	-0.0	-0.00
25YR-72HR	20.92	83289.4	80298.9	2990.5	-0.0	-0.00
25YR-72HR	21.00	83768.6	80775.0	2993.6	-0.0	-0.00
25YR-72HR	21.08	84248.1	81251.4	2996.7	-0.0	-0.00
25YR-72HR	21.17	84728.0	81728.3	2999.7	0.0	0.00
25YR-72HR	21.25	85208.2	82205.5	3002.7	0.0	0.00
25YR-72HR	21.33	85688.7	82683.0	3005.6	0.0	0.00
25YR-72HR	21.42	86169.5	83160.9	3008.6	0.0	0.00
25YR-72HR	21.50	86650.6	83638.9	3011.8	0.0	0.00
25YR-72HR	21.58	87132.1	84117.3	3014.8	0.0	0.00
25YR-72HR	21.67	87613.9	84596.1	3017.8	0.0	0.00
25YR-72HR	21.75	88096.0	85075.0	3020.9	0.0	0.00
25YR-72HR	21.83	88578.4	85554.4	3024.0	0.0	0.00
25YR-72HR	21.92	89061.1	86034.0	3027.1	0.0	0.00
25YR-72HR	22.00	89544.1	86514.0	3030.1	0.0	0.00
25YR-72HR	22.08	90027.4	86994.3	3033.1	0.0	0.00
25YR-72HR	22.17	90511.0	87474.9	3036.1	0.0	0.00
25YR-72HR	22.25	90994.9	87955.5	3039.4	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	22.33	91479.1	88436.7	3042.4	0.0	0.00
25YR-72HR	22.42	91963.6	88918.2	3045.4	0.0	0.00
25YR-72HR	22.50	92448.4	89400.0	3048.4	0.0	0.00
25YR-72HR	22.58	92933.4	89882.0	3051.5	0.0	0.00
25YR-72HR	22.67	93418.8	90364.3	3054.5	0.0	0.00
25YR-72HR	22.75	93904.4	90846.9	3057.5	0.0	0.00
25YR-72HR	22.83	94390.3	91329.7	3060.6	0.0	0.00
25YR-72HR	22.92	94876.5	91812.8	3063.7	0.0	0.00
25YR-72HR	23.00	95363.0	92296.2	3066.8	0.0	0.00
25YR-72HR	23.08	95849.7	92779.9	3069.8	0.0	0.00
25YR-72HR	23.17	96336.7	93263.9	3072.8	0.0	0.00
25YR-72HR	23.25	96824.0	93748.3	3075.7	0.0	0.00
25YR-72HR	23.33	97311.5	94232.9	3078.7	0.0	0.00
25YR-72HR	23.42	97799.3	94717.6	3081.7	0.0	0.00
25YR-72HR	23.50	98287.4	95202.6	3084.8	0.0	0.00
25YR-72HR	23.58	98775.7	95687.9	3087.8	0.0	0.00
25YR-72HR	23.67	99264.3	96173.5	3090.8	0.0	0.00
25YR-72HR	23.75	99753.2	96659.4	3093.8	0.0	0.00
25YR-72HR	23.83	100242.3	97145.6	3096.8	0.0	0.00
25YR-72HR	23.92	100731.8	97632.0	3099.8	0.0	0.00
25YR-72HR	24.00	101221.7	98118.7	3102.9	0.0	0.00
25YR-72HR	24.25	102893.2	99672.2	3220.9	0.0	0.00
25YR-72HR	24.50	104854.8	101470.9	3383.9	0.0	0.00
25YR-72HR	24.75	106943.8	103450.7	3493.1	0.0	0.00
25YR-72HR	25.00	109082.4	105529.6	3552.9	0.0	0.00
25YR-72HR	25.25	111234.2	107649.4	3584.8	0.0	0.00
25YR-72HR	25.50	113390.1	109783.6	3606.5	0.0	0.00
25YR-72HR	25.75	115549.8	111924.5	3625.4	0.0	0.00
25YR-72HR	26.00	117713.4	114069.9	3643.5	0.0	0.00
25YR-72HR	26.25	119880.7	116219.3	3661.4	0.0	0.00
25YR-72HR	26.50	122051.6	118372.3	3679.3	0.0	0.00
25YR-72HR	26.75	124226.0	120529.2	3696.8	0.0	0.00
25YR-72HR	27.00	126403.8	122689.2	3714.5	0.0	0.00
25YR-72HR	27.25	128584.8	124852.6	3732.3	0.0	0.00
25YR-72HR	27.50	130769.1	127019.2	3749.9	0.0	0.00
25YR-72HR	27.75	132956.4	129188.8	3767.6	0.0	0.00
25YR-72HR	28.00	135146.8	131361.5	3785.3	0.0	0.00
25YR-72HR	28.25	137340.1	133537.1	3802.9	0.0	0.00
25YR-72HR	28.50	139536.2	135715.5	3820.7	0.0	0.00
25YR-72HR	28.75	141735.1	137896.9	3838.2	0.0	0.00
25YR-72HR	29.00	143936.7	140080.8	3855.9	0.0	0.00
25YR-72HR	29.25	146141.0	142267.4	3873.6	0.0	0.00
25YR-72HR	29.50	148347.8	144456.6	3891.2	0.0	0.00
25YR-72HR	29.75	150557.1	146648.2	3908.8	0.0	0.00
25YR-72HR	30.00	152768.8	148842.3	3926.5	0.0	0.00
25YR-72HR	30.25	154982.9	151038.8	3944.0	0.0	0.00
25YR-72HR	30.50	157199.3	153237.6	3961.6	0.0	0.00
25YR-72HR	30.75	159417.9	155438.6	3979.3	0.0	0.00
25YR-72HR	31.00	161638.7	157641.8	3996.9	0.0	0.00
25YR-72HR	31.25	163861.7	159847.1	4014.6	0.0	0.00
25YR-72HR	31.50	166086.7	162054.4	4032.3	0.0	0.00
25YR-72HR	31.75	168313.8	164263.9	4049.9	0.0	0.00
25YR-72HR	32.00	170542.9	166475.3	4067.6	0.0	0.00
25YR-72HR	32.25	172773.9	168688.7	4085.2	0.0	0.00
25YR-72HR	32.50	175006.8	170903.8	4103.0	0.0	0.00
25YR-72HR	32.75	177241.6	173120.8	4120.8	0.0	0.00
25YR-72HR	33.00	179478.1	175339.7	4138.4	0.0	0.00
25YR-72HR	33.25	181716.5	177560.3	4156.2	0.0	0.00
25YR-72HR	33.50	183956.5	179782.5	4174.0	0.0	0.00
25YR-72HR	33.75	186198.2	182006.6	4191.7	0.0	0.00
25YR-72HR	34.00	188441.6	184232.2	4209.4	0.0	0.00
25YR-72HR	34.25	190686.6	186459.4	4227.2	0.0	0.00
25YR-72HR	34.50	192933.2	188688.2	4245.0	0.0	0.00
25YR-72HR	34.75	195181.3	190918.5	4262.8	0.0	0.00
25YR-72HR	35.00	197430.9	193150.2	4280.7	0.0	0.00
25YR-72HR	35.25	199682.0	195383.5	4298.5	0.0	0.00
25YR-72HR	35.50	201934.5	197618.3	4316.2	0.0	0.00
25YR-72HR	35.75	204188.5	199854.3	4334.1	0.0	0.00
25YR-72HR	36.00	206443.8	202091.7	4352.1	-0.0	-0.00
25YR-72HR	36.25	208707.4	204333.9	4373.5	-0.0	-0.00
25YR-72HR	36.50	210982.3	206586.1	4396.2	-0.0	-0.00
25YR-72HR	36.75	213262.9	208845.8	4417.1	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	37.00	215546.4	211110.1	4436.3	-0.0	-0.00
25YR-72HR	37.25	217831.5	213376.6	4454.9	-0.0	-0.00
25YR-72HR	37.50	220117.8	215644.8	4473.0	-0.0	-0.00
25YR-72HR	37.75	222405.3	217914.4	4491.0	-0.0	-0.00
25YR-72HR	38.00	224694.1	220185.1	4508.9	-0.0	-0.00
25YR-72HR	38.25	226984.0	222457.0	4527.0	-0.0	-0.00
25YR-72HR	38.50	229275.0	224729.9	4545.1	-0.0	-0.00
25YR-72HR	38.75	231567.2	227004.0	4563.1	0.0	0.00
25YR-72HR	39.00	233860.5	229279.3	4581.2	0.0	0.00
25YR-72HR	39.25	236154.8	231555.6	4599.2	0.0	0.00
25YR-72HR	39.50	238450.3	233832.9	4617.3	-0.0	-0.00
25YR-72HR	39.75	240746.7	236111.2	4635.5	-0.0	-0.00
25YR-72HR	40.00	243044.2	238390.6	4653.6	-0.0	-0.00
25YR-72HR	40.25	245342.7	240671.0	4671.8	-0.0	-0.00
25YR-72HR	40.50	247642.2	242952.3	4690.0	-0.0	-0.00
25YR-72HR	40.75	249942.7	245234.5	4708.2	-0.0	-0.00
25YR-72HR	41.00	252244.1	247517.7	4726.4	-0.0	-0.00
25YR-72HR	41.25	254546.4	249801.8	4744.6	-0.0	-0.00
25YR-72HR	41.50	256849.7	252087.0	4762.7	-0.0	-0.00
25YR-72HR	41.75	259153.8	254373.0	4780.8	-0.0	-0.00
25YR-72HR	42.00	261458.9	256659.8	4799.1	-0.0	-0.00
25YR-72HR	42.25	263764.8	258947.5	4817.3	-0.0	-0.00
25YR-72HR	42.50	266071.5	261235.9	4835.6	-0.0	-0.00
25YR-72HR	42.75	268379.1	263525.1	4854.0	-0.0	-0.00
25YR-72HR	43.00	270687.5	265815.2	4872.3	0.0	0.00
25YR-72HR	43.25	272996.7	268106.1	4890.6	0.0	0.00
25YR-72HR	43.50	275306.7	270397.8	4908.9	0.0	0.00
25YR-72HR	43.75	277617.5	272690.3	4927.2	0.0	0.00
25YR-72HR	44.00	279929.1	274983.5	4945.5	0.0	0.00
25YR-72HR	44.25	282241.4	277277.5	4963.9	0.0	0.00
25YR-72HR	44.50	284554.4	279572.1	4982.3	-0.0	-0.00
25YR-72HR	44.75	286868.2	281867.6	5000.6	0.0	0.00
25YR-72HR	45.00	289182.7	284163.7	5019.0	0.0	0.00
25YR-72HR	45.25	291497.9	286460.6	5037.4	0.0	0.00
25YR-72HR	45.50	293813.8	288758.0	5055.8	0.0	0.00
25YR-72HR	45.75	296130.4	291056.1	5074.3	0.0	0.00
25YR-72HR	46.00	298447.6	293354.9	5092.8	0.0	0.00
25YR-72HR	46.25	300765.5	295654.3	5111.3	0.0	0.00
25YR-72HR	46.50	303084.1	297954.4	5129.7	0.0	0.00
25YR-72HR	46.75	305403.3	300255.1	5148.2	0.0	0.00
25YR-72HR	47.00	307723.1	302556.5	5166.7	0.0	0.00
25YR-72HR	47.25	310043.6	304858.5	5185.1	0.0	0.00
25YR-72HR	47.50	312364.6	307161.0	5203.6	0.0	0.00
25YR-72HR	47.75	314686.3	309464.1	5222.2	-0.0	-0.00
25YR-72HR	48.00	317008.6	311767.9	5240.7	-0.0	-0.00
25YR-72HR	48.25	319403.5	314118.7	5284.8	-0.0	-0.00
25YR-72HR	48.50	321920.0	316578.5	5341.5	-0.0	-0.00
25YR-72HR	48.75	324482.3	319108.8	5373.5	-0.0	-0.00
25YR-72HR	49.00	327062.5	321674.6	5387.9	-0.0	-0.00
25YR-72HR	49.25	329661.0	324237.0	5424.0	-0.0	-0.00
25YR-72HR	49.50	332285.7	326813.1	5472.6	-0.0	-0.00
25YR-72HR	49.75	334920.7	329403.6	5517.0	-0.0	-0.00
25YR-72HR	50.00	337560.0	332001.9	5558.2	-0.0	-0.00
25YR-72HR	50.25	340340.1	334671.5	5668.6	-0.0	-0.00
25YR-72HR	50.50	343341.1	337533.7	5807.4	-0.0	-0.00
25YR-72HR	50.75	346425.0	340523.7	5901.3	-0.0	-0.00
25YR-72HR	51.00	349540.5	343576.3	5964.3	-0.0	-0.00
25YR-72HR	51.25	352743.9	346714.8	6029.0	-0.0	-0.00
25YR-72HR	51.50	356079.4	349985.8	6093.6	-0.0	-0.00
25YR-72HR	51.75	359464.8	353337.1	6127.7	-0.0	-0.00
25YR-72HR	52.00	362869.7	356727.8	6141.9	-0.0	-0.00
25YR-72HR	52.25	366575.4	360255.3	6320.1	-0.0	-0.00
25YR-72HR	52.50	370760.0	364195.9	6564.1	-0.0	-0.00
25YR-72HR	52.75	375124.0	368413.6	6710.4	-0.0	-0.00
25YR-72HR	53.00	379556.5	372763.5	6793.0	-0.0	-0.00
25YR-72HR	53.25	384296.1	377304.2	6991.9	-0.0	-0.00
25YR-72HR	53.50	389516.8	382281.1	7235.7	-0.0	-0.00
25YR-72HR	53.75	394918.0	387538.1	7379.9	-0.0	-0.00
25YR-72HR	54.00	400388.8	392925.1	7463.7	-0.0	-0.00
25YR-72HR	54.25	406175.9	398484.1	7691.7	-0.0	-0.00
25YR-72HR	54.50	412462.8	404489.2	7973.6	-0.0	-0.00
25YR-72HR	54.75	418937.9	410783.6	8154.2	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	55.00	425485.6	417211.1	8274.5	-0.0	-0.00
25YR-72HR	55.25	432349.1	423857.8	8491.3	-0.0	-0.00
25YR-72HR	55.50	439714.8	430977.3	8737.4	0.0	0.00
25YR-72HR	55.75	447269.8	438389.7	8880.1	-0.0	-0.00
25YR-72HR	56.00	454898.4	445934.9	8963.5	-0.0	-0.00
25YR-72HR	56.25	462897.8	453678.1	9219.7	-0.0	-0.00
25YR-72HR	56.50	471509.2	461974.6	9534.6	-0.0	-0.00
25YR-72HR	56.75	480346.8	470618.8	9728.0	-0.0	-0.00
25YR-72HR	57.00	489272.4	479419.3	9853.1	-0.0	-0.00
25YR-72HR	57.25	498669.2	488497.5	10171.7	-0.0	-0.00
25YR-72HR	57.50	508852.7	498303.8	10548.9	-0.0	-0.00
25YR-72HR	57.75	519586.8	508642.9	10943.9	-0.0	-0.00
25YR-72HR	58.00	530864.2	519558.7	11305.5	-0.0	-0.00
25YR-72HR	58.25	542661.8	530995.4	11666.4	0.0	0.00
25YR-72HR	58.50	555118.1	543121.2	11996.9	0.0	0.00
25YR-72HR	58.75	568987.0	556177.5	12809.5	0.0	0.00
25YR-72HR	59.00	584919.1	571224.8	13694.3	0.0	0.00
25YR-72HR	59.25	604265.6	588815.7	15450.0	0.0	0.00
25YR-72HR	59.50	628226.3	611069.7	17156.6	0.0	0.00
25YR-72HR	59.75	696780.3	660799.4	35980.9	0.0	0.00
25YR-72HR	60.00	838509.8	790703.1	47806.7	0.0	0.00
25YR-72HR	60.25	966369.4	926943.4	39426.0	0.0	0.00
25YR-72HR	60.50	1038002.0	1006743.7	31258.3	0.0	0.00
25YR-72HR	60.75	1081856.8	1056831.3	25025.5	0.0	0.00
25YR-72HR	61.00	1107998.8	1086974.1	21024.7	0.0	0.00
25YR-72HR	61.25	1128134.8	1108974.0	19160.8	0.0	0.00
25YR-72HR	61.50	1144449.8	1126336.7	18113.0	0.0	0.00
25YR-72HR	61.75	1158952.2	1141479.0	17473.2	0.0	0.00
25YR-72HR	62.00	1171917.8	1154901.0	17016.8	0.0	0.00
25YR-72HR	62.25	1183458.1	1167049.9	16408.3	0.0	0.00
25YR-72HR	62.50	1193267.3	1177455.5	15811.8	0.0	0.00
25YR-72HR	62.75	1202217.3	1186734.6	15482.7	0.0	0.00
25YR-72HR	63.00	1210493.9	1195213.4	15280.5	0.0	0.00
25YR-72HR	63.25	1218566.7	1203382.6	15184.2	0.0	0.00
25YR-72HR	63.50	1226565.8	1211431.7	15134.1	0.0	0.00
25YR-72HR	63.75	1234552.3	1219443.1	15109.2	0.0	0.00
25YR-72HR	64.00	1242537.5	1227447.6	15089.9	0.0	0.00
25YR-72HR	64.25	1249612.4	1234955.1	14657.3	0.0	0.00
25YR-72HR	64.50	1255186.4	1241058.9	14127.6	0.0	0.00
25YR-72HR	64.75	1260199.8	1246291.2	13908.7	0.0	0.00
25YR-72HR	65.00	1265001.4	1251157.0	13844.4	0.0	0.00
25YR-72HR	65.25	1269781.6	1255917.3	13864.2	0.0	0.00
25YR-72HR	65.50	1274578.7	1260673.8	13904.9	0.0	0.00
25YR-72HR	65.75	1279382.2	1265437.3	13945.0	0.0	0.00
25YR-72HR	66.00	1284188.2	1270204.8	13983.5	0.0	0.00
25YR-72HR	66.25	1288994.5	1274973.4	14021.1	0.0	0.00
25YR-72HR	66.50	1293800.5	1279742.1	14058.4	0.0	0.00
25YR-72HR	66.75	1298606.4	1284510.7	14095.7	0.0	0.00
25YR-72HR	67.00	1303412.3	1289279.3	14133.0	0.0	0.00
25YR-72HR	67.25	1308218.3	1294048.1	14170.3	0.0	0.00
25YR-72HR	67.50	1313024.5	1298816.9	14207.6	0.0	0.00
25YR-72HR	67.75	1317830.6	1303585.8	14244.8	0.0	0.00
25YR-72HR	68.00	1322636.4	1308354.6	14281.8	0.0	0.00
25YR-72HR	68.25	1326967.2	1312886.0	14081.2	0.0	0.00
25YR-72HR	68.50	1330547.5	1316744.6	13802.9	0.0	0.00
25YR-72HR	68.75	1333848.6	1320176.9	13671.7	-0.0	-0.00
25YR-72HR	69.00	1337044.6	1323425.1	13619.6	0.0	0.00
25YR-72HR	69.25	1340225.5	1326614.4	13611.1	-0.0	-0.00
25YR-72HR	69.50	1343406.3	1329792.5	13613.8	0.0	0.00
25YR-72HR	69.75	1346587.2	1332969.0	13618.2	0.0	0.00
25YR-72HR	70.00	1349768.1	1336145.4	13622.7	0.0	0.00
25YR-72HR	70.25	1352954.3	1339337.1	13617.2	0.0	0.00
25YR-72HR	70.50	1356148.9	1342541.5	13607.4	0.0	0.00
25YR-72HR	70.75	1359346.6	1345751.1	13595.6	-0.0	-0.00
25YR-72HR	71.00	1362545.6	1348962.9	13582.7	-0.0	-0.00
25YR-72HR	71.25	1365744.8	1352175.4	13569.4	-0.0	-0.00
25YR-72HR	71.50	1368944.0	1355388.1	13555.9	-0.0	-0.00
25YR-72HR	71.75	1372143.2	1358600.9	13542.3	-0.0	-0.00
25YR-72HR	72.00	1375342.0	1361813.5	13528.4	-0.0	-0.00
25YR-72HR	72.25	1377616.0	1364696.6	12919.4	-0.0	-0.00
25YR-72HR	72.50	1377977.1	1366773.3	11203.8	-0.0	-0.00
25YR-72HR	72.75	1377977.1	1368094.7	9882.4	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	73.00	1377977.1	1369224.4	8752.7	0.0	0.00
25YR-72HR	73.25	1377977.1	1370290.5	7686.5	0.0	0.00
25YR-72HR	73.50	1377977.1	1371327.6	6649.5	0.0	0.00
25YR-72HR	73.75	1377977.1	1372351.0	5626.1	0.0	0.00
25YR-72HR	74.00	1377977.1	1373369.6	4607.4	0.0	0.00
25YR-72HR	74.25	1377977.1	1374388.8	3588.3	0.0	0.00
25YR-72HR	74.50	1377977.1	1375414.0	2563.1	0.0	0.00
25YR-72HR	74.75	1377977.1	1376439.0	1538.1	0.0	0.00
25YR-72HR	75.00	1377977.1	1377463.6	513.5	0.0	0.00
25YR-72HR	75.25	1377977.1	1378488.0	-510.9	0.0	-0.00
25YR-72HR	75.50	1377977.1	1379512.2	-1535.2	0.0	-0.00
25YR-72HR	75.75	1377977.1	1380536.5	-2559.4	0.0	-0.00
25YR-72HR	76.00	1377977.1	1381560.7	-3583.6	0.0	-0.00
25YR-72HR	76.25	1377977.1	1382584.9	-4607.8	0.0	-0.00
25YR-72HR	76.50	1377977.1	1383609.2	-5632.1	0.0	-0.00
25YR-72HR	76.75	1377977.1	1384633.2	-6656.1	0.0	-0.00
25YR-72HR	77.00	1377977.1	1385657.5	-7680.5	0.0	-0.00
25YR-72HR	77.25	1377977.1	1386681.6	-8704.5	0.0	-0.00
25YR-72HR	77.50	1377977.1	1387704.8	-9727.7	0.0	-0.00
25YR-72HR	77.75	1377977.1	1388726.6	-10749.5	0.0	-0.00
25YR-72HR	78.00	1377977.1	1389746.8	-11769.7	0.0	-0.00
25YR-72HR	78.25	1377977.1	1390765.7	-12788.6	0.0	-0.00
25YR-72HR	78.50	1377977.1	1391783.4	-13806.3	0.0	-0.00
25YR-72HR	78.75	1377977.1	1392799.7	-14822.6	0.0	-0.00
25YR-72HR	79.00	1377977.1	1393814.7	-15837.6	0.0	-0.00
25YR-72HR	79.25	1377977.1	1394828.1	-16851.0	0.0	-0.00
25YR-72HR	79.50	1377977.1	1395849.2	-17872.1	0.0	-0.00
25YR-72HR	79.75	1377977.1	1396872.2	-18895.1	0.0	-0.00
25YR-72HR	80.00	1377977.1	1397895.2	-19918.1	0.0	-0.00
25YR-72HR	80.25	1377977.1	1398918.3	-20941.2	0.0	-0.00
25YR-72HR	80.50	1377977.1	1399941.4	-21964.3	0.0	-0.00
25YR-72HR	80.75	1377977.1	1400964.6	-22987.5	0.0	-0.00
25YR-72HR	81.00	1377977.1	1401987.7	-24010.7	0.0	-0.00
25YR-72HR	81.25	1377977.1	1403010.9	-25033.9	0.0	-0.00
25YR-72HR	81.50	1377977.1	1404034.2	-26057.1	0.0	-0.00
25YR-72HR	81.75	1377977.1	1405057.2	-27080.2	0.0	-0.00
25YR-72HR	82.00	1377977.1	1406080.5	-28103.4	0.0	-0.00
25YR-72HR	82.25	1377977.1	1407103.6	-29126.5	0.0	-0.00
25YR-72HR	82.50	1377977.1	1408126.8	-30149.7	0.0	-0.00
25YR-72HR	82.75	1377977.1	1409149.5	-31172.4	0.0	-0.00
25YR-72HR	83.00	1377977.1	1410171.1	-32194.0	0.0	-0.00
25YR-72HR	83.25	1377977.1	1411191.5	-33214.4	0.0	-0.00
25YR-72HR	83.50	1377977.1	1412210.6	-34233.5	0.0	-0.00
25YR-72HR	83.75	1377977.1	1413228.3	-35251.2	0.0	-0.00
25YR-72HR	84.00	1377977.1	1414244.6	-36267.5	0.0	-0.00
25YR-72HR	84.25	1377977.1	1415259.3	-37282.3	0.0	-0.00
25YR-72HR	84.50	1377977.1	1416276.0	-38298.9	0.0	-0.00
25YR-72HR	84.75	1377977.1	1417299.3	-39322.3	0.0	-0.00
25YR-72HR	85.00	1377977.1	1418322.7	-40345.6	0.0	-0.00
25YR-72HR	85.25	1377977.1	1419345.9	-41368.9	0.0	-0.00
25YR-72HR	85.50	1377977.1	1420369.2	-42392.1	0.0	-0.00
25YR-72HR	85.75	1377977.1	1421392.4	-43415.3	0.0	-0.00
25YR-72HR	86.00	1377977.1	1422415.5	-44438.5	0.0	-0.00
25YR-72HR	86.25	1377977.1	1423438.6	-45461.5	0.0	-0.00
25YR-72HR	86.50	1377977.1	1424461.6	-46484.6	0.0	-0.00
25YR-72HR	86.75	1377977.1	1425484.7	-47507.6	0.0	-0.00
25YR-72HR	87.00	1377977.1	1426507.8	-48530.7	0.0	-0.00
25YR-72HR	87.25	1377977.1	1427531.7	-49554.7	0.0	-0.00
25YR-72HR	87.50	1377977.1	1428555.8	-50578.7	0.0	-0.00
25YR-72HR	87.75	1377977.1	1429579.9	-51602.8	0.0	-0.00
25YR-72HR	88.00	1377977.1	1430603.5	-52626.4	0.0	-0.00
25YR-72HR	88.25	1377977.1	1431626.0	-53648.9	0.0	-0.00
25YR-72HR	88.50	1377977.1	1432647.3	-54670.2	0.0	-0.00
25YR-72HR	88.75	1377977.1	1433667.4	-55690.3	0.0	-0.00
25YR-72HR	89.00	1377977.1	1434686.1	-56709.1	0.0	-0.00
25YR-72HR	89.25	1377977.1	1435703.5	-57726.4	0.0	-0.00
25YR-72HR	89.50	1377977.1	1436719.3	-58742.3	0.0	-0.00
25YR-72HR	89.75	1377977.1	1437742.9	-59765.8	0.0	-0.00
25YR-72HR	90.00	1377977.1	1438768.2	-60791.2	0.0	-0.00
25YR-72HR	90.25	1377977.1	1439793.6	-61816.6	0.0	-0.00
25YR-72HR	90.50	1377977.1	1440819.1	-62842.0	0.0	-0.00
25YR-72HR	90.75	1377977.1	1441844.7	-63867.6	0.0	-0.00

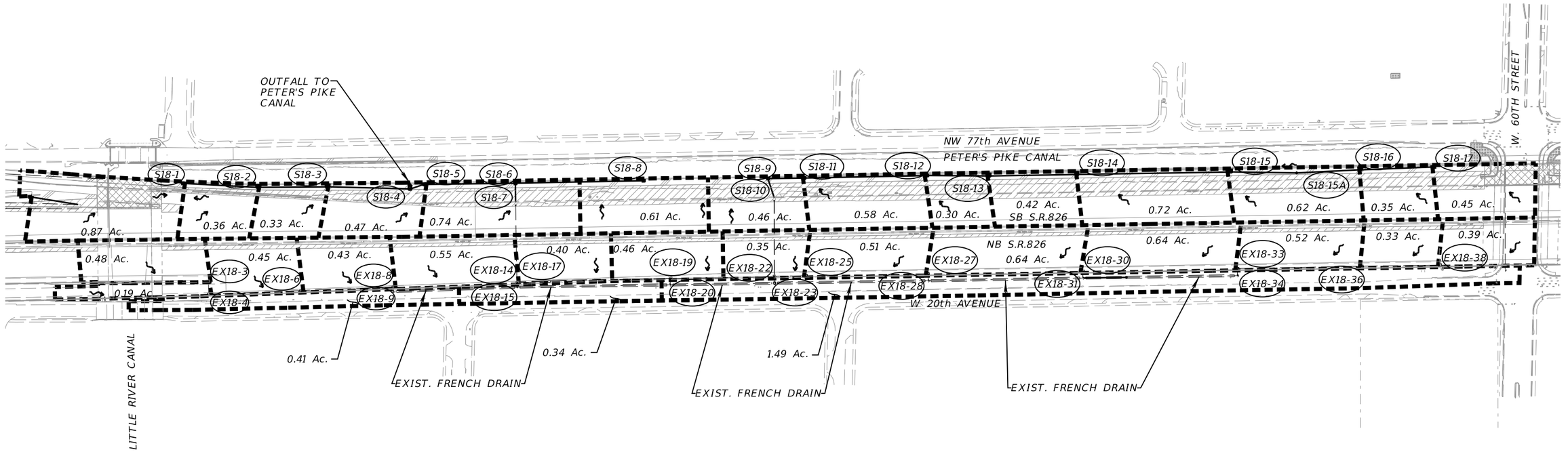
Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	91.00	1377977.1	1442870.3	-64893.2	0.0	-0.00
25YR-72HR	91.25	1377977.1	1443895.9	-65918.8	0.0	-0.00
25YR-72HR	91.50	1377977.1	1444921.5	-66944.5	0.0	-0.00
25YR-72HR	91.75	1377977.1	1445947.1	-67970.1	0.0	-0.00
25YR-72HR	92.00	1377977.1	1446972.5	-68995.5	0.0	-0.00
25YR-72HR	92.25	1377977.1	1447998.1	-70021.0	0.0	-0.00
25YR-72HR	92.50	1377977.1	1449023.4	-71046.3	0.0	-0.00
25YR-72HR	92.75	1377977.1	1450048.7	-72071.7	0.0	-0.00
25YR-72HR	93.00	1377977.1	1451073.6	-73096.5	0.0	-0.00
25YR-72HR	93.25	1377977.1	1452097.2	-74120.2	0.0	-0.00
25YR-72HR	93.50	1377977.1	1453119.6	-75142.5	0.0	-0.00
25YR-72HR	93.75	1377977.1	1454140.6	-76163.5	0.0	-0.00
25YR-72HR	94.00	1377977.1	1455160.1	-77183.0	0.0	-0.00
25YR-72HR	94.25	1377977.1	1456178.1	-78201.0	0.0	-0.00
25YR-72HR	94.50	1377977.1	1457194.4	-79217.4	0.0	-0.00
25YR-72HR	94.75	1377977.1	1458212.6	-80235.5	0.0	-0.00
25YR-72HR	95.00	1377977.1	1459237.4	-81260.3	0.0	-0.00
25YR-72HR	95.25	1377977.1	1460262.1	-82285.0	0.0	-0.00
25YR-72HR	95.50	1377977.1	1461286.6	-83309.5	0.0	-0.00
25YR-72HR	95.75	1377977.1	1462311.0	-84333.9	0.0	-0.00
25YR-72HR	96.00	1377977.1	1463335.2	-85358.1	0.0	-0.00
25YR-72HR	96.00	1377977.1	1463335.2	-85358.1	0.0	-0.00

Basin 18

Drainage Maps

PRE-DEVELOPMENT CONDITIONS

0 50 200
Feet



BASIN 18 TOTAL AREA = 15.88 ACRES

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
826	MIAMI-DADE	432687-1-52-01

DRAINAGE MAP (BASIN 18)

SHEET NO.
J-1340

malfonso 11/25/2019 10:23:43 AM P:\432687152\01 SR-826-I-75 Express Lanes\drainage\Post-Development Conditions\drmprdl8.dgn

Curve Number Calculations

PRE-DEVELOPMENT CONDITIONS
AREA BREAKDOWN (BASIN B-18)

SUB-BASIN	TOTAL DRAINAGE AREA (ACRES)	PERVIOUS DRAINAGE AREA (ACRES)	PERVIOUS AREA CURVE NUMBER	IMPERVIOUS DRAINAGE AREA (ACRES)	IMPERVIOUS AREA CURVE NUMBER	COMPOSITE CURVE NUMBER
B18-1	0.87	0.00	61	0.87	96	96
B18-2	0.36	0.00	61	0.36	96	96
B18-3	0.33	0.00	61	0.33	96	96
B18-5	0.47	0.00	61	0.47	96	96
B18-6	0.74	0.00	61	0.74	96	96
B18-8	0.61	0.00	61	0.61	96	96
B18-9	0.46	0.00	61	0.46	96	96
B18-11	0.58	0.00	61	0.58	96	96
B18-12	0.30	0.00	61	0.30	96	96
B18-13	0.42	0.00	61	0.42	96	96
B18-14	0.72	0.00	61	0.72	96	96
B18-15	0.62	0.00	61	0.62	96	96
B18-16	0.35	0.00	61	0.35	96	96
B18-17	0.47	0.00	61	0.47	96	96
BX18-3	0.48	0.00	61	0.48	96	96
BX18-4	0.19	0.00	61	0.19	96	96
BX18-6	0.45	0.00	61	0.45	96	96
BX18-8	0.43	0.00	61	0.43	96	96
BX18-9	0.41	0.26	61	0.15	96	74
BX18-14	0.55	0.00	61	0.55	96	96
BX18-15	0.34	0.25	61	0.09	96	70
BX18-17	0.40	0.00	61	0.40	96	96
BX18-19	0.46	0.00	61	0.46	96	96
BX18-22	0.35	0.00	61	0.35	96	96
BX18-23	1.49	0.99	61	0.50	96	73
BX18-25	0.51	0.00	61	0.51	96	96
BX18-27	0.64	0.00	61	0.64	96	96
BX18-30	0.64	0.00	61	0.64	96	96
BX18-33	0.52	0.00	61	0.52	96	96
BX18-36	0.33	0.00	61	0.33	96	96
BX18-38	0.39	0.00	61	0.39	96	96
Total Basin B-18	**15.88**	**1.50**	**61**	**14.38**	**96**	**93**

Average Hydraulic Conductivity

Average Hydraulic Conductivity

Basin B-18		
Percolation Test	P-2A	P-3A
Average Flow to 10 ft. depth (gpm)	20.00	0.10
Depth to Water Table (ft)	7.00	8.00
Head Maintained (ft)	7.00	8.00
Borehole Diameter (ft)	0.500	0.500
Borehole Depth (ft)	10.00	10.00
Du (ft)	7.00	8.00
Average Flow (cfs)	0.0446	0.0002
Ds (ft)	3.00	2.00
Hydraulic Conductivity K (cfs/ft2-ft head)	6.12E-04	2.89E-06
Average Hydraulic Conductivity K	3.07E-04	

Basin B-18		
Percolation Test	P-2B	P-3B
Average Flow to 15 ft. depth (gpm)	41.00	38.00
Depth to Water Table (ft)	7.00	8.00
Head Maintained (ft)	7.00	8.00
Borehole Diameter (ft)	0.267	0.267
Borehole Depth (ft)	5.00	5.00
Du (ft)	7.00	8.00
Average Flow (cfs)	0.0913	0.0847
Ds (ft)	8.00	7.00
Hydraulic Conductivity K (cfs/ft2-ft head)	3.12E-03	2.53E-03
Average Hydraulic Conductivity K	2.82E-03	
Total Average Hydraulic Conductivity K	**1.15E-03**	

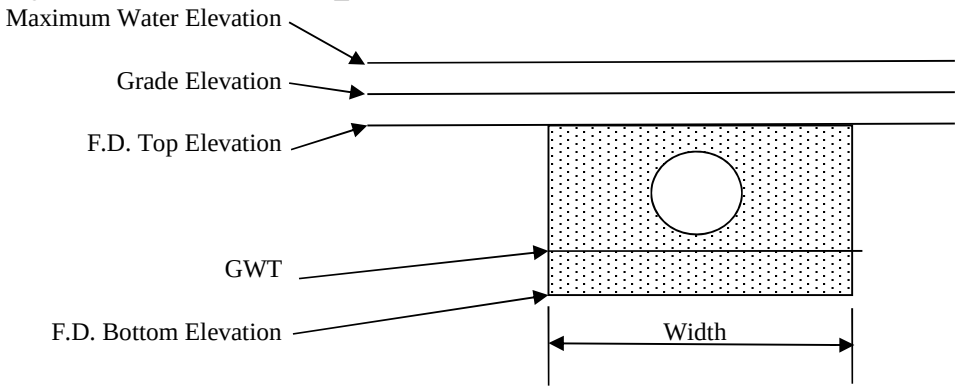
Rating Curve Calculations

Made by: _____ _____

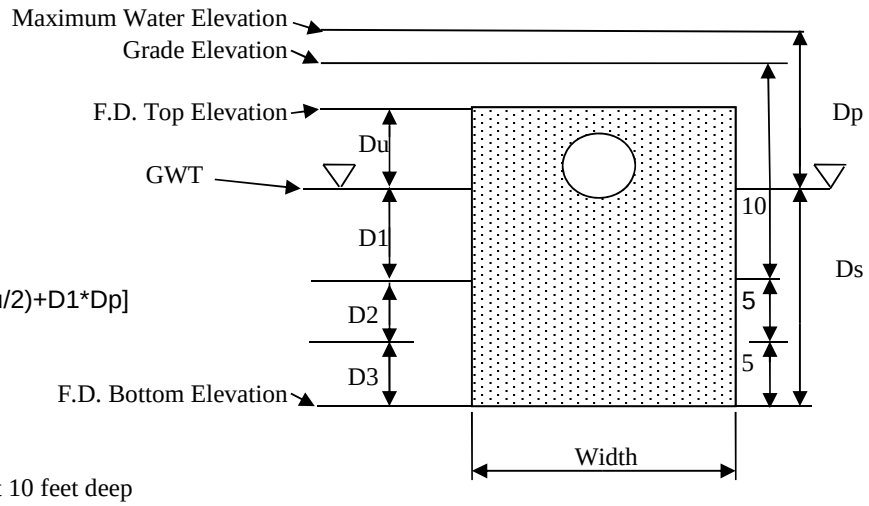
Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-18



Maximum Water Elevation =	**5.45**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**4.45**	ft.NAVD	
F.D.Top Elevation =	**3.45**	ft.NAVD	
Ground Water Table =	**1.95**	ft.NAVD	
F.D. Bottom Elevation =	**-10.06**	ft.NAVD	
Width =	**5.00**	feet.	
Pipe Diameter =	**30**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**1.15E-03**	cfs/ft^2-ft head	(Ave. P-2A,P-3A)
Hydraulic Conductivity K15 =	**1.15E-03**	cfs/ft^2-ft head	(Ave. P-2A,P-3A)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____

Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-18

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.95	***2.45***
(ft)	(cfs/ft)	(cfs/ft)
1.95	0.000	0.000
2.45	0.013	0.000
3.45	0.044	0.030
5.45	0.106	0.092

Rating Curve (Q)

Headwater	***Water Table Elev. (ft)***	
	1.95	***2.45***
(ft)	(cfs)	(cfs)
1.95	0.00	0.00
2.45	0.01	0.00
3.45	0.04	0.03
5.45	0.11	0.09

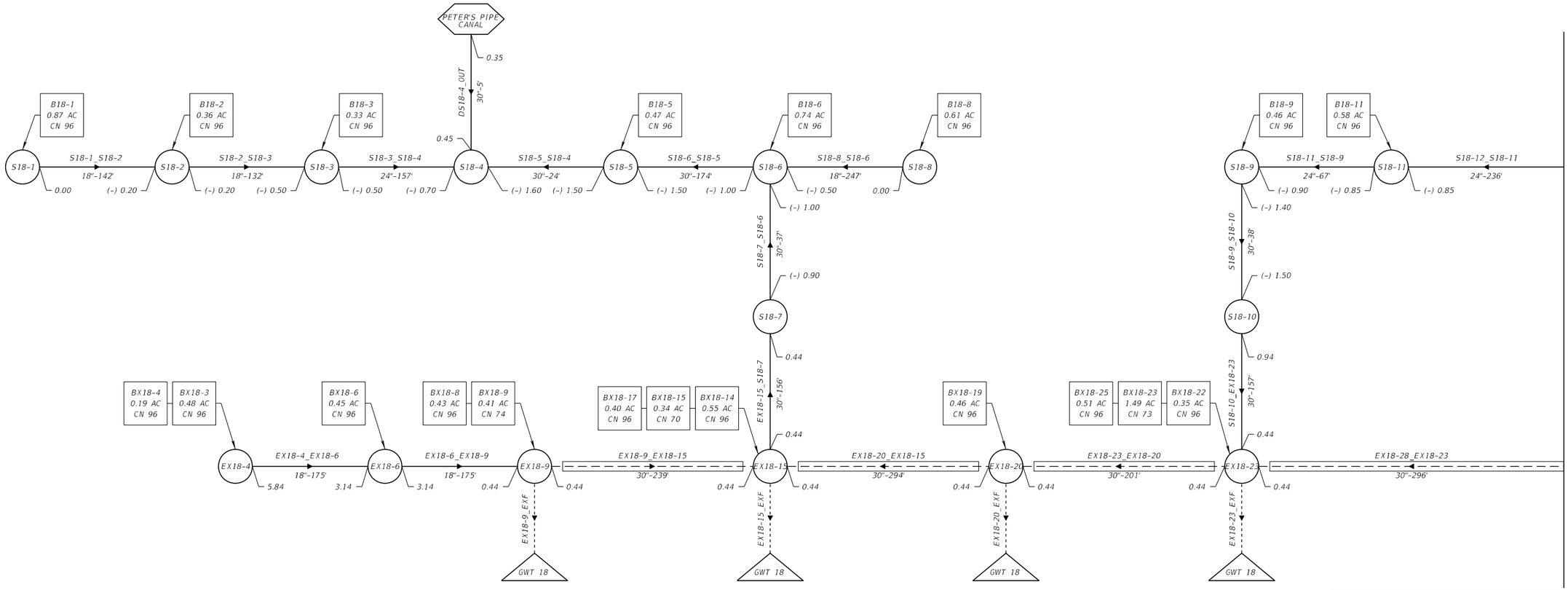
Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

Rating Curve Adjusted (Q)

Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.95	1.95	0.00
1.95	2.45	0.01
1.95	3.45	0.04
1.95	5.45	0.10
2.45	2.45	0.00
2.45	3.45	0.03
2.45	5.45	0.09

Nodal Diagram

PRE-DEVELOPMENT CONDITIONS



WEIR INPUT SUMMARY							
WEIR	VERT. TYPE	HORIZ.	CIRC.	RECT.	INV.	SPAN	RISE
DS18-4_OUT	MAVIS	-	-	X	3.45'	60"	9.60"

LEGEND

- B18-1 / 0.12 AC / CN 96 — CONTRIBUTING BASIN, BASIN NAME, BASIN AREA, CURVE NUMBER
- S18-2 — NODE NAME
- 58ST_CANAL — BOUNDARY NODE WITH CONSTANT TAILWATER
- GWT 6-12 — BOUNDARY NODE WITH VARIABLE TAILWATER
- S18-3_S18-4 / 18"-42' / 21.50 / 21.40 — PIPE LINK WITH (QUANTITY)SIZE-LENGTH, INVERT ELEVATIONS
- WEX18_14 — WEIR LINK
- AREA 1_EXF — RATING CURVE LINK

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

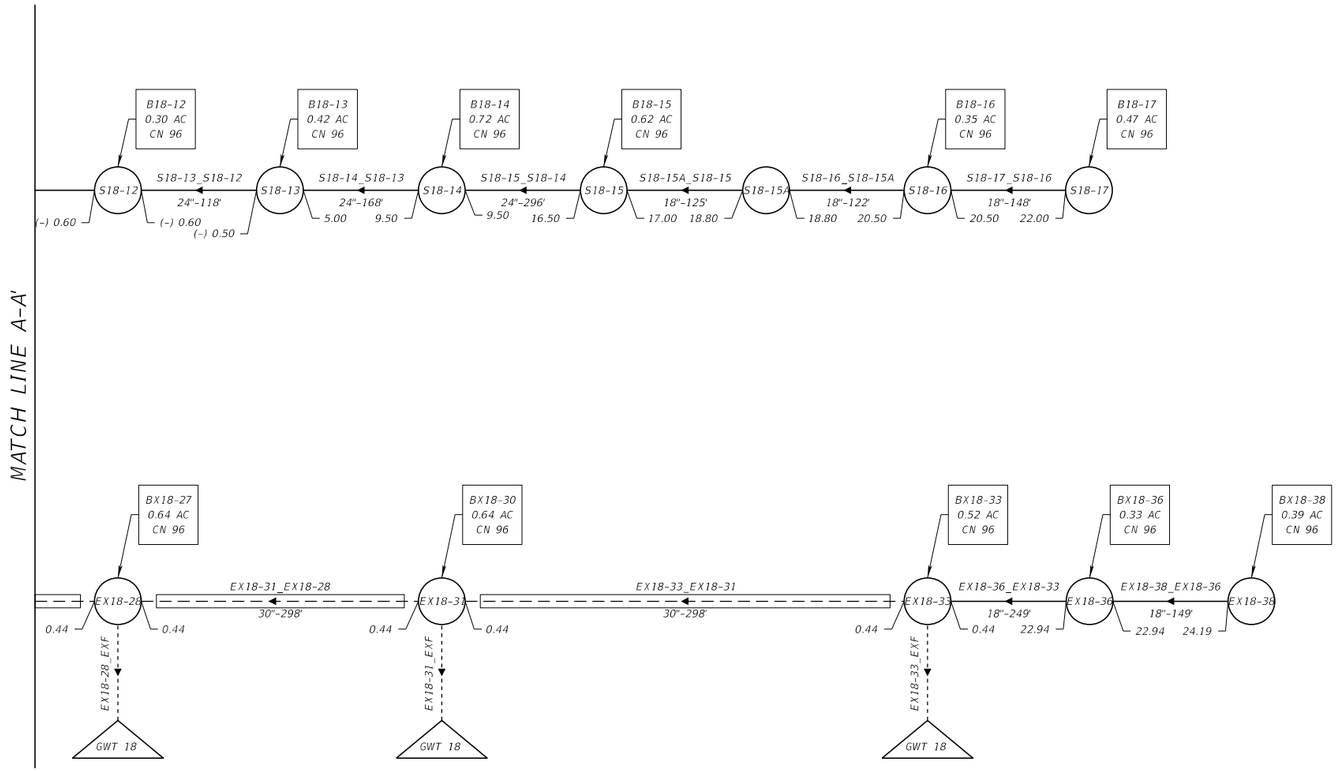
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
826	MIAMI-DADE	447165-1-52-01 441830-1-52-01 441831-1-52-01

NODAL DIAGRAM
BASIN 18

SHEET NO.

AMATHURA 11/10/2020 2:22:34 PM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\44716515201\zz_working\AM's Work

PRE-DEVELOPMENT CONDITIONS



LEGEND

B18-1 0.12 AC CN 96	CONTRIBUTING BASIN BASIN NAME BASIN AREA CURVE NUMBER
S18-2	NODE NAME
58ST_CANAL	BOUNDARY NODE WITH CONSTANT TAILWATER
GWT 6-12	BOUNDARY NODE WITH VARIABLE TAILWATER
S18-3_S18-4 18"-42" 21.50 21.40	PIPE LINK WITH (QUANTITY)SIZE-LENGTH INVERT ELEVATIONS
WEX18_14	WEIR LINK
AREA 1_EXF	RATING CURVE LINK

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
826	MIAMI-DADE	447165-1-52-01 441830-1-52-01 441831-1-52-01

NODAL DIAGRAM
BASIN 18

SHEET NO.

AMATHURA 11/10/2020 2:22:34 PM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\44716515201\zz_working\AM's Work

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
EX18-15	Basin 18	25YR-72HR	60.03	4.17	4.69	0.0048	156	60.02	6.63	60.03	6.62
EX18-20	Basin 18	25YR-72HR	60.03	4.06	6.26	0.0035	144	60.02	6.42	60.03	6.42
EX18-23	Basin 18	25YR-72HR	60.03	4.09	4.64	0.0028	154	60.03	16.47	60.03	16.47
EX18-28	Basin 18	25YR-72HR	60.03	3.66	4.94	0.0015	150	0.03	0.14	0.03	0.44
EX18-31	Basin 18	25YR-72HR	60.03	3.61	4.86	-0.0039	150	60.02	6.27	60.03	6.27
EX18-33	Basin 18	25YR-72HR	60.03	3.62	4.94	-0.0019	292	60.02	7.65	60.04	7.65
EX18-36	Basin 18	25YR-72HR	60.04	24.07	27.12	0.0010	381	60.02	4.46	60.03	4.44
EX18-38	Basin 18	25YR-72HR	60.02	25.01	28.32	0.0008	223	60.02	2.42	60.02	2.41
EX18-4	Basin 18	25YR-72HR	60.02	6.97	10.00	0.0011	229	60.02	4.16	60.02	4.15
EX18-6	Basin 18	25YR-72HR	60.04	5.24	7.42	0.0023	243	60.02	6.94	60.05	6.89
EX18-9	Basin 18	25YR-72HR	60.03	4.24	4.69	-0.0026	135	60.03	11.84	60.04	11.84
GWT_18	Basin 18	25YR-72HR	72.00	2.45	99.00	0.0001	0	60.03	74.13	0.00	0.00
P_PIKE_CANAL	Basin 18	25YR-72HR	0.00	2.37	99.00	0.0000	0	60.03	12.94	0.00	0.00
S18-1	Basin 18	25YR-72HR	60.04	6.32	10.33	0.0035	118	60.02	5.40	60.04	5.34
S18-10	Basin 18	25YR-72HR	60.05	4.47	4.61	-0.0042	125	60.39	17.23	60.39	17.26
S18-11	Basin 18	25YR-72HR	60.22	5.36	4.84	-0.0312	35284	60.05	20.96	60.47	16.04
S18-12	Basin 18	25YR-72HR	60.07	7.19	7.50	-0.0069	131	60.05	17.49	60.06	17.44
S18-13	Basin 18	25YR-72HR	60.07	8.25	10.26	-0.0055	244	60.04	15.85	60.06	15.68
S18-14	Basin 18	25YR-72HR	60.04	11.53	15.26	0.0013	431	60.03	13.29	60.04	13.27
S18-15	Basin 18	25YR-72HR	60.04	18.04	22.29	0.0010	455	60.03	8.88	60.04	8.86
S18-15A	Basin 18	25YR-72HR	60.04	20.09	24.98	0.0009	268	60.03	5.07	60.04	5.06
S18-16	Basin 18	25YR-72HR	60.03	21.79	26.00	0.0011	289	60.02	5.08	60.03	5.07
S18-17	Basin 18	25YR-72HR	60.02	22.91	27.24	0.0009	221	60.02	2.92	60.02	2.91
S18-2	Basin 18	25YR-72HR	60.04	5.80	7.67	0.0033	123	60.03	7.56	60.04	7.54
S18-3	Basin 18	25YR-72HR	60.04	4.79	6.23	0.0029	126	60.03	9.57	60.04	9.57
S18-4	Basin 18	25YR-72HR	60.03	4.34	5.96	-0.0070	122	60.03	12.57	60.03	12.94
S18-5	Basin 18	25YR-72HR	60.03	4.35	5.28	0.0072	125	60.02	4.75	60.02	3.03
S18-6	Basin 18	25YR-72HR	60.03	4.35	4.86	-0.0036	135	72.61	2.78	60.02	1.83
S18-7	Basin 18	25YR-72HR	60.03	4.28	4.10	0.0035	125	0.00	0.00	72.63	2.33
S18-8	Basin 18	25YR-72HR	60.03	4.73	4.77	0.0028	122	60.02	3.78	60.03	3.76
S18-9	Basin 18	25YR-72HR	60.08	4.74	4.62	-0.0064	2383	60.39	17.20	60.39	17.23

Qpre = 12.94 cfs

```
================================================================================
==== Basins ====================================================================
================================================================================

         Name: B18-1                   Node: S18-1                 Status: Onsite
        Group: Basin 18                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.870                 Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



--------------------------------------------------------------------------------
         Name: B18-11                  Node: S18-11                Status: Onsite
        Group: Basin 18                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.580                 Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



--------------------------------------------------------------------------------
         Name: B18-12                  Node: S18-12                Status: Onsite
        Group: Basin 18                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.300                 Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



--------------------------------------------------------------------------------
         Name: B18-13                  Node: S18-13                Status: Onsite
        Group: Basin 18                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.420                 Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



--------------------------------------------------------------------------------
         Name: B18-14                  Node: S18-14                Status: Onsite
        Group: Basin 18                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.720                 Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



--------------------------------------------------------------------------------
         Name: B18-15                  Node: S18-15                Status: Onsite
        Group: Basin 18                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
```

Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.620 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B18-16 Node: S18-16 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.350 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B18-17 Node: S18-17 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.470 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B18-2 Node: S18-2 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.360 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B18-3 Node: S18-3 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.330 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B18-5 Node: S18-5 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.470 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B18-6 Node: S18-6 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

```
        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.740                   Time Shift(hrs): 0.00
           Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00
```

```
         Name: B18-8                    Node: S18-8                  Status: Onsite
        Group: Basin 18                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.610                   Time Shift(hrs): 0.00
           Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00
```

```
         Name: B18-9                    Node: S18-9                  Status: Onsite
        Group: Basin 18                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.460                   Time Shift(hrs): 0.00
           Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00
```

```
         Name: BX18-14                  Node: EX18-15                Status: Onsite
        Group: Basin 18                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.550                   Time Shift(hrs): 0.00
           Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00
```

```
         Name: BX18-15                  Node: EX18-15                Status: Onsite
        Group: Basin 18                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.340                   Time Shift(hrs): 0.00
           Curve Number: 70.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00
```

```
         Name: BX18-17                  Node: EX18-15                Status: Onsite
        Group: Basin 18                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.400                   Time Shift(hrs): 0.00
           Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00
```

Name: BX18-19 Node: EX18-20 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.460 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX18-22 Node: EX18-23 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.350 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX18-23 Node: EX18-23 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 1.490 Time Shift(hrs): 0.00
Curve Number: 73.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX18-25 Node: EX18-23 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.510 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX18-27 Node: EX18-28 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.640 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX18-3 Node: EX18-4 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.480 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

```
--------------------------------------------------------------------------------------------------
        Name: BX18-30                Node: EX18-31               Status: Onsite
       Group: Basin 18               Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                   Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
            Area(ac): 0.640                   Time Shift(hrs): 0.00
        Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


--------------------------------------------------------------------------------------------------
        Name: BX18-33                Node: EX18-33               Status: Onsite
       Group: Basin 18               Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                   Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
            Area(ac): 0.520                   Time Shift(hrs): 0.00
        Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


--------------------------------------------------------------------------------------------------
        Name: BX18-36                Node: EX18-36               Status: Onsite
       Group: Basin 18               Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                   Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
            Area(ac): 0.330                   Time Shift(hrs): 0.00
        Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


--------------------------------------------------------------------------------------------------
        Name: BX18-38                Node: EX18-38               Status: Onsite
       Group: Basin 18               Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                   Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
            Area(ac): 0.390                   Time Shift(hrs): 0.00
        Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


--------------------------------------------------------------------------------------------------
        Name: BX18-4                 Node: EX18-4                Status: Onsite
       Group: Basin 18               Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                   Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
            Area(ac): 0.190                   Time Shift(hrs): 0.00
        Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


--------------------------------------------------------------------------------------------------
        Name: BX18-6                 Node: EX18-6                Status: Onsite
       Group: Basin 18               Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                   Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
```

Area(ac): 0.450 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX18-8 Node: EX18-9 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.430 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX18-9 Node: EX18-9 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.410 Time Shift(hrs): 0.00
Curve Number: 74.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

==========
==== Nodes ==========
==========

Name: EX18-15 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 4.690
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
4.690	0.0004

Name: EX18-20 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 6.260
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
6.260	0.0004

Name: EX18-23 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 4.640
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
4.640	0.0004
4.650	0.0040

Name: EX18-28 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 4.940

Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
4.940	0.0004

Name: EX18-31 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 4.860
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
4.860	0.0004

Name: EX18-33 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 4.940
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
4.940	0.0004

Name: EX18-36 Base Flow(cfs): 0.000 Init Stage(ft): 22.940
Group: Basin 18 Warn Stage(ft): 27.120
Type: Stage/Area

Stage(ft)	Area(ac)
20.940	0.0004
27.120	0.0004

Name: EX18-38 Base Flow(cfs): 0.000 Init Stage(ft): 24.190
Group: Basin 18 Warn Stage(ft): 28.320
Type: Stage/Area

Stage(ft)	Area(ac)
22.190	0.0004
28.320	0.0004

Name: EX18-4 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
10.000	0.0004

Name: EX18-6 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 7.420
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
7.420	0.0004

Name: EX18-9 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 4.690
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
4.690	0.0004

Name: GWT_18 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	1.950
108.00	1.950

Name: P_PIKE_CANAL Base Flow(cfs): 0.000 Init Stage(ft): 2.370
Group: Basin 18 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	2.370
108.00	2.370

Name: S18-1 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 10.330
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
10.330	0.0004

Name: S18-10 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 4.610
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
4.610	0.0004
4.620	0.0040

Name: S18-11 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 4.840
Type: Stage/Area

Stage(ft)	Area(ac)

1.950	0.0004
4.840	0.0004
5.000	0.2900
5.200	0.5800

Name: S18-12 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 7.500
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
7.500	0.0004

Name: S18-13 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 10.260
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
10.260	0.0004

Name: S18-14 Base Flow(cfs): 0.000 Init Stage(ft): 9.500
Group: Basin 18 Warn Stage(ft): 15.260
Type: Stage/Area

Stage(ft)	Area(ac)
7.500	0.0004
15.260	0.0004

Name: S18-15 Base Flow(cfs): 0.000 Init Stage(ft): 16.500
Group: Basin 18 Warn Stage(ft): 22.290
Type: Stage/Area

Stage(ft)	Area(ac)
14.500	0.0004
22.290	0.0004

Name: S18-15A Base Flow(cfs): 0.000 Init Stage(ft): 18.800
Group: Basin 18 Warn Stage(ft): 24.980
Type: Stage/Area

Stage(ft)	Area(ac)
16.800	0.0004
24.980	0.0004

Name: S18-16 Base Flow(cfs): 0.000 Init Stage(ft): 20.500
Group: Basin 18 Warn Stage(ft): 26.000
Type: Stage/Area

Stage(ft)	Area(ac)

18.500	0.0004
26.000	0.0004

Name: S18-17 Base Flow(cfs): 0.000 Init Stage(ft): 22.000
Group: Basin 18 Warn Stage(ft): 27.240
Type: Stage/Area

Stage(ft)	Area(ac)
20.000	0.0004
27.240	0.0004

Name: S18-2 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 7.670
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
7.670	0.0004

Name: S18-3 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 6.230
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
6.230	0.0004

Name: S18-4 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 5.960
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
5.960	0.0004

Name: S18-5 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 5.280
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
5.280	0.0004

Name: S18-6 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 4.860
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
4.860	0.0004

Name: S18-7 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 4.100
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
4.100	0.0004

Name: S18-8 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 4.770
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
4.770	0.0004

Name: S18-9 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 4.620
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
4.620	0.0004
5.120	0.2300
5.620	0.4600

Operating Tables

Name: E_OPT_18 Group: Basin 18
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.950	1.95	0.00
1.950	2.45	0.01
1.950	3.45	0.04
1.950	5.45	0.10
2.450	2.45	0.00
2.450	3.45	0.03
2.450	5.45	0.09

Pipes

Name: EX18-15_S18-7 From Node: EX18-15 Length(ft): 156.00
Group: Basin 18 To Node: S18-7 Count: 1
Friction Equation: Automatic
Solution Algorithm: Most Restrictive
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.10
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	30.00	30.00
Rise(in):	30.00	30.00
Invert(ft):	0.440	0.440
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX18-16_S18-15A	From Node:	S18-16	Length(ft): 122.00
Group:	Basin 18	To Node:	S18-15A	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	18.00	18.00		Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00		Exit Loss Coef: 0.10
Invert(ft):	20.500	18.800		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX18-20_EX18-15	From Node:	EX18-20	Length(ft): 294.00
Group:	Basin 18	To Node:	EX18-15	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	30.00	30.00		Entrance Loss Coef: 1.35
Rise(in):	30.00	30.00		Exit Loss Coef: 1.46
Invert(ft):	0.440	0.440		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX18-23_EX18-20	From Node:	EX18-23	Length(ft): 201.00
Group:	Basin 18	To Node:	EX18-20	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	30.00	30.00		Entrance Loss Coef: 1.35
Rise(in):	30.00	30.00		Exit Loss Coef: 0.10
Invert(ft):	0.440	0.440		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX18-28_EX18-23	From Node: EX18-28	Length(ft): 296.00
Group:	Basin 18	To Node: EX18-23	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	30.00	30.00	Entrance Loss Coef: 1.35
Rise(in):	30.00	30.00	Exit Loss Coef: 0.10
Invert(ft):	0.440	0.440	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX18-31_EX18-28	From Node: EX18-31	Length(ft): 298.00
Group:	Basin 18	To Node: EX18-28	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	30.00	30.00	Entrance Loss Coef: 1.35
Rise(in):	30.00	30.00	Exit Loss Coef: 0.10
Invert(ft):	0.440	0.440	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX18-33_EX18-31	From Node: EX18-33	Length(ft): 298.00
Group:	Basin 18	To Node: EX18-31	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	30.00	30.00	Entrance Loss Coef: 1.35
Rise(in):	30.00	30.00	Exit Loss Coef: 0.10
Invert(ft):	0.440	0.440	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX18-36_EX18-33	From Node: EX18-36	Length(ft): 249.00
Group:	Basin 18	To Node: EX18-33	Count: 1

			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	0.10
Invert(ft):	22.940	0.440	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX18-38_EX18-36	From Node:	EX18-38
Group:	Basin 18	To Node:	EX18-36

Length(ft): 149.00
Count: 1

			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	0.10
Invert(ft):	24.190	22.940	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX18-4_EX18-6	From Node:	EX18-4
Group:	Basin 18	To Node:	EX18-6

Length(ft): 175.00
Count: 1

			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	0.10
Invert(ft):	5.840	3.140	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX18-6_EX18-9	From Node:	EX18-6
Group:	Basin 18	To Node:	EX18-9

Length(ft): 175.00
Count: 1

			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	0.10
Invert(ft):	3.140	0.440	Bend Loss Coef:	0.00

Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX18-9_EX18-15	From Node: EX18-9	Length(ft):	239.00
Group:	Basin 18	To Node: EX18-15	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	30.00	30.00	Entrance Loss Coef:	1.35
Rise(in):	30.00	30.00	Exit Loss Coef:	1.46
Invert(ft):	0.440	0.440	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S18-10_EX18-23	From Node: S18-10	Length(ft):	156.00
Group:	Basin 18	To Node: EX18-23	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	30.00	30.00	Entrance Loss Coef:	0.50
Rise(in):	30.00	30.00	Exit Loss Coef:	0.10
Invert(ft):	0.500	0.440	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S18-11_S18-9	From Node: S18-11	Length(ft):	67.00
Group:	Basin 18	To Node: S18-9	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	0.10
Invert(ft):	-0.850	-0.900	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S18-12_S18-11	From Node:	S18-12	Length(ft): 236.00
Group:	Basin 18	To Node:	S18-11	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	24.00	24.00		Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00		Exit Loss Coef: 0.10
Invert(ft):	-0.600	-0.850		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S18-13_S18-12	From Node:	S18-13	Length(ft): 118.00
Group:	Basin 18	To Node:	S18-12	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	24.00	24.00		Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00		Exit Loss Coef: 0.10
Invert(ft):	-0.500	-0.600		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S18-14_S18-13	From Node:	S18-14	Length(ft): 168.00
Group:	Basin 18	To Node:	S18-13	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	24.00	24.00		Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00		Exit Loss Coef: 0.10
Invert(ft):	9.500	5.000		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

```
---------------------------------------------------------------------------------------------------
         Name: S18-15_S18-14       From Node: S18-15            Length(ft): 296.00
        Group: Basin 18              To Node: S18-14                 Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                        Flow: Both
     Span(in): 24.00          24.00                     Entrance Loss Coef: 0.50
     Rise(in): 24.00          24.00                         Exit Loss Coef: 0.10
   Invert(ft): 16.500         9.500                         Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


---------------------------------------------------------------------------------------------------
         Name: S18-15A_S18-15      From Node: S18-15A           Length(ft): 125.00
        Group: Basin 18              To Node: S18-15                 Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                        Flow: Both
     Span(in): 18.00          18.00                     Entrance Loss Coef: 0.50
     Rise(in): 18.00          18.00                         Exit Loss Coef: 0.10
   Invert(ft): 18.800         17.000                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


---------------------------------------------------------------------------------------------------
         Name: S18-17_S18-16       From Node: S18-17            Length(ft): 148.00
        Group: Basin 18              To Node: S18-16                 Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                        Flow: Both
     Span(in): 18.00          18.00                     Entrance Loss Coef: 0.50
     Rise(in): 18.00          18.00                         Exit Loss Coef: 0.10
   Invert(ft): 22.000         20.500                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


---------------------------------------------------------------------------------------------------
         Name: S18-1_S12-2         From Node: S18-1             Length(ft): 142.00
        Group: Basin 18              To Node: S18-2                  Count: 1
                                                          Friction Equation: Automatic
```

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	18.00	18.00	Flow:	Both
Rise(in):	18.00	18.00	Entrance Loss Coef:	0.50
Invert(ft):	0.000	-0.200	Exit Loss Coef:	0.10
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S18-2_S18-3	From Node:	S18-2	Length(ft):	132.00
Group:	Basin 18	To Node:	S18-3	Count:	1
				Friction Equation:	Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	18.00	18.00	Flow:	Both
Rise(in):	18.00	18.00	Entrance Loss Coef:	0.50
Invert(ft):	-0.200	-0.500	Exit Loss Coef:	0.10
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S18-3_S18-4	From Node:	S18-3	Length(ft):	157.00
Group:	Basin 18	To Node:	S18-4	Count:	1
				Friction Equation:	Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	24.00	24.00	Flow:	Both
Rise(in):	24.00	24.00	Entrance Loss Coef:	0.50
Invert(ft):	-0.500	-0.700	Exit Loss Coef:	1.46
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S18-5_S18-4	From Node:	S18-5	Length(ft):	24.00
Group:	Basin 18	To Node:	S18-4	Count:	1
				Friction Equation:	Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	30.00	30.00	Flow:	Both
Rise(in):	30.00	30.00	Entrance Loss Coef:	0.50
Invert(ft):	-1.500	-1.600	Exit Loss Coef:	1.46
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
			Outlet Ctrl Spec:	Use dc or tw

Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S18-6_S18-5	From Node: S18-6	Length(ft): 174.00
Group:	Basin 18	To Node: S18-5	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	30.00	30.00	Entrance Loss Coef: 0.50
Rise(in):	30.00	30.00	Exit Loss Coef: 0.10
Invert(ft):	-1.000	-1.500	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S18-7_S18-6	From Node: S18-7	Length(ft): 37.00
Group:	Basin 18	To Node: S18-6	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	30.00	30.00	Entrance Loss Coef: 0.50
Rise(in):	30.00	30.00	Exit Loss Coef: 1.46
Invert(ft):	-0.900	-1.000	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S18-8_S18-6	From Node: S18-8	Length(ft): 247.00
Group:	Basin 18	To Node: S18-6	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.10
Invert(ft):	0.000	-0.500	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:

Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: S18-9_S18-10 From Node: S18-9 Length(ft): 38.00
Group: Basin 18 To Node: S18-10 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	30.00	30.00	Flow:	Both
Rise(in):	30.00	30.00	Entrance Loss Coef:	0.50
Invert(ft):	-1.400	-1.500	Exit Loss Coef:	0.10
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

==========
==== Drop Structures ==========
==========

Name: DS18-4 From Node: S18-4 Length(ft): 5.00
Group: Basin 18 To Node: P_PIKE_CANAL Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Friction Equation:	Automatic
Span(in):	30.00	30.00	Solution Algorithm:	Most Restrictive
Rise(in):	30.00	30.00	Flow:	Both
Invert(ft):	0.450	0.350	Entrance Loss Coef:	0.500
Manning's N:	0.012000	0.012000	Exit Loss Coef:	1.000
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Solution Incs:	10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 1 for Drop Structure DS18-4 ***

TABLE

Count: 1 Bottom Clip(in): 0.000
Type: Vertical: Mavis Top Clip(in): 0.000
Flow: Both Weir Disc Coef: 3.130
Geometry: Rectangular Orifice Disc Coef: 0.600

Span(in): 60.00 Invert(ft): 3.450
Rise(in): 9.60 Control Elev(ft): 3.450

==========
==== Rating Curves ==========
==========

Name: EX18-15_EXF From Node: EX18-15 Count: 267
Group: Basin 18 To Node: GWT_18 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_18	1.950	1.950
#2:		0.000	0.000

#3:	0.000	0.000
#4:	0.000	0.000

Name: EX18-20_EXF From Node: EX18-20 Count: 248
Group: Basin 18 To Node: GWT_18 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_18	1.950	1.950
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: EX18-23_EXF From Node: EX18-23 Count: 249
Group: Basin 18 To Node: GWT_18 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_18	1.950	1.950
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: EX18-28_EXF From Node: EX18-28 Count: 297
Group: Basin 18 To Node: GWT_18 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_18	1.950	1.950
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: EX18-31_EXF From Node: EX18-31 Count: 282
Group: Basin 18 To Node: GWT_18 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_18	1.950	1.950
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: EX18-33_EXF From Node: EX18-33 Count: 141
Group: Basin 18 To Node: GWT_18 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_18	1.950	1.950
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: EX18-9_EXF From Node: EX18-9 Count: 120
Group: Basin 18 To Node: GWT_18 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_18	1.950	1.950
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

==========
==== Hydrology Simulations ==========
==========

Name: 100YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 5.00

Time(hrs)	Print Inc(min)
1.000	1.00
1.330	1.00

Name: 100YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 13.44

Time(hrs)	Print Inc(min)
8.000	5.00
16.000	1.00
24.000	5.00
24.330	5.00

Name: 100YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 9.60

Time(hrs)	Print Inc(min)
2.000	5.00
6.000	1.00
8.000	5.00
8.330	5.00

Name: 10YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 3.50

Time(hrs)	Print Inc(min)
1.000	1.00
1.330	1.00

Name: 10YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 8.88

Time(hrs)	Print Inc(min)

8.000	5.00
16.000	1.00
24.000	5.00
24.330	5.00

Name: 10YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 6.40

Time(hrs)	Print Inc(min)
2.000	5.00
6.000	1.00
8.000	5.00
8.330	5.00

Name: 25YR-72HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Sfwmd72
Rainfall Amount(in): 14.00

Time(hrs)	Print Inc(min)
48.000	15.00
56.000	5.00
64.000	1.00
72.000	5.00
72.330	5.00

==========
==== Routing Simulations ==========
==========

Name: 100YR-1HR Hydrology Sim: 100YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 25.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
1.000	1.000
25.000	15.000

Group	Run
Basin 18	Yes

Name: 100YR-24HR Hydrology Sim: 100YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500

```
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                   End Time(hrs): 48.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages: 24HR                    Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.000
16.000          1.000
24.000          5.000
48.000          15.000

Group           Run
--------------- -----
Basin 18        Yes


-------------------------------------------------------------------------------------------------------
         Name: 100YR-8HR          Hydrology Sim: 100YR-8HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: No          Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                   End Time(hrs): 36.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages: 8HR                     Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           5.000
6.000           1.000
8.000           5.000
36.000          15.000

Group           Run
--------------- -----
Basin 18        Yes


-------------------------------------------------------------------------------------------------------
         Name: 10YR-1HR           Hydrology Sim: 10YR-1HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: No          Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                   End Time(hrs): 25.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
1.000           1.000
25.000          15.000

Group           Run
--------------- -----
Basin 18        Yes


-------------------------------------------------------------------------------------------------------
         Name: 10YR-24HR          Hydrology Sim: 10YR-24HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP
```

```
      Execute: No          Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 48.00
     Min Calc Time(sec): 0.5000               Max Calc Time(sec): 60.0000
        Boundary Stages: 24HR                    Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.000
16.000          1.000
24.000          5.000
48.000          15.000

Group           Run
--------------- -----
Basin 18        Yes


-------------------------------------------------------------------------------------------------
         Name: 10YR-8HR            Hydrology Sim: 10YR-8HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: No          Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 36.00
     Min Calc Time(sec): 0.5000               Max Calc Time(sec): 60.0000
        Boundary Stages: 8HR                     Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           5.000
6.000           1.000
8.000           5.000
36.000          15.000

Group           Run
--------------- -----
Basin 18        Yes


-------------------------------------------------------------------------------------------------
         Name: 25YR-72HR           Hydrology Sim: 25YR-72HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 96.00
     Min Calc Time(sec): 0.5000               Max Calc Time(sec): 60.0000
        Boundary Stages: 72HR                    Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.000
16.000          1.000
24.000          5.000
96.000          15.000

Group           Run
--------------- -----
Basin 18        Yes
```

==========
==== Boundary Conditions ====
==========

Name: 8HR Node: GWT_18 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.950
1.000	1.960
2.000	2.020
3.000	2.090
4.000	2.300
5.000	2.380
6.000	2.410
7.000	2.440
8.000	2.450
12.000	1.950
36.000	1.950

Name: 24HR Node: GWT_18 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.950
1.000	1.960
2.000	1.970
3.000	1.980
4.000	2.000
5.000	2.010
6.000	2.030
7.000	2.050
8.000	2.070
9.000	2.100
10.000	2.130
11.000	2.170
12.000	2.220
13.000	2.260
14.000	2.290
15.000	2.320
16.000	2.340
17.000	2.360
18.000	2.380
19.000	2.400
20.000	2.420
21.000	2.430
22.000	2.440
23.000	2.450
24.000	2.450
36.000	1.950
48.000	1.950

Name: 72HR Node: GWT_18 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.950
24.000	2.000
36.000	2.040
48.000	2.080
49.000	2.090
50.000	2.090
51.000	2.090
52.000	2.100
53.000	2.100
54.000	2.110
55.000	2.120
56.000	2.130
57.000	2.150
57.500	2.150
58.000	2.160

58.500	2.170
59.000	2.180
59.500	2.200
60.000	2.320
60.500	2.350
61.000	2.360
61.500	2.370
62.000	2.380
62.500	2.390
63.000	2.390
64.000	2.410
65.000	2.410
66.000	2.420
68.000	2.430
70.000	2.440
72.000	2.450
96.000	1.950

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	0.00	0.0	0.0	0.0	0.0	0.00
25YR-72HR	0.08	0.0	-0.2	0.2	0.0	0.00
25YR-72HR	0.17	0.0	-1.3	1.3	0.0	0.00
25YR-72HR	0.25	0.0	-2.7	2.7	0.0	0.00
25YR-72HR	0.33	0.0	-4.0	4.0	-0.0	-0.00
25YR-72HR	0.42	0.0	-5.2	5.2	0.0	0.00
25YR-72HR	0.50	0.0	-6.5	6.5	-0.0	-0.00
25YR-72HR	0.58	0.0	-7.7	7.7	-0.0	-0.00
25YR-72HR	0.67	0.0	-9.0	9.0	-0.0	-0.00
25YR-72HR	0.75	0.0	-10.2	10.2	-0.0	-0.00
25YR-72HR	0.83	0.0	-11.4	11.4	-0.0	-0.00
25YR-72HR	0.92	0.0	-12.7	12.7	-0.0	-0.00
25YR-72HR	1.00	0.0	-13.9	13.9	-0.0	-0.00
25YR-72HR	1.08	0.0	-15.2	15.2	-0.0	-0.00
25YR-72HR	1.17	0.0	-16.4	16.4	0.0	0.00
25YR-72HR	1.25	0.0	-17.6	17.6	0.0	0.00
25YR-72HR	1.33	0.4	-18.8	19.2	-0.0	-0.00
25YR-72HR	1.42	1.5	-19.6	21.1	-0.0	-0.00
25YR-72HR	1.50	3.3	-19.9	23.2	-0.0	-0.00
25YR-72HR	1.58	7.5	-19.4	26.9	-0.0	-0.00
25YR-72HR	1.67	15.6	-16.6	32.2	-0.0	-0.00
25YR-72HR	1.75	27.7	-10.9	38.6	-0.0	-0.00
25YR-72HR	1.83	44.2	-1.7	45.9	-0.0	-0.00
25YR-72HR	1.92	65.6	11.6	54.1	-0.0	-0.00
25YR-72HR	2.00	92.1	29.1	63.0	-0.0	-0.00
25YR-72HR	2.08	123.4	50.7	72.7	-0.0	-0.00
25YR-72HR	2.17	159.9	76.6	83.2	-0.0	-0.00
25YR-72HR	2.25	201.3	106.9	94.5	-0.0	-0.00
25YR-72HR	2.33	247.6	141.4	106.2	-0.0	-0.00
25YR-72HR	2.42	298.5	180.3	118.3	0.0	0.00
25YR-72HR	2.50	354.1	223.4	130.7	0.0	0.00
25YR-72HR	2.58	414.2	270.8	143.4	0.0	0.00
25YR-72HR	2.67	478.4	322.3	156.1	0.0	0.00
25YR-72HR	2.75	546.9	377.9	169.0	0.0	0.00
25YR-72HR	2.83	619.4	437.5	182.0	0.0	0.00
25YR-72HR	2.92	695.8	500.9	194.9	0.0	0.00
25YR-72HR	3.00	776.0	568.1	207.9	0.0	0.00
25YR-72HR	3.08	859.8	638.9	220.9	0.0	0.00
25YR-72HR	3.17	947.1	713.2	234.0	0.0	0.00
25YR-72HR	3.25	1037.9	790.8	247.1	0.0	0.00
25YR-72HR	3.33	1132.1	871.7	260.4	0.0	0.00
25YR-72HR	3.42	1229.4	955.8	273.7	0.0	0.00
25YR-72HR	3.50	1330.0	1042.9	287.1	0.0	0.00
25YR-72HR	3.58	1433.6	1132.9	300.7	0.0	0.00
25YR-72HR	3.67	1540.1	1225.8	314.3	0.0	0.00
25YR-72HR	3.75	1649.5	1321.5	328.0	0.0	0.00
25YR-72HR	3.83	1761.7	1419.9	341.9	0.0	0.00
25YR-72HR	3.92	1876.7	1520.9	355.8	0.0	0.00
25YR-72HR	4.00	1994.3	1624.4	369.9	0.0	0.00
25YR-72HR	4.08	2114.4	1730.4	384.1	0.0	0.00
25YR-72HR	4.17	2237.1	1838.7	398.4	0.0	0.00
25YR-72HR	4.25	2362.2	1949.3	412.9	0.0	0.00
25YR-72HR	4.33	2489.6	2062.2	427.5	0.0	0.00
25YR-72HR	4.42	2619.4	2177.2	442.2	0.0	0.00
25YR-72HR	4.50	2751.4	2294.4	457.0	0.0	0.00
25YR-72HR	4.58	2885.6	2413.7	471.9	0.0	0.00
25YR-72HR	4.67	3022.0	2535.0	486.9	0.0	0.00
25YR-72HR	4.75	3160.4	2658.3	502.1	0.0	0.00
25YR-72HR	4.83	3300.9	2783.5	517.3	0.0	0.00
25YR-72HR	4.92	3443.3	2910.6	532.6	0.0	0.00
25YR-72HR	5.00	3587.6	3039.6	548.0	0.0	0.00
25YR-72HR	5.08	3733.8	3170.3	563.5	0.0	0.00
25YR-72HR	5.17	3881.9	3302.8	579.1	0.0	0.00
25YR-72HR	5.25	4031.7	3437.0	594.8	0.0	0.00
25YR-72HR	5.33	4183.3	3572.8	610.5	0.0	0.00
25YR-72HR	5.42	4336.6	3710.2	626.4	0.0	0.00
25YR-72HR	5.50	4491.6	3849.3	642.3	0.0	0.00
25YR-72HR	5.58	4648.1	3989.9	658.2	0.0	0.00
25YR-72HR	5.67	4806.3	4133.1	673.2	-0.0	-0.00
25YR-72HR	5.75	4966.0	4279.2	686.8	-0.0	-0.00
25YR-72HR	5.83	5127.2	4428.0	699.3	-0.0	-0.00
25YR-72HR	5.92	5289.9	4578.9	711.0	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	6.00	5454.1	4731.6	722.5	-0.0	-0.00
25YR-72HR	6.08	5619.6	4885.9	733.7	-0.0	-0.00
25YR-72HR	6.17	5786.6	5041.6	744.9	-0.0	-0.00
25YR-72HR	6.25	5954.9	5198.7	756.1	-0.0	-0.00
25YR-72HR	6.33	6124.5	5357.1	767.3	-0.0	-0.00
25YR-72HR	6.42	6295.4	5516.8	778.5	-0.0	-0.00
25YR-72HR	6.50	6467.5	5677.8	789.8	-0.0	-0.00
25YR-72HR	6.58	6640.9	5839.9	801.0	-0.0	-0.00
25YR-72HR	6.67	6815.5	6003.2	812.3	-0.0	-0.00
25YR-72HR	6.75	6991.3	6167.7	823.6	-0.0	-0.00
25YR-72HR	6.83	7168.3	6333.3	835.0	-0.0	-0.00
25YR-72HR	6.92	7346.4	6500.1	846.3	-0.0	-0.00
25YR-72HR	7.00	7525.6	6667.9	857.7	-0.0	-0.00
25YR-72HR	7.08	7705.9	6836.8	869.1	-0.0	-0.00
25YR-72HR	7.17	7887.2	7006.7	880.6	-0.0	-0.00
25YR-72HR	7.25	8069.7	7177.6	892.0	-0.0	-0.00
25YR-72HR	7.33	8253.1	7349.6	903.5	-0.0	-0.00
25YR-72HR	7.42	8437.5	7522.5	915.0	-0.0	-0.00
25YR-72HR	7.50	8622.9	7696.4	926.5	-0.0	-0.00
25YR-72HR	7.58	8809.3	7871.2	938.1	-0.0	-0.00
25YR-72HR	7.67	8996.6	8047.0	949.7	-0.0	-0.00
25YR-72HR	7.75	9184.9	8223.6	961.3	-0.0	-0.00
25YR-72HR	7.83	9374.0	8401.1	972.9	-0.0	-0.00
25YR-72HR	7.92	9564.1	8579.5	984.5	-0.0	-0.00
25YR-72HR	8.00	9755.0	8758.8	996.2	-0.0	-0.00
25YR-72HR	8.08	9946.8	8938.9	1007.9	-0.0	-0.00
25YR-72HR	8.10	9985.2	8975.0	1010.2	-0.0	-0.00
25YR-72HR	8.12	10023.7	9011.2	1012.5	-0.0	-0.00
25YR-72HR	8.13	10062.2	9047.4	1014.8	-0.0	-0.00
25YR-72HR	8.15	10100.8	9083.7	1017.1	-0.0	-0.00
25YR-72HR	8.17	10139.4	9120.1	1019.3	-0.0	-0.00
25YR-72HR	8.18	10178.0	9156.6	1021.4	-0.0	-0.00
25YR-72HR	8.20	10216.7	9193.3	1023.4	-0.0	-0.00
25YR-72HR	8.22	10255.4	9230.1	1025.3	-0.0	-0.00
25YR-72HR	8.23	10294.1	9267.0	1027.1	-0.0	-0.00
25YR-72HR	8.25	10332.8	9304.0	1028.8	-0.0	-0.00
25YR-72HR	8.27	10371.6	9341.2	1030.4	-0.0	-0.00
25YR-72HR	8.28	10410.4	9378.6	1031.9	-0.0	-0.00
25YR-72HR	8.30	10449.3	9416.1	1033.2	-0.0	-0.00
25YR-72HR	8.32	10488.2	9453.7	1034.5	-0.0	-0.00
25YR-72HR	8.33	10527.1	9491.5	1035.6	-0.0	-0.00
25YR-72HR	8.35	10566.0	9529.4	1036.7	-0.0	-0.00
25YR-72HR	8.37	10605.0	9567.3	1037.7	-0.0	-0.00
25YR-72HR	8.38	10644.0	9605.4	1038.6	-0.0	-0.00
25YR-72HR	8.40	10683.1	9643.6	1039.4	-0.0	-0.00
25YR-72HR	8.42	10722.1	9681.9	1040.2	-0.0	-0.00
25YR-72HR	8.43	10761.2	9720.3	1040.9	-0.0	-0.00
25YR-72HR	8.45	10800.4	9758.7	1041.6	-0.0	-0.00
25YR-72HR	8.47	10839.5	9797.3	1042.3	-0.0	-0.00
25YR-72HR	8.48	10878.7	9835.8	1042.9	-0.0	-0.00
25YR-72HR	8.50	10918.0	9874.5	1043.5	-0.0	-0.00
25YR-72HR	8.52	10957.2	9913.2	1044.1	-0.0	-0.00
25YR-72HR	8.53	10996.5	9951.9	1044.6	-0.0	-0.00
25YR-72HR	8.55	11035.8	9990.7	1045.1	-0.0	-0.00
25YR-72HR	8.57	11075.2	10029.5	1045.7	-0.0	-0.00
25YR-72HR	8.58	11114.6	10068.4	1046.2	-0.0	-0.00
25YR-72HR	8.60	11154.0	10107.3	1046.6	-0.0	-0.00
25YR-72HR	8.62	11193.4	10146.3	1047.1	-0.0	-0.00
25YR-72HR	8.63	11232.9	10185.3	1047.6	-0.0	-0.00
25YR-72HR	8.65	11272.4	10224.3	1048.1	-0.0	-0.00
25YR-72HR	8.67	11311.9	10263.4	1048.5	-0.0	-0.00
25YR-72HR	8.68	11351.5	10302.5	1049.0	-0.0	-0.00
25YR-72HR	8.70	11391.0	10341.6	1049.4	-0.0	-0.00
25YR-72HR	8.72	11430.7	10380.8	1049.9	-0.0	-0.00
25YR-72HR	8.73	11470.3	10420.0	1050.3	-0.0	-0.00
25YR-72HR	8.75	11510.0	10459.2	1050.8	-0.0	-0.00
25YR-72HR	8.77	11549.7	10498.5	1051.2	-0.0	-0.00
25YR-72HR	8.78	11589.4	10537.8	1051.7	-0.0	-0.00
25YR-72HR	8.80	11629.2	10577.1	1052.1	-0.0	-0.00
25YR-72HR	8.82	11669.0	10616.4	1052.6	-0.0	-0.00
25YR-72HR	8.83	11708.8	10655.8	1053.0	-0.0	-0.00
25YR-72HR	8.85	11748.6	10695.2	1053.4	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	8.87	11788.5	10734.7	1053.9	-0.0	-0.00
25YR-72HR	8.88	11828.4	10774.1	1054.3	-0.0	-0.00
25YR-72HR	8.90	11868.4	10813.6	1054.7	-0.0	-0.00
25YR-72HR	8.92	11908.3	10853.2	1055.2	-0.0	-0.00
25YR-72HR	8.93	11948.3	10892.7	1055.6	-0.0	-0.00
25YR-72HR	8.95	11988.3	10932.3	1056.0	-0.0	-0.00
25YR-72HR	8.97	12028.4	10971.9	1056.5	-0.0	-0.00
25YR-72HR	8.98	12068.4	11011.6	1056.9	-0.0	-0.00
25YR-72HR	9.00	12108.5	11051.2	1057.3	-0.0	-0.00
25YR-72HR	9.02	12148.7	11090.9	1057.7	-0.0	-0.00
25YR-72HR	9.03	12188.8	11130.6	1058.2	-0.0	-0.00
25YR-72HR	9.05	12229.0	11170.4	1058.6	-0.0	-0.00
25YR-72HR	9.07	12269.2	11210.2	1059.0	-0.0	-0.00
25YR-72HR	9.08	12309.4	11250.0	1059.4	-0.0	-0.00
25YR-72HR	9.10	12349.7	11289.8	1059.9	-0.0	-0.00
25YR-72HR	9.12	12390.0	11329.7	1060.3	-0.0	-0.00
25YR-72HR	9.13	12430.3	11369.6	1060.7	-0.0	-0.00
25YR-72HR	9.15	12470.7	11409.5	1061.1	-0.0	-0.00
25YR-72HR	9.17	12511.0	11449.5	1061.6	-0.0	-0.00
25YR-72HR	9.18	12551.4	11489.4	1062.0	-0.0	-0.00
25YR-72HR	9.20	12591.8	11529.4	1062.4	-0.0	-0.00
25YR-72HR	9.22	12632.3	11569.5	1062.8	-0.0	-0.00
25YR-72HR	9.23	12672.8	11609.5	1063.2	-0.0	-0.00
25YR-72HR	9.25	12713.3	11649.6	1063.7	-0.0	-0.00
25YR-72HR	9.27	12753.8	11689.7	1064.1	-0.0	-0.00
25YR-72HR	9.28	12794.3	11729.8	1064.5	-0.0	-0.00
25YR-72HR	9.30	12834.9	11770.0	1064.9	-0.0	-0.00
25YR-72HR	9.32	12875.5	11810.2	1065.3	-0.0	-0.00
25YR-72HR	9.33	12916.2	11850.4	1065.8	-0.0	-0.00
25YR-72HR	9.35	12956.8	11890.6	1066.2	-0.0	-0.00
25YR-72HR	9.37	12997.5	11930.9	1066.6	-0.0	-0.00
25YR-72HR	9.38	13038.2	11971.2	1067.0	-0.0	-0.00
25YR-72HR	9.40	13078.9	12011.5	1067.4	-0.0	-0.00
25YR-72HR	9.42	13119.7	12051.9	1067.8	-0.0	-0.00
25YR-72HR	9.43	13160.5	12092.2	1068.2	-0.0	-0.00
25YR-72HR	9.45	13201.3	12132.6	1068.6	-0.0	-0.00
25YR-72HR	9.47	13242.1	12173.1	1069.1	-0.0	-0.00
25YR-72HR	9.48	13283.0	12213.5	1069.5	-0.0	-0.00
25YR-72HR	9.50	13323.9	12254.0	1069.9	-0.0	-0.00
25YR-72HR	9.52	13364.8	12294.5	1070.3	-0.0	-0.00
25YR-72HR	9.53	13405.7	12335.0	1070.7	-0.0	-0.00
25YR-72HR	9.55	13446.7	12375.5	1071.1	-0.0	-0.00
25YR-72HR	9.57	13487.6	12416.1	1071.5	-0.0	-0.00
25YR-72HR	9.58	13528.6	12456.7	1071.9	-0.0	-0.00
25YR-72HR	9.60	13569.7	12497.3	1072.3	-0.0	-0.00
25YR-72HR	9.62	13610.7	12538.0	1072.7	-0.0	-0.00
25YR-72HR	9.63	13651.8	12578.7	1073.1	-0.0	-0.00
25YR-72HR	9.65	13692.9	12619.4	1073.5	-0.0	-0.00
25YR-72HR	9.67	13734.0	12660.1	1073.9	-0.0	-0.00
25YR-72HR	9.68	13775.2	12700.8	1074.4	-0.0	-0.00
25YR-72HR	9.70	13816.4	12741.6	1074.8	-0.0	-0.00
25YR-72HR	9.72	13857.6	12782.4	1075.2	-0.0	-0.00
25YR-72HR	9.73	13898.8	12823.2	1075.6	-0.0	-0.00
25YR-72HR	9.75	13940.0	12864.1	1076.0	-0.0	-0.00
25YR-72HR	9.77	13981.3	12904.9	1076.4	-0.0	-0.00
25YR-72HR	9.78	14022.6	12945.8	1076.8	-0.0	-0.00
25YR-72HR	9.80	14063.9	12986.7	1077.2	-0.0	-0.00
25YR-72HR	9.82	14105.2	13027.7	1077.6	-0.0	-0.00
25YR-72HR	9.83	14146.6	13068.6	1078.0	-0.0	-0.00
25YR-72HR	9.85	14188.0	13109.6	1078.4	-0.0	-0.00
25YR-72HR	9.87	14229.4	13150.6	1078.8	-0.0	-0.00
25YR-72HR	9.88	14270.8	13191.7	1079.2	-0.0	-0.00
25YR-72HR	9.90	14312.3	13232.7	1079.6	-0.0	-0.00
25YR-72HR	9.92	14353.7	13273.8	1080.0	-0.0	-0.00
25YR-72HR	9.93	14395.2	13314.9	1080.3	-0.0	-0.00
25YR-72HR	9.95	14436.8	13356.0	1080.7	-0.0	-0.00
25YR-72HR	9.97	14478.3	13397.2	1081.1	-0.0	-0.00
25YR-72HR	9.98	14519.9	13438.3	1081.5	-0.0	-0.00
25YR-72HR	10.00	14561.5	13479.5	1081.9	-0.0	-0.00
25YR-72HR	10.02	14603.1	13520.8	1082.3	-0.0	-0.00
25YR-72HR	10.03	14644.7	13562.0	1082.7	-0.0	-0.00
25YR-72HR	10.05	14686.4	13603.3	1083.1	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	10.07	14728.0	13644.5	1083.5	-0.0	-0.00
25YR-72HR	10.08	14769.7	13685.9	1083.9	-0.0	-0.00
25YR-72HR	10.10	14811.5	13727.2	1084.3	-0.0	-0.00
25YR-72HR	10.12	14853.2	13768.5	1084.7	-0.0	-0.00
25YR-72HR	10.13	14895.0	13809.9	1085.1	-0.0	-0.00
25YR-72HR	10.15	14936.8	13851.3	1085.4	-0.0	-0.00
25YR-72HR	10.17	14978.6	13892.7	1085.8	-0.0	-0.00
25YR-72HR	10.18	15020.4	13934.2	1086.2	-0.0	-0.00
25YR-72HR	10.20	15062.3	13975.6	1086.6	-0.0	-0.00
25YR-72HR	10.22	15104.1	14017.1	1087.0	-0.0	-0.00
25YR-72HR	10.23	15146.0	14058.6	1087.4	-0.0	-0.00
25YR-72HR	10.25	15187.9	14100.2	1087.8	-0.0	-0.00
25YR-72HR	10.27	15229.9	14141.7	1088.2	-0.0	-0.00
25YR-72HR	10.28	15271.8	14183.3	1088.6	-0.0	-0.00
25YR-72HR	10.30	15313.8	14224.9	1089.0	-0.0	-0.00
25YR-72HR	10.32	15355.8	14266.5	1089.3	-0.0	-0.00
25YR-72HR	10.33	15397.8	14308.1	1089.7	-0.0	-0.00
25YR-72HR	10.35	15439.9	14349.8	1090.1	-0.0	-0.00
25YR-72HR	10.37	15482.0	14391.5	1090.5	-0.0	-0.00
25YR-72HR	10.38	15524.0	14433.2	1090.9	-0.0	-0.00
25YR-72HR	10.40	15566.1	14474.9	1091.3	-0.0	-0.00
25YR-72HR	10.42	15608.3	14516.6	1091.6	-0.0	-0.00
25YR-72HR	10.43	15650.4	14558.4	1092.0	-0.0	-0.00
25YR-72HR	10.45	15692.6	14600.2	1092.4	-0.0	-0.00
25YR-72HR	10.47	15734.8	14642.0	1092.8	-0.0	-0.00
25YR-72HR	10.48	15777.0	14683.8	1093.2	-0.0	-0.00
25YR-72HR	10.50	15819.2	14725.7	1093.5	-0.0	-0.00
25YR-72HR	10.52	15861.5	14767.5	1093.9	-0.0	-0.00
25YR-72HR	10.53	15903.7	14809.4	1094.3	-0.0	-0.00
25YR-72HR	10.55	15946.0	14851.3	1094.7	-0.0	-0.00
25YR-72HR	10.57	15988.3	14893.3	1095.1	-0.0	-0.00
25YR-72HR	10.58	16030.7	14935.2	1095.4	-0.0	-0.00
25YR-72HR	10.60	16073.0	14977.2	1095.8	-0.0	-0.00
25YR-72HR	10.62	16115.4	15019.2	1096.2	-0.0	-0.00
25YR-72HR	10.63	16157.8	15061.2	1096.6	-0.0	-0.00
25YR-72HR	10.65	16200.2	15103.2	1096.9	-0.0	-0.00
25YR-72HR	10.67	16242.6	15145.3	1097.3	-0.0	-0.00
25YR-72HR	10.68	16285.0	15187.4	1097.7	-0.0	-0.00
25YR-72HR	10.70	16327.5	15229.4	1098.1	-0.0	-0.00
25YR-72HR	10.72	16370.0	15271.6	1098.4	-0.0	-0.00
25YR-72HR	10.73	16412.5	15313.7	1098.8	-0.0	-0.00
25YR-72HR	10.75	16455.0	15355.9	1099.2	-0.0	-0.00
25YR-72HR	10.77	16497.6	15398.0	1099.6	-0.0	-0.00
25YR-72HR	10.78	16540.1	15440.2	1099.9	-0.0	-0.00
25YR-72HR	10.80	16582.7	15482.4	1100.3	-0.0	-0.00
25YR-72HR	10.82	16625.3	15524.7	1100.7	-0.0	-0.00
25YR-72HR	10.83	16667.9	15566.9	1101.0	-0.0	-0.00
25YR-72HR	10.85	16710.6	15609.2	1101.4	-0.0	-0.00
25YR-72HR	10.87	16753.2	15651.5	1101.8	-0.0	-0.00
25YR-72HR	10.88	16795.9	15693.8	1102.1	-0.0	-0.00
25YR-72HR	10.90	16838.6	15736.1	1102.5	-0.0	-0.00
25YR-72HR	10.92	16881.3	15778.5	1102.9	-0.0	-0.00
25YR-72HR	10.93	16924.1	15820.8	1103.2	-0.0	-0.00
25YR-72HR	10.95	16966.8	15863.2	1103.6	-0.0	-0.00
25YR-72HR	10.97	17009.6	15905.6	1104.0	-0.0	-0.00
25YR-72HR	10.98	17052.4	15948.0	1104.4	-0.0	-0.00
25YR-72HR	11.00	17095.2	15990.5	1104.7	-0.0	-0.00
25YR-72HR	11.02	17138.0	16032.9	1105.1	-0.0	-0.00
25YR-72HR	11.03	17180.9	16075.4	1105.5	-0.0	-0.00
25YR-72HR	11.05	17223.7	16117.9	1105.8	-0.0	-0.00
25YR-72HR	11.07	17266.6	16160.4	1106.2	-0.0	-0.00
25YR-72HR	11.08	17309.5	16203.0	1106.6	-0.0	-0.00
25YR-72HR	11.10	17352.4	16245.5	1106.9	-0.0	-0.00
25YR-72HR	11.12	17395.4	16288.1	1107.3	-0.0	-0.00
25YR-72HR	11.13	17438.3	16330.7	1107.6	-0.0	-0.00
25YR-72HR	11.15	17481.3	16373.3	1108.0	-0.0	-0.00
25YR-72HR	11.17	17524.3	16415.9	1108.4	-0.0	-0.00
25YR-72HR	11.18	17567.3	16458.6	1108.7	-0.0	-0.00
25YR-72HR	11.20	17610.3	16501.2	1109.1	-0.0	-0.00
25YR-72HR	11.22	17653.4	16543.9	1109.5	-0.0	-0.00
25YR-72HR	11.23	17696.4	16586.6	1109.8	-0.0	-0.00
25YR-72HR	11.25	17739.5	16629.3	1110.2	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	11.27	17782.6	16672.1	1110.5	-0.0	-0.00
25YR-72HR	11.28	17825.7	16714.8	1110.9	-0.0	-0.00
25YR-72HR	11.30	17868.9	16757.6	1111.3	-0.0	-0.00
25YR-72HR	11.32	17912.0	16800.4	1111.6	-0.0	-0.00
25YR-72HR	11.33	17955.2	16843.2	1112.0	-0.0	-0.00
25YR-72HR	11.35	17998.4	16886.0	1112.4	-0.0	-0.00
25YR-72HR	11.37	18041.6	16928.9	1112.7	-0.0	-0.00
25YR-72HR	11.38	18084.8	16971.7	1113.1	-0.0	-0.00
25YR-72HR	11.40	18128.0	17014.6	1113.4	-0.0	-0.00
25YR-72HR	11.42	18171.3	17057.5	1113.8	-0.0	-0.00
25YR-72HR	11.43	18214.6	17100.4	1114.1	-0.0	-0.00
25YR-72HR	11.45	18257.8	17143.3	1114.5	-0.0	-0.00
25YR-72HR	11.47	18301.2	17186.3	1114.9	-0.0	-0.00
25YR-72HR	11.48	18344.5	17229.3	1115.2	-0.0	-0.00
25YR-72HR	11.50	18387.8	17272.2	1115.6	-0.0	-0.00
25YR-72HR	11.52	18431.2	17315.2	1115.9	-0.0	-0.00
25YR-72HR	11.53	18474.6	17358.3	1116.3	-0.0	-0.00
25YR-72HR	11.55	18518.0	17401.3	1116.7	-0.0	-0.00
25YR-72HR	11.57	18561.4	17444.4	1117.0	-0.0	-0.00
25YR-72HR	11.58	18604.8	17487.4	1117.4	-0.0	-0.00
25YR-72HR	11.60	18648.2	17530.5	1117.7	-0.0	-0.00
25YR-72HR	11.62	18691.7	17573.6	1118.1	-0.0	-0.00
25YR-72HR	11.63	18735.2	17616.8	1118.4	-0.0	-0.00
25YR-72HR	11.65	18778.7	17659.9	1118.8	-0.0	-0.00
25YR-72HR	11.67	18822.2	17703.1	1119.2	-0.0	-0.00
25YR-72HR	11.68	18865.7	17746.2	1119.5	-0.0	-0.00
25YR-72HR	11.70	18909.3	17789.4	1119.9	-0.0	-0.00
25YR-72HR	11.72	18952.9	17832.6	1120.2	-0.0	-0.00
25YR-72HR	11.73	18996.4	17875.9	1120.6	-0.0	-0.00
25YR-72HR	11.75	19040.0	17919.1	1120.9	-0.0	-0.00
25YR-72HR	11.77	19083.7	17962.4	1121.3	-0.0	-0.00
25YR-72HR	11.78	19127.3	18005.7	1121.6	-0.0	-0.00
25YR-72HR	11.80	19170.9	18049.0	1122.0	-0.0	-0.00
25YR-72HR	11.82	19214.6	18092.3	1122.3	-0.0	-0.00
25YR-72HR	11.83	19258.3	18135.6	1122.7	-0.0	-0.00
25YR-72HR	11.85	19302.0	18178.9	1123.1	-0.0	-0.00
25YR-72HR	11.87	19345.7	18222.3	1123.4	-0.0	-0.00
25YR-72HR	11.88	19389.5	18265.7	1123.8	-0.0	-0.00
25YR-72HR	11.90	19433.2	18309.1	1124.1	-0.0	-0.00
25YR-72HR	11.92	19477.0	18352.5	1124.5	-0.0	-0.00
25YR-72HR	11.93	19520.8	18396.0	1124.8	-0.0	-0.00
25YR-72HR	11.95	19564.6	18439.4	1125.2	-0.0	-0.00
25YR-72HR	11.97	19608.4	18482.9	1125.5	-0.0	-0.00
25YR-72HR	11.98	19652.2	18526.4	1125.9	-0.0	-0.00
25YR-72HR	12.00	19696.1	18569.9	1126.2	-0.0	-0.00
25YR-72HR	12.02	19740.0	18613.4	1126.6	-0.0	-0.00
25YR-72HR	12.03	19783.9	18656.9	1126.9	-0.0	-0.00
25YR-72HR	12.05	19827.8	18700.5	1127.3	-0.0	-0.00
25YR-72HR	12.07	19871.7	18744.1	1127.7	-0.0	-0.00
25YR-72HR	12.08	19915.6	18787.6	1128.0	-0.0	-0.00
25YR-72HR	12.10	19959.6	18831.3	1128.4	-0.0	-0.00
25YR-72HR	12.12	20003.6	18874.9	1128.7	-0.0	-0.00
25YR-72HR	12.13	20047.6	18918.5	1129.1	-0.0	-0.00
25YR-72HR	12.15	20091.6	18962.2	1129.4	-0.0	-0.00
25YR-72HR	12.17	20135.7	19005.9	1129.8	-0.0	-0.00
25YR-72HR	12.18	20179.7	19049.6	1130.1	-0.0	-0.00
25YR-72HR	12.20	20223.8	19093.3	1130.5	-0.0	-0.00
25YR-72HR	12.22	20267.9	19137.0	1130.8	-0.0	-0.00
25YR-72HR	12.23	20312.0	19180.8	1131.2	-0.0	-0.00
25YR-72HR	12.25	20356.1	19224.6	1131.6	-0.0	-0.00
25YR-72HR	12.27	20400.3	19268.3	1131.9	-0.0	-0.00
25YR-72HR	12.28	20444.4	19312.2	1132.3	-0.0	-0.00
25YR-72HR	12.30	20488.6	19356.0	1132.6	-0.0	-0.00
25YR-72HR	12.32	20532.8	19399.8	1133.0	-0.0	-0.00
25YR-72HR	12.33	20577.0	19443.7	1133.3	-0.0	-0.00
25YR-72HR	12.35	20621.3	19487.6	1133.7	-0.0	-0.00
25YR-72HR	12.37	20665.5	19531.5	1134.0	-0.0	-0.00
25YR-72HR	12.38	20709.8	19575.4	1134.4	-0.0	-0.00
25YR-72HR	12.40	20754.1	19619.3	1134.7	-0.0	-0.00
25YR-72HR	12.42	20798.4	19663.3	1135.1	-0.0	-0.00
25YR-72HR	12.43	20842.7	19707.3	1135.4	-0.0	-0.00
25YR-72HR	12.45	20887.1	19751.3	1135.8	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	12.47	20931.4	19795.3	1136.2	-0.0	-0.00
25YR-72HR	12.48	20975.8	19839.3	1136.5	-0.0	-0.00
25YR-72HR	12.50	21020.2	19883.3	1136.9	-0.0	-0.00
25YR-72HR	12.52	21064.6	19927.4	1137.2	-0.0	-0.00
25YR-72HR	12.53	21109.0	19971.5	1137.6	-0.0	-0.00
25YR-72HR	12.55	21153.5	20015.6	1137.9	-0.0	-0.00
25YR-72HR	12.57	21198.0	20059.7	1138.3	-0.0	-0.00
25YR-72HR	12.58	21242.5	20103.8	1138.6	-0.0	-0.00
25YR-72HR	12.60	21287.0	20148.0	1139.0	-0.0	-0.00
25YR-72HR	12.62	21331.5	20192.2	1139.3	-0.0	-0.00
25YR-72HR	12.63	21376.0	20236.4	1139.7	-0.0	-0.00
25YR-72HR	12.65	21420.6	20280.6	1140.0	-0.0	-0.00
25YR-72HR	12.67	21465.2	20324.8	1140.4	-0.0	-0.00
25YR-72HR	12.68	21509.8	20369.0	1140.7	-0.0	-0.00
25YR-72HR	12.70	21554.4	20413.3	1141.1	-0.0	-0.00
25YR-72HR	12.72	21599.0	20457.6	1141.4	-0.0	-0.00
25YR-72HR	12.73	21643.6	20501.9	1141.8	-0.0	-0.00
25YR-72HR	12.75	21688.3	20546.2	1142.1	-0.0	-0.00
25YR-72HR	12.77	21733.0	20590.5	1142.5	-0.0	-0.00
25YR-72HR	12.78	21777.7	20634.9	1142.8	-0.0	-0.00
25YR-72HR	12.80	21822.4	20679.2	1143.2	-0.0	-0.00
25YR-72HR	12.82	21867.1	20723.6	1143.5	-0.0	-0.00
25YR-72HR	12.83	21911.9	20768.0	1143.9	-0.0	-0.00
25YR-72HR	12.85	21956.7	20812.4	1144.2	-0.0	-0.00
25YR-72HR	12.87	22001.4	20856.9	1144.6	-0.0	-0.00
25YR-72HR	12.88	22046.2	20901.3	1144.9	-0.0	-0.00
25YR-72HR	12.90	22091.1	20945.8	1145.3	-0.0	-0.00
25YR-72HR	12.92	22135.9	20990.3	1145.6	-0.0	-0.00
25YR-72HR	12.93	22180.8	21034.8	1146.0	-0.0	-0.00
25YR-72HR	12.95	22225.6	21079.3	1146.3	-0.0	-0.00
25YR-72HR	12.97	22270.5	21123.9	1146.7	-0.0	-0.00
25YR-72HR	12.98	22315.4	21168.4	1147.0	-0.0	-0.00
25YR-72HR	13.00	22360.3	21213.0	1147.3	-0.0	-0.00
25YR-72HR	13.02	22405.3	21257.6	1147.7	-0.0	-0.00
25YR-72HR	13.03	22450.2	21302.2	1148.0	-0.0	-0.00
25YR-72HR	13.05	22495.2	21346.8	1148.4	-0.0	-0.00
25YR-72HR	13.07	22540.2	21391.5	1148.7	-0.0	-0.00
25YR-72HR	13.08	22585.2	21436.1	1149.1	-0.0	-0.00
25YR-72HR	13.10	22630.2	21480.8	1149.4	-0.0	-0.00
25YR-72HR	13.12	22675.3	21525.5	1149.8	-0.0	-0.00
25YR-72HR	13.13	22720.3	21570.2	1150.1	-0.0	-0.00
25YR-72HR	13.15	22765.4	21614.9	1150.4	-0.0	-0.00
25YR-72HR	13.17	22810.5	21659.7	1150.8	-0.0	-0.00
25YR-72HR	13.18	22855.6	21704.4	1151.1	-0.0	-0.00
25YR-72HR	13.20	22900.7	21749.2	1151.5	-0.0	-0.00
25YR-72HR	13.22	22945.8	21794.0	1151.8	-0.0	-0.00
25YR-72HR	13.23	22991.0	21838.8	1152.2	-0.0	-0.00
25YR-72HR	13.25	23036.2	21883.7	1152.5	-0.0	-0.00
25YR-72HR	13.27	23081.4	21928.5	1152.8	-0.0	-0.00
25YR-72HR	13.28	23126.6	21973.4	1153.2	-0.0	-0.00
25YR-72HR	13.30	23171.8	22018.2	1153.5	-0.0	-0.00
25YR-72HR	13.32	23217.0	22063.1	1153.9	-0.0	-0.00
25YR-72HR	13.33	23262.3	22108.0	1154.2	-0.0	-0.00
25YR-72HR	13.35	23307.5	22153.0	1154.6	-0.0	-0.00
25YR-72HR	13.37	23352.8	22197.9	1154.9	-0.0	-0.00
25YR-72HR	13.38	23398.1	22242.9	1155.2	-0.0	-0.00
25YR-72HR	13.40	23443.4	22287.9	1155.6	-0.0	-0.00
25YR-72HR	13.42	23488.8	22332.8	1155.9	-0.0	-0.00
25YR-72HR	13.43	23534.1	22377.9	1156.2	-0.0	-0.00
25YR-72HR	13.45	23579.5	22422.9	1156.6	-0.0	-0.00
25YR-72HR	13.47	23624.8	22467.9	1156.9	-0.0	-0.00
25YR-72HR	13.48	23670.2	22513.0	1157.3	-0.0	-0.00
25YR-72HR	13.50	23715.6	22558.0	1157.6	-0.0	-0.00
25YR-72HR	13.52	23761.1	22603.1	1157.9	-0.0	-0.00
25YR-72HR	13.53	23806.5	22648.2	1158.3	-0.0	-0.00
25YR-72HR	13.55	23852.0	22693.4	1158.6	-0.0	-0.00
25YR-72HR	13.57	23897.4	22738.5	1159.0	-0.0	-0.00
25YR-72HR	13.58	23942.9	22783.6	1159.3	-0.0	-0.00
25YR-72HR	13.60	23988.4	22828.8	1159.6	-0.0	-0.00
25YR-72HR	13.62	24034.0	22874.0	1160.0	-0.0	-0.00
25YR-72HR	13.63	24079.5	22919.2	1160.3	-0.0	-0.00
25YR-72HR	13.65	24125.0	22964.4	1160.6	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	13.67	24170.6	23009.6	1161.0	-0.0	-0.00
25YR-72HR	13.68	24216.2	23054.9	1161.3	-0.0	-0.00
25YR-72HR	13.70	24261.8	23100.1	1161.6	-0.0	-0.00
25YR-72HR	13.72	24307.4	23145.4	1162.0	-0.0	-0.00
25YR-72HR	13.73	24353.0	23190.7	1162.3	-0.0	-0.00
25YR-72HR	13.75	24398.7	23236.0	1162.7	-0.0	-0.00
25YR-72HR	13.77	24444.3	23281.3	1163.0	-0.0	-0.00
25YR-72HR	13.78	24490.0	23326.7	1163.3	-0.0	-0.00
25YR-72HR	13.80	24535.7	23372.0	1163.7	-0.0	-0.00
25YR-72HR	13.82	24581.4	23417.4	1164.0	-0.0	-0.00
25YR-72HR	13.83	24627.1	23462.8	1164.3	-0.0	-0.00
25YR-72HR	13.85	24672.9	23508.2	1164.7	-0.0	-0.00
25YR-72HR	13.87	24718.6	23553.6	1165.0	-0.0	-0.00
25YR-72HR	13.88	24764.4	23599.0	1165.3	-0.0	-0.00
25YR-72HR	13.90	24810.2	23644.5	1165.7	-0.0	-0.00
25YR-72HR	13.92	24855.9	23690.0	1166.0	-0.0	-0.00
25YR-72HR	13.93	24901.8	23735.4	1166.3	-0.0	-0.00
25YR-72HR	13.95	24947.6	23780.9	1166.7	-0.0	-0.00
25YR-72HR	13.97	24993.4	23826.4	1167.0	-0.0	-0.00
25YR-72HR	13.98	25039.3	23872.0	1167.3	-0.0	-0.00
25YR-72HR	14.00	25085.2	23917.5	1167.7	-0.0	-0.00
25YR-72HR	14.02	25131.0	23963.0	1168.0	-0.0	-0.00
25YR-72HR	14.03	25176.9	24008.6	1168.3	-0.0	-0.00
25YR-72HR	14.05	25222.9	24054.2	1168.7	-0.0	-0.00
25YR-72HR	14.07	25268.8	24099.8	1169.0	-0.0	-0.00
25YR-72HR	14.08	25314.7	24145.4	1169.3	-0.0	-0.00
25YR-72HR	14.10	25360.7	24191.0	1169.7	-0.0	-0.00
25YR-72HR	14.12	25406.7	24236.7	1170.0	-0.0	-0.00
25YR-72HR	14.13	25452.7	24282.4	1170.3	-0.0	-0.00
25YR-72HR	14.15	25498.7	24328.0	1170.7	-0.0	-0.00
25YR-72HR	14.17	25544.7	24373.7	1171.0	-0.0	-0.00
25YR-72HR	14.18	25590.7	24419.4	1171.3	-0.0	-0.00
25YR-72HR	14.20	25636.8	24465.1	1171.7	-0.0	-0.00
25YR-72HR	14.22	25682.9	24510.9	1172.0	-0.0	-0.00
25YR-72HR	14.23	25728.9	24556.6	1172.3	-0.0	-0.00
25YR-72HR	14.25	25775.0	24602.4	1172.6	-0.0	-0.00
25YR-72HR	14.27	25821.2	24648.2	1173.0	-0.0	-0.00
25YR-72HR	14.28	25867.3	24694.0	1173.3	-0.0	-0.00
25YR-72HR	14.30	25913.4	24739.8	1173.6	-0.0	-0.00
25YR-72HR	14.32	25959.6	24785.6	1174.0	-0.0	-0.00
25YR-72HR	14.33	26005.7	24831.4	1174.3	-0.0	-0.00
25YR-72HR	14.35	26051.9	24877.3	1174.6	-0.0	-0.00
25YR-72HR	14.37	26098.1	24923.2	1175.0	-0.0	-0.00
25YR-72HR	14.38	26144.3	24969.1	1175.3	-0.0	-0.00
25YR-72HR	14.40	26190.6	25015.0	1175.6	-0.0	-0.00
25YR-72HR	14.42	26236.8	25060.9	1175.9	-0.0	-0.00
25YR-72HR	14.43	26283.1	25106.8	1176.3	-0.0	-0.00
25YR-72HR	14.45	26329.3	25152.7	1176.6	-0.0	-0.00
25YR-72HR	14.47	26375.6	25198.7	1176.9	-0.0	-0.00
25YR-72HR	14.48	26421.9	25244.7	1177.3	-0.0	-0.00
25YR-72HR	14.50	26468.3	25290.7	1177.6	-0.0	-0.00
25YR-72HR	14.52	26514.6	25336.7	1177.9	-0.0	-0.00
25YR-72HR	14.53	26560.9	25382.7	1178.2	-0.0	-0.00
25YR-72HR	14.55	26607.3	25428.7	1178.6	-0.0	-0.00
25YR-72HR	14.57	26653.7	25474.8	1178.9	-0.0	-0.00
25YR-72HR	14.58	26700.0	25520.8	1179.2	-0.0	-0.00
25YR-72HR	14.60	26746.5	25566.9	1179.6	-0.0	-0.00
25YR-72HR	14.62	26792.9	25613.0	1179.9	-0.0	-0.00
25YR-72HR	14.63	26839.3	25659.1	1180.2	-0.0	-0.00
25YR-72HR	14.65	26885.7	25705.2	1180.5	-0.0	-0.00
25YR-72HR	14.67	26932.2	25751.3	1180.9	-0.0	-0.00
25YR-72HR	14.68	26978.7	25797.5	1181.2	-0.0	-0.00
25YR-72HR	14.70	27025.2	25843.7	1181.5	-0.0	-0.00
25YR-72HR	14.72	27071.7	25889.8	1181.8	-0.0	-0.00
25YR-72HR	14.73	27118.2	25936.0	1182.2	-0.0	-0.00
25YR-72HR	14.75	27164.7	25982.2	1182.5	-0.0	-0.00
25YR-72HR	14.77	27211.3	26028.4	1182.8	-0.0	-0.00
25YR-72HR	14.78	27257.8	26074.7	1183.1	-0.0	-0.00
25YR-72HR	14.80	27304.4	26120.9	1183.5	-0.0	-0.00
25YR-72HR	14.82	27351.0	26167.2	1183.8	-0.0	-0.00
25YR-72HR	14.83	27397.6	26213.4	1184.1	-0.0	-0.00
25YR-72HR	14.85	27444.2	26259.7	1184.4	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	14.87	27490.8	26306.0	1184.8	-0.0	-0.00
25YR-72HR	14.88	27537.4	26352.3	1185.1	-0.0	-0.00
25YR-72HR	14.90	27584.1	26398.7	1185.4	-0.0	-0.00
25YR-72HR	14.92	27630.8	26445.0	1185.7	-0.0	-0.00
25YR-72HR	14.93	27677.4	26491.4	1186.1	-0.0	-0.00
25YR-72HR	14.95	27724.1	26537.8	1186.4	-0.0	-0.00
25YR-72HR	14.97	27770.8	26584.1	1186.7	-0.0	-0.00
25YR-72HR	14.98	27817.6	26630.5	1187.0	-0.0	-0.00
25YR-72HR	15.00	27864.3	26677.0	1187.4	-0.0	-0.00
25YR-72HR	15.02	27911.1	26723.4	1187.7	-0.0	-0.00
25YR-72HR	15.03	27957.8	26769.8	1188.0	-0.0	-0.00
25YR-72HR	15.05	28004.6	26816.3	1188.3	-0.0	-0.00
25YR-72HR	15.07	28051.4	26862.7	1188.7	-0.0	-0.00
25YR-72HR	15.08	28098.2	26909.2	1189.0	-0.0	-0.00
25YR-72HR	15.10	28145.0	26955.7	1189.3	-0.0	-0.00
25YR-72HR	15.12	28191.8	27002.2	1189.6	-0.0	-0.00
25YR-72HR	15.13	28238.7	27048.7	1189.9	-0.0	-0.00
25YR-72HR	15.15	28285.5	27095.3	1190.3	-0.0	-0.00
25YR-72HR	15.17	28332.4	27141.8	1190.6	-0.0	-0.00
25YR-72HR	15.18	28379.3	27188.4	1190.9	-0.0	-0.00
25YR-72HR	15.20	28426.2	27235.0	1191.2	-0.0	-0.00
25YR-72HR	15.22	28473.1	27281.6	1191.5	-0.0	-0.00
25YR-72HR	15.23	28520.0	27328.2	1191.9	-0.0	-0.00
25YR-72HR	15.25	28567.0	27374.8	1192.2	-0.0	-0.00
25YR-72HR	15.27	28613.9	27421.4	1192.5	-0.0	-0.00
25YR-72HR	15.28	28660.9	27468.1	1192.8	-0.0	-0.00
25YR-72HR	15.30	28707.9	27514.7	1193.1	-0.0	-0.00
25YR-72HR	15.32	28754.8	27561.4	1193.5	-0.0	-0.00
25YR-72HR	15.33	28801.8	27608.1	1193.8	-0.0	-0.00
25YR-72HR	15.35	28848.9	27654.8	1194.1	-0.0	-0.00
25YR-72HR	15.37	28895.9	27701.5	1194.4	-0.0	-0.00
25YR-72HR	15.38	28942.9	27748.2	1194.8	-0.0	-0.00
25YR-72HR	15.40	28990.0	27794.9	1195.1	-0.0	-0.00
25YR-72HR	15.42	29037.1	27841.7	1195.4	-0.0	-0.00
25YR-72HR	15.43	29084.1	27888.4	1195.7	-0.0	-0.00
25YR-72HR	15.45	29131.2	27935.2	1196.0	-0.0	-0.00
25YR-72HR	15.47	29178.3	27982.0	1196.3	-0.0	-0.00
25YR-72HR	15.48	29225.5	28028.8	1196.7	-0.0	-0.00
25YR-72HR	15.50	29272.6	28075.6	1197.0	-0.0	-0.00
25YR-72HR	15.52	29319.7	28122.4	1197.3	-0.0	-0.00
25YR-72HR	15.53	29366.9	28169.3	1197.6	-0.0	-0.00
25YR-72HR	15.55	29414.1	28216.1	1197.9	-0.0	-0.00
25YR-72HR	15.57	29461.2	28263.0	1198.3	-0.0	-0.00
25YR-72HR	15.58	29508.4	28309.9	1198.6	-0.0	-0.00
25YR-72HR	15.60	29555.6	28356.8	1198.9	-0.0	-0.00
25YR-72HR	15.62	29602.9	28403.7	1199.2	-0.0	-0.00
25YR-72HR	15.63	29650.1	28450.6	1199.5	-0.0	-0.00
25YR-72HR	15.65	29697.4	28497.5	1199.8	-0.0	-0.00
25YR-72HR	15.67	29744.6	28544.4	1200.2	-0.0	-0.00
25YR-72HR	15.68	29791.9	28591.4	1200.5	-0.0	-0.00
25YR-72HR	15.70	29839.2	28638.4	1200.8	-0.0	-0.00
25YR-72HR	15.72	29886.5	28685.3	1201.1	-0.0	-0.00
25YR-72HR	15.73	29933.8	28732.3	1201.4	-0.0	-0.00
25YR-72HR	15.75	29981.1	28779.3	1201.8	-0.0	-0.00
25YR-72HR	15.77	30028.4	28826.4	1202.1	-0.0	-0.00
25YR-72HR	15.78	30075.8	28873.4	1202.4	-0.0	-0.00
25YR-72HR	15.80	30123.1	28920.4	1202.7	-0.0	-0.00
25YR-72HR	15.82	30170.5	28967.5	1203.0	-0.0	-0.00
25YR-72HR	15.83	30217.9	29014.6	1203.3	-0.0	-0.00
25YR-72HR	15.85	30265.3	29061.6	1203.6	-0.0	-0.00
25YR-72HR	15.87	30312.7	29108.7	1204.0	-0.0	-0.00
25YR-72HR	15.88	30360.1	29155.8	1204.3	-0.0	-0.00
25YR-72HR	15.90	30407.5	29203.0	1204.6	-0.0	-0.00
25YR-72HR	15.92	30455.0	29250.1	1204.9	-0.0	-0.00
25YR-72HR	15.93	30502.4	29297.2	1205.2	-0.0	-0.00
25YR-72HR	15.95	30549.9	29344.4	1205.5	-0.0	-0.00
25YR-72HR	15.97	30597.4	29391.6	1205.8	-0.0	-0.00
25YR-72HR	15.98	30644.9	29438.7	1206.1	-0.0	-0.00
25YR-72HR	16.00	30692.4	29485.9	1206.5	-0.0	-0.00
25YR-72HR	16.08	30930.1	29722.1	1208.1	-0.0	-0.00
25YR-72HR	16.17	31168.1	29958.5	1209.6	-0.0	-0.00
25YR-72HR	16.25	31406.4	30195.3	1211.2	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	16.33	31645.0	30432.3	1212.7	-0.0	-0.00
25YR-72HR	16.42	31883.9	30669.6	1214.3	-0.0	-0.00
25YR-72HR	16.50	32123.1	30907.3	1215.8	-0.0	-0.00
25YR-72HR	16.58	32362.6	31145.2	1217.4	-0.0	-0.00
25YR-72HR	16.67	32602.3	31383.4	1218.9	-0.0	-0.00
25YR-72HR	16.75	32842.4	31621.9	1220.5	-0.0	-0.00
25YR-72HR	16.83	33082.7	31860.6	1222.0	-0.0	-0.00
25YR-72HR	16.92	33323.3	32099.7	1223.6	0.0	0.00
25YR-72HR	17.00	33564.1	32339.0	1225.1	0.0	0.00
25YR-72HR	17.08	33805.2	32578.6	1226.6	0.0	0.00
25YR-72HR	17.17	34046.6	32818.5	1228.2	0.0	0.00
25YR-72HR	17.25	34288.3	33058.6	1229.7	0.0	0.00
25YR-72HR	17.33	34530.3	33299.0	1231.2	0.0	0.00
25YR-72HR	17.42	34772.4	33539.7	1232.7	0.0	0.00
25YR-72HR	17.50	35014.9	33780.7	1234.2	0.0	0.00
25YR-72HR	17.58	35257.6	34021.9	1235.8	0.0	0.00
25YR-72HR	17.67	35500.6	34263.3	1237.3	0.0	0.00
25YR-72HR	17.75	35743.8	34505.0	1238.8	0.0	0.00
25YR-72HR	17.83	35987.3	34747.0	1240.3	0.0	0.00
25YR-72HR	17.92	36231.0	34989.2	1241.8	0.0	0.00
25YR-72HR	18.00	36475.0	35231.7	1243.3	0.0	0.00
25YR-72HR	18.08	36719.2	35474.4	1244.8	0.0	0.00
25YR-72HR	18.17	36963.6	35717.4	1246.3	0.0	0.00
25YR-72HR	18.25	37208.3	35960.6	1247.8	0.0	0.00
25YR-72HR	18.33	37453.3	36204.0	1249.3	0.0	0.00
25YR-72HR	18.42	37698.5	36447.7	1250.8	0.0	0.00
25YR-72HR	18.50	37943.9	36691.6	1252.2	0.0	0.00
25YR-72HR	18.58	38189.5	36935.8	1253.7	0.0	0.00
25YR-72HR	18.67	38435.4	37180.2	1255.2	0.0	0.00
25YR-72HR	18.75	38681.5	37424.8	1256.7	0.0	0.00
25YR-72HR	18.83	38927.8	37669.7	1258.2	0.0	0.00
25YR-72HR	18.92	39174.4	37914.7	1259.6	0.0	0.00
25YR-72HR	19.00	39421.2	38160.1	1261.1	0.0	0.00
25YR-72HR	19.08	39668.2	38405.6	1262.6	0.0	0.00
25YR-72HR	19.17	39915.4	38651.3	1264.1	0.0	0.00
25YR-72HR	19.25	40162.8	38897.3	1265.5	0.0	0.00
25YR-72HR	19.33	40410.5	39143.5	1267.0	0.0	0.00
25YR-72HR	19.42	40658.4	39389.9	1268.4	0.0	0.00
25YR-72HR	19.50	40906.5	39636.6	1269.9	0.0	0.00
25YR-72HR	19.58	41154.8	39883.4	1271.3	0.0	0.00
25YR-72HR	19.67	41403.3	40130.5	1272.8	0.0	0.00
25YR-72HR	19.75	41652.0	40377.8	1274.3	0.0	0.00
25YR-72HR	19.83	41901.0	40625.2	1275.7	0.0	0.00
25YR-72HR	19.92	42150.1	40872.9	1277.2	0.0	0.00
25YR-72HR	20.00	42399.4	41120.8	1278.6	0.0	0.00
25YR-72HR	20.08	42649.0	41368.9	1280.0	0.0	0.00
25YR-72HR	20.17	42898.7	41617.2	1281.5	0.0	0.00
25YR-72HR	20.25	43148.7	41865.7	1282.9	0.0	0.00
25YR-72HR	20.33	43398.8	42114.4	1284.4	0.0	0.00
25YR-72HR	20.42	43649.2	42363.3	1285.9	0.0	0.00
25YR-72HR	20.50	43899.7	42612.4	1287.3	0.0	0.00
25YR-72HR	20.58	44150.5	42861.7	1288.7	0.0	0.00
25YR-72HR	20.67	44401.4	43111.2	1290.1	0.0	0.00
25YR-72HR	20.75	44652.5	43360.9	1291.6	0.0	0.00
25YR-72HR	20.83	44903.8	43610.8	1293.0	0.0	0.00
25YR-72HR	20.92	45155.3	43860.8	1294.5	0.0	0.00
25YR-72HR	21.00	45407.0	44111.1	1295.9	0.0	0.00
25YR-72HR	21.08	45658.9	44361.5	1297.3	0.0	0.00
25YR-72HR	21.17	45910.9	44612.2	1298.7	-0.0	-0.00
25YR-72HR	21.25	46163.1	44863.0	1300.1	-0.0	-0.00
25YR-72HR	21.33	46415.6	45114.0	1301.6	-0.0	-0.00
25YR-72HR	21.42	46668.2	45365.2	1303.0	-0.0	-0.00
25YR-72HR	21.50	46920.9	45616.5	1304.4	-0.0	-0.00
25YR-72HR	21.58	47173.9	45868.1	1305.8	-0.0	-0.00
25YR-72HR	21.67	47427.0	46119.8	1307.3	-0.0	-0.00
25YR-72HR	21.75	47680.4	46371.7	1308.7	-0.0	-0.00
25YR-72HR	21.83	47933.8	46623.7	1310.1	-0.0	-0.00
25YR-72HR	21.92	48187.5	46876.0	1311.5	-0.0	-0.00
25YR-72HR	22.00	48441.3	47128.4	1312.9	-0.0	-0.00
25YR-72HR	22.08	48695.3	47381.0	1314.3	-0.0	-0.00
25YR-72HR	22.17	48949.5	47633.8	1315.7	-0.0	-0.00
25YR-72HR	22.25	49203.9	47886.7	1317.1	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	22.33	49458.4	48139.8	1318.5	-0.0	-0.00
25YR-72HR	22.42	49713.0	48393.1	1320.0	-0.0	-0.00
25YR-72HR	22.50	49967.9	48646.5	1321.4	-0.0	-0.00
25YR-72HR	22.58	50222.9	48900.2	1322.7	-0.0	-0.00
25YR-72HR	22.67	50478.1	49153.9	1324.1	-0.0	-0.00
25YR-72HR	22.75	50733.4	49407.9	1325.6	-0.0	-0.00
25YR-72HR	22.83	50988.9	49661.9	1327.0	-0.0	-0.00
25YR-72HR	22.92	51244.6	49916.2	1328.4	-0.0	-0.00
25YR-72HR	23.00	51500.4	50170.6	1329.8	-0.0	-0.00
25YR-72HR	23.08	51756.3	50425.2	1331.2	-0.0	-0.00
25YR-72HR	23.17	52012.5	50679.9	1332.5	-0.0	-0.00
25YR-72HR	23.25	52268.8	50934.8	1333.9	-0.0	-0.00
25YR-72HR	23.33	52525.2	51189.9	1335.3	-0.0	-0.00
25YR-72HR	23.42	52781.8	51445.1	1336.7	-0.0	-0.00
25YR-72HR	23.50	53038.5	51700.5	1338.1	-0.0	-0.00
25YR-72HR	23.58	53295.4	51956.0	1339.5	-0.0	-0.00
25YR-72HR	23.67	53552.5	52211.6	1340.9	-0.0	-0.00
25YR-72HR	23.75	53809.7	52467.4	1342.3	-0.0	-0.00
25YR-72HR	23.83	54067.1	52723.4	1343.7	-0.0	-0.00
25YR-72HR	23.92	54324.6	52979.5	1345.1	-0.0	-0.00
25YR-72HR	24.00	54582.4	53235.9	1346.5	-0.0	-0.00
25YR-72HR	24.25	55462.2	54058.1	1404.1	-0.0	-0.00
25YR-72HR	24.50	56494.8	55034.1	1460.7	-0.0	-0.00
25YR-72HR	24.75	57594.8	56103.8	1491.0	-0.0	-0.00
25YR-72HR	25.00	58721.2	57215.2	1506.0	-0.0	-0.00
25YR-72HR	25.25	59854.9	58340.6	1514.3	-0.0	-0.00
25YR-72HR	25.50	60991.0	59470.0	1521.0	-0.0	-0.00
25YR-72HR	25.75	62129.6	60601.9	1527.7	-0.0	-0.00
25YR-72HR	26.00	63270.5	61736.2	1534.3	-0.0	-0.00
25YR-72HR	26.25	64413.6	62872.8	1540.9	-0.0	-0.00
25YR-72HR	26.50	65559.0	64011.6	1547.5	-0.0	-0.00
25YR-72HR	26.75	66706.6	65152.6	1554.0	-0.0	-0.00
25YR-72HR	27.00	67856.3	66295.8	1560.5	-0.0	-0.00
25YR-72HR	27.25	69008.1	67441.0	1567.0	-0.0	-0.00
25YR-72HR	27.50	70161.9	68588.4	1573.5	-0.0	-0.00
25YR-72HR	27.75	71317.7	69737.7	1580.0	-0.0	-0.00
25YR-72HR	28.00	72475.4	70889.0	1586.5	-0.0	-0.00
25YR-72HR	28.25	73635.1	72042.2	1592.9	-0.0	-0.00
25YR-72HR	28.50	74796.6	73197.2	1599.4	-0.0	-0.00
25YR-72HR	28.75	75959.9	74354.1	1605.8	-0.0	-0.00
25YR-72HR	29.00	77125.1	75512.8	1612.2	-0.0	-0.00
25YR-72HR	29.25	78291.9	76673.3	1618.6	0.0	0.00
25YR-72HR	29.50	79460.5	77835.5	1625.0	0.0	0.00
25YR-72HR	29.75	80630.7	78999.4	1631.3	0.0	0.00
25YR-72HR	30.00	81802.6	80164.9	1637.7	0.0	0.00
25YR-72HR	30.25	82976.1	81332.0	1644.1	0.0	0.00
25YR-72HR	30.50	84151.2	82500.8	1650.4	0.0	0.00
25YR-72HR	30.75	85327.8	83671.1	1656.7	0.0	0.00
25YR-72HR	31.00	86505.9	84842.9	1663.0	0.0	0.00
25YR-72HR	31.25	87685.5	86016.2	1669.3	0.0	0.00
25YR-72HR	31.50	88866.6	87191.0	1675.6	0.0	0.00
25YR-72HR	31.75	90049.1	88367.2	1681.9	0.0	0.00
25YR-72HR	32.00	91233.0	89544.9	1688.1	0.0	0.00
25YR-72HR	32.25	92418.3	90723.9	1694.4	0.0	0.00
25YR-72HR	32.50	93604.9	91904.3	1700.7	0.0	0.00
25YR-72HR	32.75	94792.9	93086.0	1706.9	0.0	0.00
25YR-72HR	33.00	95982.2	94269.0	1713.2	0.0	0.00
25YR-72HR	33.25	97172.7	95453.4	1719.4	0.0	0.00
25YR-72HR	33.50	98364.6	96639.0	1725.6	0.0	0.00
25YR-72HR	33.75	99557.6	97825.8	1731.8	0.0	0.00
25YR-72HR	34.00	100751.9	99013.9	1738.0	0.0	0.00
25YR-72HR	34.25	101947.3	100203.2	1744.2	0.0	0.00
25YR-72HR	34.50	103144.0	101393.6	1750.4	0.0	0.00
25YR-72HR	34.75	104341.8	102585.2	1756.6	0.0	0.00
25YR-72HR	35.00	105540.7	103778.0	1762.7	0.0	0.00
25YR-72HR	35.25	106740.7	104971.9	1768.9	0.0	0.00
25YR-72HR	35.50	107941.9	106166.8	1775.1	0.0	0.00
25YR-72HR	35.75	109144.1	107362.9	1781.2	0.0	0.00
25YR-72HR	36.00	110347.4	108560.1	1787.3	0.0	0.00
25YR-72HR	36.25	111555.4	109760.2	1795.2	0.0	0.00
25YR-72HR	36.50	112769.8	110966.8	1803.0	0.0	0.00
25YR-72HR	36.75	113987.6	112177.7	1809.9	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	37.00	115207.2	113390.9	1816.3	0.0	0.00
25YR-72HR	37.25	116427.9	114605.5	1822.5	0.0	0.00
25YR-72HR	37.50	117649.7	115821.1	1828.6	0.0	0.00
25YR-72HR	37.75	118872.4	117037.8	1834.7	0.0	0.00
25YR-72HR	38.00	120096.1	118255.4	1840.8	0.0	0.00
25YR-72HR	38.25	121320.8	119473.9	1846.8	0.0	0.00
25YR-72HR	38.50	122546.3	120693.3	1853.0	0.0	0.00
25YR-72HR	38.75	123772.8	121913.7	1859.0	0.0	0.00
25YR-72HR	39.00	125000.2	123135.0	1865.1	0.0	0.00
25YR-72HR	39.25	126228.4	124357.2	1871.2	0.0	0.00
25YR-72HR	39.50	127457.5	125580.3	1877.3	0.0	0.00
25YR-72HR	39.75	128687.5	126804.2	1883.3	0.0	0.00
25YR-72HR	40.00	129918.3	128029.0	1889.3	0.0	0.00
25YR-72HR	40.25	131150.0	129254.6	1895.4	0.0	0.00
25YR-72HR	40.50	132382.5	130481.0	1901.5	0.0	0.00
25YR-72HR	40.75	133615.8	131708.2	1907.5	0.0	0.00
25YR-72HR	41.00	134849.9	132936.3	1913.6	0.0	0.00
25YR-72HR	41.25	136084.8	134165.2	1919.6	0.0	0.00
25YR-72HR	41.50	137320.4	135394.8	1925.6	0.0	0.00
25YR-72HR	41.75	138556.9	136625.2	1931.6	0.0	0.00
25YR-72HR	42.00	139794.0	137856.4	1937.6	0.0	0.00
25YR-72HR	42.25	141032.0	139088.3	1943.6	0.0	0.00
25YR-72HR	42.50	142270.6	140321.0	1949.7	0.0	0.00
25YR-72HR	42.75	143510.0	141554.3	1955.7	0.0	0.00
25YR-72HR	43.00	144750.1	142788.4	1961.7	0.0	0.00
25YR-72HR	43.25	145990.9	144023.2	1967.7	0.0	0.00
25YR-72HR	43.50	147232.4	145258.8	1973.7	0.0	0.00
25YR-72HR	43.75	148474.6	146495.0	1979.7	0.0	0.00
25YR-72HR	44.00	149717.5	147731.8	1985.7	0.0	0.00
25YR-72HR	44.25	150961.0	148969.4	1991.7	0.0	0.00
25YR-72HR	44.50	152205.2	150207.6	1997.7	0.0	0.00
25YR-72HR	44.75	153450.1	151446.4	2003.7	0.0	0.00
25YR-72HR	45.00	154695.6	152686.0	2009.6	0.0	0.00
25YR-72HR	45.25	155941.7	153926.1	2015.6	0.0	0.00
25YR-72HR	45.50	157188.4	155166.8	2021.6	0.0	0.00
25YR-72HR	45.75	158435.8	156408.3	2027.6	0.0	0.00
25YR-72HR	46.00	159683.8	157650.3	2033.5	0.0	0.00
25YR-72HR	46.25	160932.4	158892.9	2039.4	0.0	0.00
25YR-72HR	46.50	162181.6	160136.2	2045.4	0.0	0.00
25YR-72HR	46.75	163431.3	161380.0	2051.3	0.0	0.00
25YR-72HR	47.00	164681.7	162624.4	2057.3	0.0	0.00
25YR-72HR	47.25	165932.6	163869.4	2063.2	0.0	0.00
25YR-72HR	47.50	167184.1	165114.9	2069.2	0.0	0.00
25YR-72HR	47.75	168436.2	166361.1	2075.1	0.0	0.00
25YR-72HR	48.00	169688.8	167607.7	2081.1	0.0	0.00
25YR-72HR	48.25	170980.8	168866.0	2114.8	0.0	0.00
25YR-72HR	48.50	172338.7	170187.7	2151.0	0.0	0.00
25YR-72HR	48.75	173721.6	171545.3	2176.4	0.0	0.00
25YR-72HR	49.00	175114.4	172917.9	2196.5	0.0	0.00
25YR-72HR	49.25	176517.4	174312.5	2204.9	0.0	0.00
25YR-72HR	49.50	177934.8	175725.8	2209.0	0.0	0.00
25YR-72HR	49.75	179358.1	177147.3	2210.8	0.0	0.00
25YR-72HR	50.00	180784.0	178572.4	2211.6	0.0	0.00
25YR-72HR	50.25	182286.2	180038.8	2247.4	0.0	0.00
25YR-72HR	50.50	183908.2	181627.4	2280.8	0.0	0.00
25YR-72HR	50.75	185575.3	183280.6	2294.7	0.0	0.00
25YR-72HR	51.00	187259.9	184960.3	2299.5	0.0	0.00
25YR-72HR	51.25	188992.3	186657.8	2334.5	0.0	0.00
25YR-72HR	51.50	190796.7	188425.5	2371.2	0.0	0.00
25YR-72HR	51.75	192628.4	190232.1	2396.4	0.0	0.00
25YR-72HR	52.00	194471.2	192054.8	2416.4	0.0	0.00
25YR-72HR	52.25	196477.2	193981.5	2495.7	0.0	0.00
25YR-72HR	52.50	198743.1	196178.6	2564.6	0.0	0.00
25YR-72HR	52.75	201106.8	198514.5	2592.3	0.0	0.00
25YR-72HR	53.00	203508.2	200906.3	2601.9	0.0	0.00
25YR-72HR	53.25	206076.8	203387.3	2689.6	0.0	0.00
25YR-72HR	53.50	208907.0	206134.1	2772.9	0.0	0.00
25YR-72HR	53.75	211836.1	209019.9	2816.2	0.0	0.00
25YR-72HR	54.00	214803.8	211961.7	2842.0	0.0	0.00
25YR-72HR	54.25	217944.1	215008.2	2935.9	0.0	0.00
25YR-72HR	54.50	221356.9	218336.4	3020.6	0.0	0.00
25YR-72HR	54.75	224873.1	221809.0	3064.1	0.0	0.00

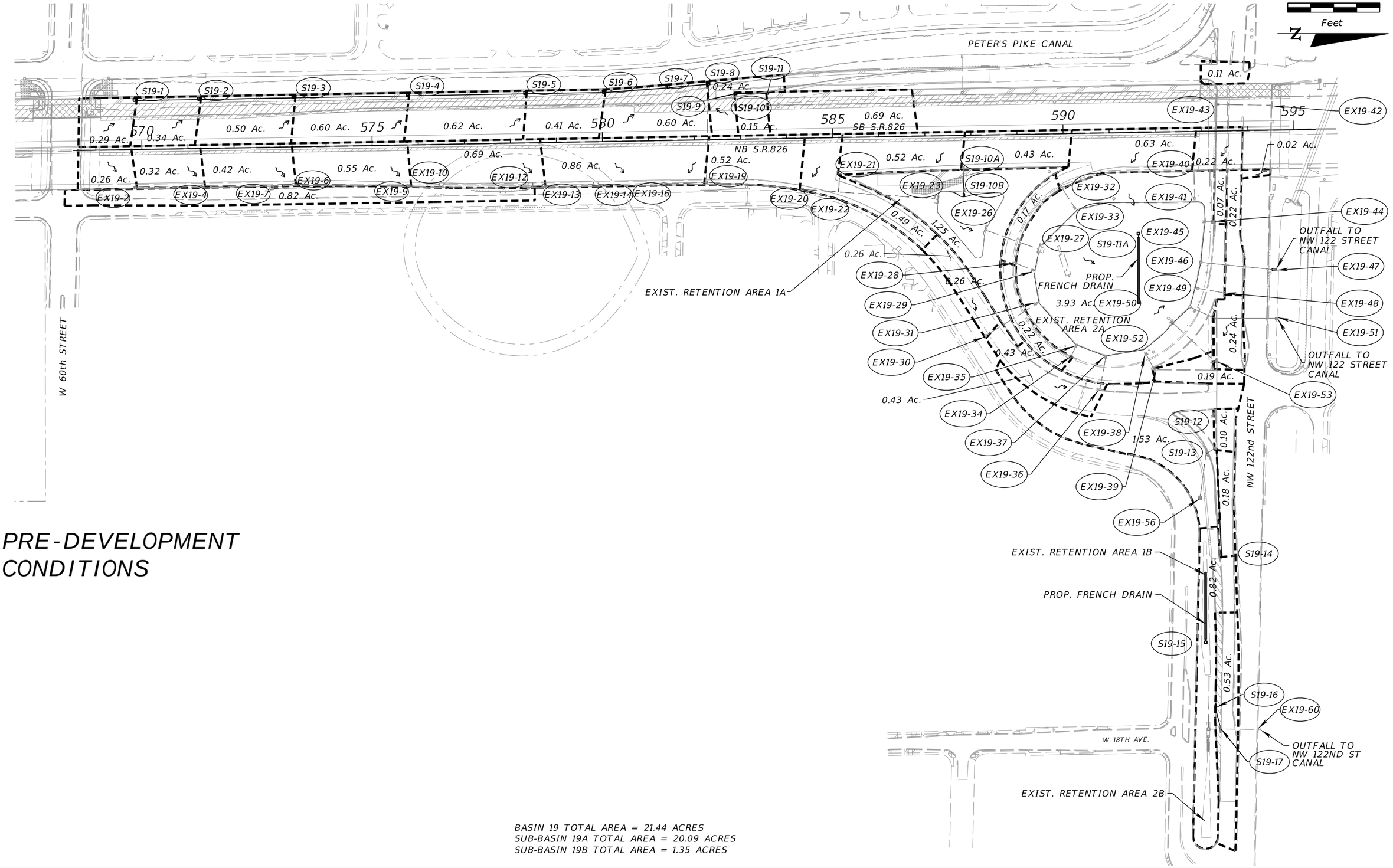
Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	55.00	228430.0	225340.2	3089.8	0.0	0.00
25YR-72HR	55.25	232159.9	228977.3	3182.6	0.0	0.00
25YR-72HR	55.50	236164.1	232898.6	3265.5	0.0	0.00
25YR-72HR	55.75	240272.9	236964.9	3308.0	0.0	0.00
25YR-72HR	56.00	244423.2	241090.0	3333.2	0.0	0.00
25YR-72HR	56.25	248777.0	245324.3	3452.7	0.0	0.00
25YR-72HR	56.50	253465.7	249904.3	3561.4	0.0	0.00
25YR-72HR	56.75	258279.5	254656.4	3623.1	-0.0	-0.00
25YR-72HR	57.00	263143.2	259478.6	3664.6	-0.0	-0.00
25YR-72HR	57.25	268265.8	264480.3	3785.5	-0.0	-0.00
25YR-72HR	57.50	273819.6	269937.3	3882.2	-0.0	-0.00
25YR-72HR	57.75	279676.1	275669.0	4007.1	-0.0	-0.00
25YR-72HR	58.00	285831.8	281730.6	4101.2	-0.0	-0.00
25YR-72HR	58.25	292274.2	288037.8	4236.4	-0.0	-0.00
25YR-72HR	58.50	299079.5	294736.6	4342.9	-0.0	-0.00
25YR-72HR	58.75	306660.1	301977.3	4682.7	-0.0	-0.00
25YR-72HR	59.00	315373.0	310428.7	4944.3	-0.0	-0.00
25YR-72HR	59.25	325962.8	320263.7	5699.1	-0.0	-0.00
25YR-72HR	59.50	339087.5	332852.3	6235.2	-0.0	-0.00
25YR-72HR	59.75	376688.2	363342.6	13345.7	-0.0	-0.00
25YR-72HR	60.00	454670.5	433310.2	21360.4	-0.0	-0.00
25YR-72HR	60.25	525030.3	502043.0	22987.3	-0.0	-0.00
25YR-72HR	60.50	564523.6	548145.3	16378.3	-0.0	-0.00
25YR-72HR	60.75	588709.6	580534.4	8175.2	-0.0	-0.00
25YR-72HR	61.00	603122.3	596297.5	6824.8	-0.0	-0.00
25YR-72HR	61.25	614242.9	608047.5	6195.3	-0.0	-0.00
25YR-72HR	61.50	623248.9	617360.4	5888.6	-0.0	-0.00
25YR-72HR	61.75	631259.1	625590.0	5669.1	-0.0	-0.00
25YR-72HR	62.00	638421.4	632865.7	5555.7	-0.0	-0.00
25YR-72HR	62.25	644796.9	639458.2	5338.7	-0.0	-0.00
25YR-72HR	62.50	650216.5	645012.7	5203.9	-0.0	-0.00
25YR-72HR	62.75	655161.9	650070.1	5091.8	-0.0	-0.00
25YR-72HR	63.00	659735.4	654707.9	5027.5	-0.0	-0.00
25YR-72HR	63.25	664196.7	659165.6	5031.1	-0.0	-0.00
25YR-72HR	63.50	668617.5	663564.6	5052.9	-0.0	-0.00
25YR-72HR	63.75	673031.6	667950.9	5080.7	-0.0	-0.00
25YR-72HR	64.00	677445.3	672336.3	5108.9	-0.0	-0.00
25YR-72HR	64.25	681355.8	676432.0	4923.8	-0.0	-0.00
25YR-72HR	64.50	684436.9	679666.3	4770.7	-0.0	-0.00
25YR-72HR	64.75	687208.4	682499.1	4709.2	-0.0	-0.00
25YR-72HR	65.00	689862.8	685174.2	4688.5	-0.0	-0.00
25YR-72HR	65.25	692505.4	687804.1	4701.3	-0.0	-0.00
25YR-72HR	65.50	695157.6	690439.4	4718.2	-0.0	-0.00
25YR-72HR	65.75	697813.3	693079.4	4733.9	-0.0	-0.00
25YR-72HR	66.00	700470.5	695721.3	4749.2	0.0	0.00
25YR-72HR	66.25	703128.0	698370.0	4757.9	0.0	0.00
25YR-72HR	66.50	705785.3	701019.9	4765.4	0.0	0.00
25YR-72HR	66.75	708442.8	703669.8	4772.9	0.0	0.00
25YR-72HR	67.00	711100.3	706319.8	4780.4	0.0	0.00
25YR-72HR	67.25	713757.9	708969.9	4788.0	0.0	0.00
25YR-72HR	67.50	716415.7	711620.2	4795.5	0.0	0.00
25YR-72HR	67.75	719073.6	714270.6	4803.0	0.0	0.00
25YR-72HR	68.00	721731.4	716921.1	4810.3	0.0	0.00
25YR-72HR	68.25	724126.4	719405.9	4720.4	0.0	0.00
25YR-72HR	68.50	726106.5	721458.8	4647.8	0.0	0.00
25YR-72HR	68.75	727932.2	723310.1	4622.1	0.0	0.00
25YR-72HR	69.00	729699.9	725081.4	4618.5	0.0	0.00
25YR-72HR	69.25	731459.2	726834.3	4624.9	0.0	0.00
25YR-72HR	69.50	733218.6	728586.1	4632.5	0.0	0.00
25YR-72HR	69.75	734978.0	730337.8	4640.2	0.0	0.00
25YR-72HR	70.00	736737.4	732089.6	4647.8	0.0	0.00
25YR-72HR	70.25	738499.8	733843.3	4656.5	0.0	0.00
25YR-72HR	70.50	740266.9	735601.8	4665.1	0.0	0.00
25YR-72HR	70.75	742035.8	737362.6	4673.1	0.0	0.00
25YR-72HR	71.00	743805.3	739124.4	4680.9	0.0	0.00
25YR-72HR	71.25	745575.0	740886.4	4688.6	0.0	0.00
25YR-72HR	71.50	747344.8	742648.5	4696.3	0.0	0.00
25YR-72HR	71.75	749114.6	744410.7	4703.9	0.0	0.00
25YR-72HR	72.00	750884.2	746172.8	4711.3	0.0	0.00
25YR-72HR	72.25	752142.1	747652.7	4489.4	0.0	0.00
25YR-72HR	72.50	752341.5	748141.5	4200.1	0.0	0.00
25YR-72HR	72.75	752341.5	748227.2	4114.4	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	73.00	752341.5	748277.3	4064.3	0.0	0.00
25YR-72HR	73.25	752341.5	748316.0	4025.5	0.0	0.00
25YR-72HR	73.50	752341.5	748350.7	3990.9	0.0	0.00
25YR-72HR	73.75	752341.5	748384.9	3956.6	0.0	0.00
25YR-72HR	74.00	752341.5	748418.9	3922.7	0.0	0.00
25YR-72HR	74.25	752341.5	748452.7	3888.9	0.0	0.00
25YR-72HR	74.50	752341.5	748486.4	3855.2	0.0	0.00
25YR-72HR	74.75	752341.5	748520.1	3821.5	0.0	0.00
25YR-72HR	75.00	752341.5	748553.7	3787.8	0.0	0.00
25YR-72HR	75.25	752341.5	748587.4	3754.1	0.0	0.00
25YR-72HR	75.50	752341.5	748621.1	3720.4	0.0	0.00
25YR-72HR	75.75	752341.5	748654.9	3686.7	0.0	0.00
25YR-72HR	76.00	752341.5	748688.7	3652.9	0.0	0.00
25YR-72HR	76.25	752341.5	748722.5	3619.0	0.0	0.00
25YR-72HR	76.50	752341.5	748756.4	3585.1	0.0	0.00
25YR-72HR	76.75	752341.5	748790.4	3551.1	0.0	0.00
25YR-72HR	77.00	752341.5	748824.4	3517.1	0.0	0.00
25YR-72HR	77.25	752341.5	748858.5	3483.1	0.0	0.00
25YR-72HR	77.50	752341.5	748892.6	3448.9	0.0	0.00
25YR-72HR	77.75	752341.5	748926.8	3414.8	0.0	0.00
25YR-72HR	78.00	752341.5	748961.0	3380.5	0.0	0.00
25YR-72HR	78.25	752341.5	748995.3	3346.2	0.0	0.00
25YR-72HR	78.50	752341.5	749029.7	3311.9	0.0	0.00
25YR-72HR	78.75	752341.5	749064.1	3277.5	0.0	0.00
25YR-72HR	79.00	752341.5	749098.5	3243.0	0.0	0.00
25YR-72HR	79.25	752341.5	749133.1	3208.5	0.0	0.00
25YR-72HR	79.50	752341.5	749167.7	3173.9	0.0	0.00
25YR-72HR	79.75	752341.5	749202.3	3139.3	0.0	0.00
25YR-72HR	80.00	752341.5	749237.0	3104.6	0.0	0.00
25YR-72HR	80.25	752341.5	749271.7	3069.8	0.0	0.00
25YR-72HR	80.50	752341.5	749306.5	3035.0	0.0	0.00
25YR-72HR	80.75	752341.5	749341.4	3000.2	0.0	0.00
25YR-72HR	81.00	752341.5	749376.3	2965.2	0.0	0.00
25YR-72HR	81.25	752341.5	749411.3	2930.3	0.0	0.00
25YR-72HR	81.50	752341.5	749446.3	2895.3	0.0	0.00
25YR-72HR	81.75	752341.5	749481.3	2860.2	0.0	0.00
25YR-72HR	82.00	752341.5	749516.5	2825.1	0.0	0.00
25YR-72HR	82.25	752341.5	749551.6	2789.9	0.0	0.00
25YR-72HR	82.50	752341.5	749586.9	2754.7	0.0	0.00
25YR-72HR	82.75	752341.5	749622.1	2719.4	0.0	0.00
25YR-72HR	83.00	752341.5	749657.4	2684.1	0.0	0.00
25YR-72HR	83.25	752341.5	749692.8	2648.7	0.0	0.00
25YR-72HR	83.50	752341.5	749728.2	2613.3	0.0	0.00
25YR-72HR	83.75	752341.5	749763.7	2577.9	0.0	0.00
25YR-72HR	84.00	752341.5	749799.2	2542.4	0.0	0.00
25YR-72HR	84.25	752341.5	749834.7	2506.8	0.0	0.00
25YR-72HR	84.50	752341.5	749870.3	2471.2	0.0	0.00
25YR-72HR	84.75	752341.5	749906.0	2435.5	0.0	0.00
25YR-72HR	85.00	752341.5	749941.7	2399.9	0.0	0.00
25YR-72HR	85.25	752341.5	749977.4	2364.1	0.0	0.00
25YR-72HR	85.50	752341.5	750013.2	2328.3	0.0	0.00
25YR-72HR	85.75	752341.5	750049.0	2292.5	0.0	0.00
25YR-72HR	86.00	752341.5	750084.9	2256.7	0.0	0.00
25YR-72HR	86.25	752341.5	750120.8	2220.7	0.0	0.00
25YR-72HR	86.50	752341.5	750156.8	2184.8	0.0	0.00
25YR-72HR	86.75	752341.5	750192.7	2148.8	0.0	0.00
25YR-72HR	87.00	752341.5	750228.8	2112.8	0.0	0.00
25YR-72HR	87.25	752341.5	750264.9	2076.7	0.0	0.00
25YR-72HR	87.50	752341.5	750301.0	2040.6	0.0	0.00
25YR-72HR	87.75	752341.5	750337.1	2004.4	0.0	0.00
25YR-72HR	88.00	752341.5	750373.3	1968.2	0.0	0.00
25YR-72HR	88.25	752341.5	750409.5	1932.0	0.0	0.00
25YR-72HR	88.50	752341.5	750445.8	1895.8	0.0	0.00
25YR-72HR	88.75	752341.5	750482.1	1859.5	0.0	0.00
25YR-72HR	89.00	752341.5	750518.4	1823.1	0.0	0.00
25YR-72HR	89.25	752341.5	750554.8	1786.8	0.0	0.00
25YR-72HR	89.50	752341.5	750591.2	1750.3	0.0	0.00
25YR-72HR	89.75	752341.5	750627.6	1713.9	0.0	0.00
25YR-72HR	90.00	752341.5	750664.1	1677.4	0.0	0.00
25YR-72HR	90.25	752341.5	750700.6	1640.9	0.0	0.00
25YR-72HR	90.50	752341.5	750737.2	1604.4	0.0	0.00
25YR-72HR	90.75	752341.5	750773.8	1567.8	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	91.00	752341.5	750810.4	1531.2	0.0	0.00
25YR-72HR	91.25	752341.5	750847.0	1494.5	0.0	0.00
25YR-72HR	91.50	752341.5	750883.7	1457.9	0.0	0.00
25YR-72HR	91.75	752341.5	750920.4	1421.2	0.0	0.00
25YR-72HR	92.00	752341.5	750957.1	1384.4	0.0	0.00
25YR-72HR	92.25	752341.5	750993.9	1347.7	0.0	0.00
25YR-72HR	92.50	752341.5	751030.7	1310.9	0.0	0.00
25YR-72HR	92.75	752341.5	751067.5	1274.1	0.0	0.00
25YR-72HR	93.00	752341.5	751104.3	1237.2	0.0	0.00
25YR-72HR	93.25	752341.5	751141.2	1200.3	0.0	0.00
25YR-72HR	93.50	752341.5	751178.1	1163.4	0.0	0.00
25YR-72HR	93.75	752341.5	751215.1	1126.5	0.0	0.00
25YR-72HR	94.00	752341.5	751252.0	1089.5	0.0	0.00
25YR-72HR	94.25	752341.5	751289.0	1052.5	0.0	0.00
25YR-72HR	94.50	752341.5	751326.0	1015.5	0.0	0.00
25YR-72HR	94.75	752341.5	751363.0	978.5	0.0	0.00
25YR-72HR	95.00	752341.5	751400.1	941.4	0.0	0.00
25YR-72HR	95.25	752341.5	751437.2	904.4	0.0	0.00
25YR-72HR	95.50	752341.5	751474.3	867.2	0.0	0.00
25YR-72HR	95.75	752341.5	751511.4	830.1	0.0	0.00
25YR-72HR	96.00	752341.5	751548.6	793.0	0.0	0.00
25YR-72HR	96.00	752341.5	751548.6	793.0	0.0	0.00

Basin 19

Drainage Maps



PRE-DEVELOPMENT CONDITIONS

BASIN 19 TOTAL AREA = 21.44 ACRES
SUB-BASIN 19A TOTAL AREA = 20.09 ACRES
SUB-BASIN 19B TOTAL AREA = 1.35 ACRES

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
826	MIAMI-DADE	432687-1-52-01

DRAINAGE MAP (BASIN 19)

SHEET NO. J-1417

malfonso 5/6/2019 3:14:43 PM P:\432687152O1 SR-826-I-75 Express Lanes\drainage\Post-Development Conditions\drmprdI9.dgn

Curve Number Calculations

CN CALCULATIONS FOR PRE-DEVELOPMENT CONDITIONS - BASIN B-19

SUB-BASIN	TOTAL DRAINAGE AREA (AC)	PERVIOUS DRAINAGE AREA (AC)	PERVIOUS AREA CURVE NUMBER	IMP. DRAINAGE AREA (AC)	IMP. AREA CURVE NUMBER	COMPOSITE CURVE NUMBER
B19-1	0.29	0	61	0.29	96	96
B19-2	0.34	0	61	0.34	96	96
B19-3	0.5	0	61	0.5	96	96
B19-4	0.6	0	61	0.6	96	96
B19-5	0.62	0	61	0.62	96	96
B19-6	0.41	0	61	0.41	96	96
B19-7	0.6	0	61	0.6	96	96
B19-8	0.24	0	61	0.24	96	96
B19-10	0.15	0	61	0.15	96	96
B19-11	0.69	0	61	0.69	96	96
B19-12	0.1	0	61	0.1	96	96
B19-14	0.18	0	61	0.18	96	96
BX19-2	0.26	0	61	0.26	96	96
BX19-4	0.32	0	61	0.32	96	96
BX19-6	0.42	0	61	0.42	96	96
BX19-7	0.82	0.56	61	0.26	96	72
BX19-9	0.55	0	61	0.55	96	96
BX19-13	0.69	0	61	0.69	96	96
BX19-16	0.86	0	61	0.86	96	96
BX19-19	0.52	0	61	0.52	96	96
BX19-20	0.49	0	61	0.49	96	96
BX19-21	0.52	0	61	0.52	96	96
B19-10A	0.43	0	61	0.43	96	96
BX19-26	1.25	1.25	61	0	96	61
BX19-28	0.17	0	61	0.17	96	96
BX19-30	0.26	0	61	0.26	96	96
BX19-32	0.63	0	61	0.63	96	96
BX19-34	0.22	0	61	0.22	96	96
BX19-36	0.43	0.04	61	0.39	96	93
BX19-39	0.19	0	61	0.19	96	96
BX19-40	0.22	0	61	0.22	96	96
BX19-42	0.02	0	61	0.02	96	96
BX19-43	0.11	0	61	0.11	96	96
BX19-44	0.07	0	61	0.07	96	96
B19-11A	3.93	3.38	61	0.55	96	66
BX19-48	0.22	0	61	0.22	96	96
BX19-53	0.24	0	61	0.24	96	96
BX19-56	1.53	1.03	61	0.5	96	72
B19-201	0.15	0.07	61	0.08	96	80
B19-202	0.33	0	61	0.33	96	96
TOTAL SUB-BASIN B-19A	20.57	6.33		14.24		

B19-15	0.82	0.82	61	0	96	61
B19-16	0.53	0	61	0.53	96	96
TOTAL SUB-BASIN B-19B	1.35	0.82		0.53		
TOTAL BASIN B-19	21.92	7.15		14.77		

Average Hydraulic Conductivity

Average Hydraulic Conductivity

Basin B-19		
Percolation Test	P-3A	P-4A
Average Flow to 10 ft. depth (gpm)	0.10	19.00
Depth to Water Table (ft)	8.00	6.00
Head Maintained (ft)	8.00	6.00
Borehole Diameter (ft)	0.500	0.500
Borehole Depth (ft)	10.00	10.00
Du (ft)	8.00	6.00
Average Flow (cfs)	0.0002	0.0423
Ds (ft)	2.00	4.00
Hydraulic Conductivity K (cfs/ft2-ft head)	2.89E-06	6.30E-04
Average Hydraulic Conductivity K	3.17E-04	

Basin B-19		
Percolation Test	P-3B	P-4B
Average Flow to 15 ft. depth (gpm)	38.00	40.00
Depth to Water Table (ft)	8.00	6.00
Head Maintained (ft)	8.00	6.00
Borehole Diameter (ft)	0.267	0.267
Borehole Depth (ft)	5.00	5.00
Du (ft)	8.00	6.00
Average Flow (cfs)	0.0847	0.0891
Ds (ft)	7.00	9.00
Hydraulic Conductivity K (cfs/ft2-ft head)	2.53E-03	3.55E-03
Average Hydraulic Conductivity K	3.04E-03	
Total Average Hydraulic Conductivity K	**1.22E-03**	

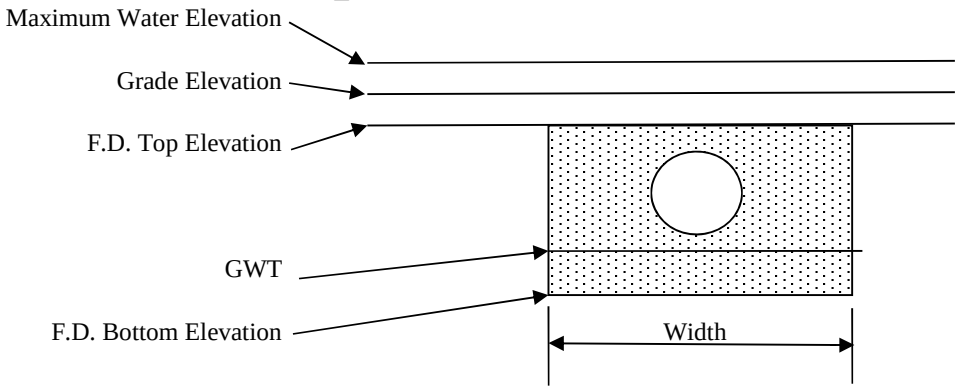
Rating Curve Calculations

Made by: _____ _____

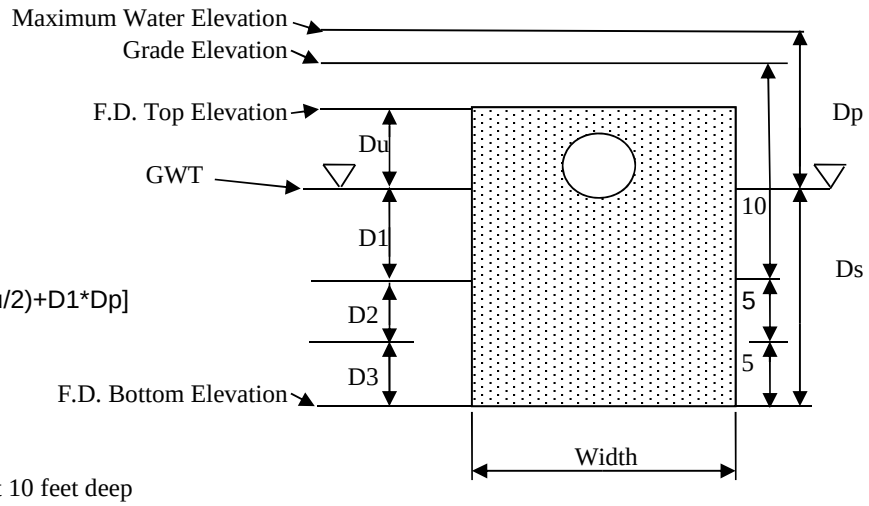
Checked by: _____ _____

Determination of Rating Curve

Proposed Exfiltration Trench: E_OPT-19



Maximum Water Elevation =	**5.45**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**1.65**	ft.NAVD	
F.D.Top Elevation =	**0.50**	ft.NAVD	
Ground Water Table =	**1.65**	ft.NAVD	
F.D. Bottom Elevation =	**-13.35**	ft.NAVD	
Width =	**4.00**	feet.	
Pipe Diameter =	**24**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**1.22E-03**	cfs/ft^2-ft head	(Ave. P-3A,P-4A)
Hydraulic Conductivity K15 =	**1.22E-03**	cfs/ft^2-ft head	(Ave. P-3A,P-4A)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____

Checked by: _____ _____

Determination of Rating Curve

Proposed Exfiltration Trench: E_OPT-19

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.65	***2.65***
(ft)	(cfs/ft)	(cfs/ft)
1.65	0.000	0.000
2.65	0.032	0.000
3.45	0.059	0.021
5.45	0.127	0.089

Rating Curve (Q)

Headwater	***Water Table Elev. (ft)***	
	1.65	***2.65***
(ft)	(cfs)	(cfs)
1.65	0.00	0.00
2.65	0.03	0.00
3.45	0.06	0.02
5.45	0.13	0.09

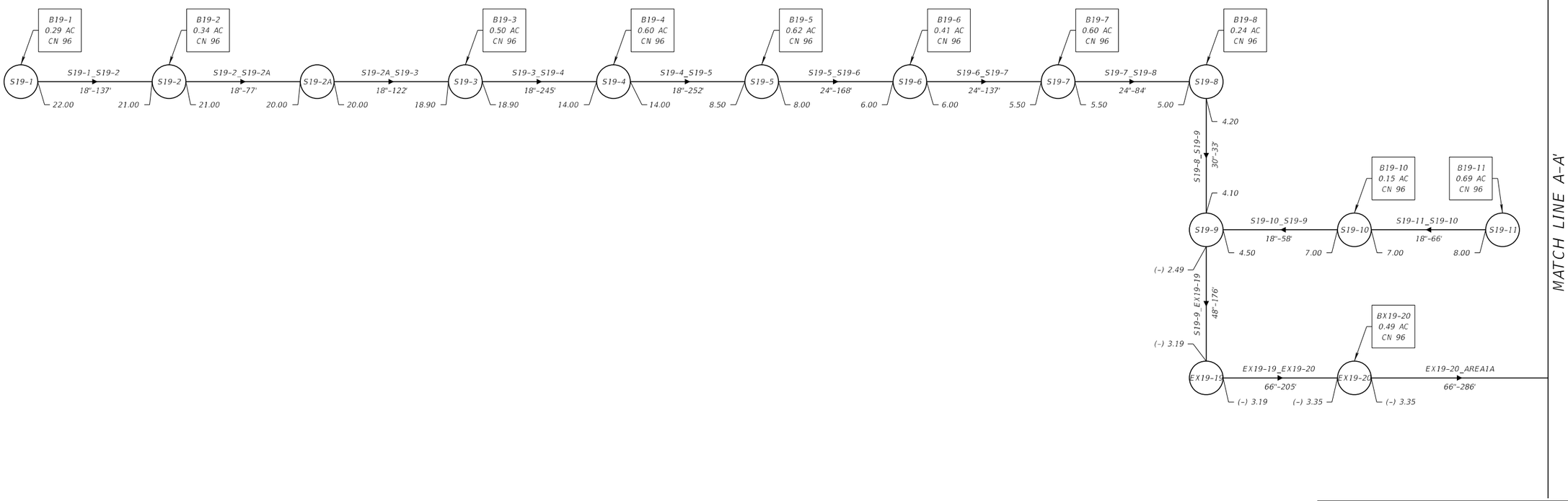
Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

Rating Curve Adjusted (Q)

Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.65	1.65	0.00
1.65	2.65	0.03
1.65	3.45	0.06
1.65	5.45	0.10
2.65	2.65	0.00
2.65	3.45	0.02
2.65	5.45	0.09

Nodal Diagram

PRE-DEVELOPMENT CONDITIONS



LEGEND	
B18-1 0.12 AC CN 96	CONTRIBUTING BASIN BASIN NAME BASIN AREA CURVE NUMBER
S18-2	NODE NAME
58ST_CANAL	BOUNDARY NODE WITH CONSTANT TAILWATER
GWT 6-12	BOUNDARY NODE WITH VARIABLE TAILWATER
S18-3_S18-4 18"-42' 21.50 21.40	PIPE LINK WITH (QUANTITY)SIZE-LENGTH INVERT ELEVATIONS
WEX18_14	WEIR LINK
AREA 1_EXF	RATING CURVE LINK

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

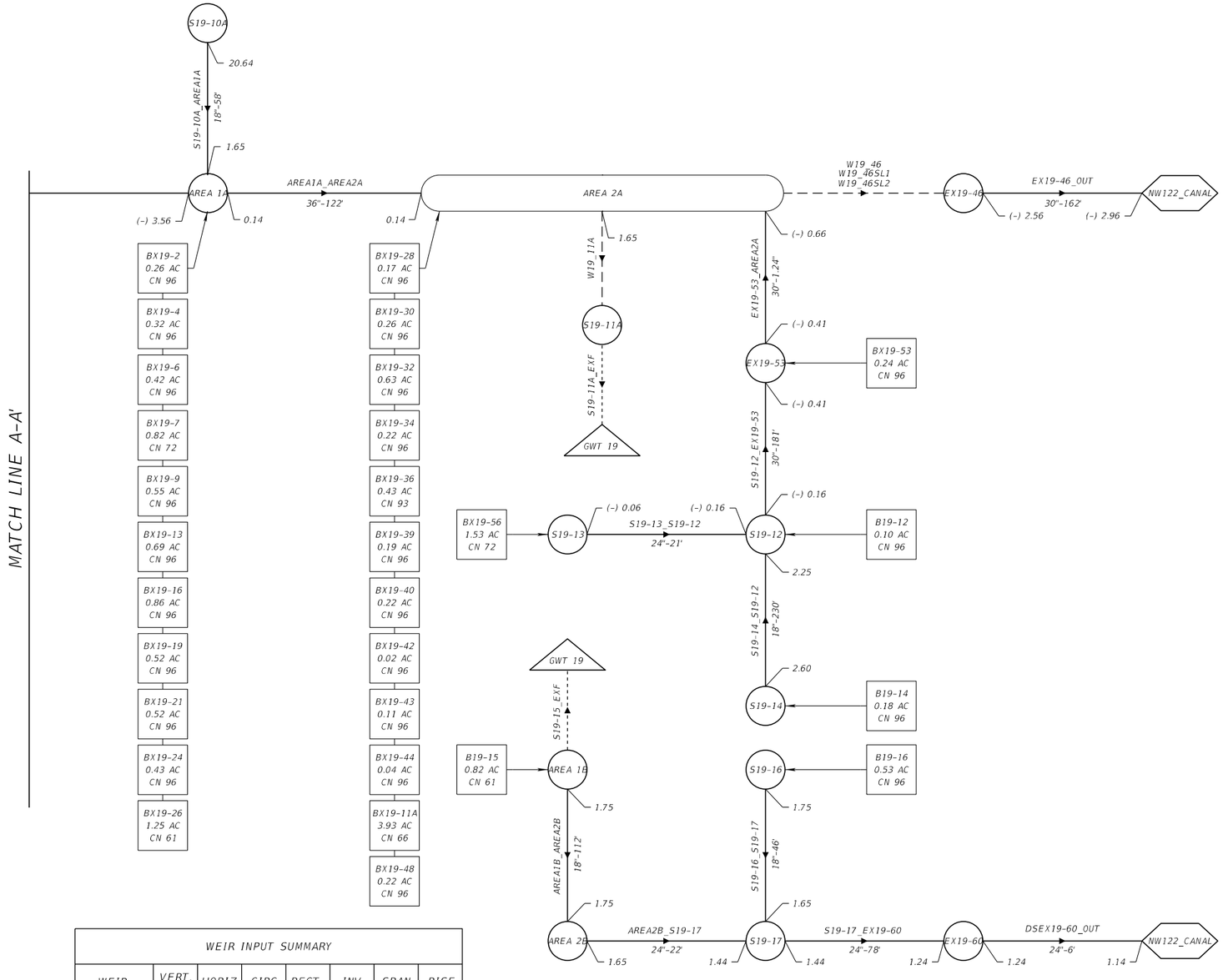
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
826	MIAMI-DADE	447165-1-52-01 441830-1-52-01 441831-1-52-01

NODAL DIAGRAM
BASIN 19

SHEET NO.

AMATHURA 11/10/2020 2:25:17 PM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\4471651520 1\zz_working\AM's Work

PRE-DEVELOPMENT CONDITIONS



WEIR INPUT SUMMARY							
WEIR	VERT. TYPE	HORIZ.	CIRC.	RECT.	INV.	SPAN	RISE
W19-46	-	-	-	X	3.95'	49"	37"
W19-46SL1	MAVIS	-	-	X	2.45'	15"	7"
W19-46SL2	MAVIS	-	-	X	2.45'	49"	17"
W19-11A	-	-	-	X	1.65'	63"	57"
DSEX19-60_OUT	MAVIS	-	-	X	2.85'	48"	6"

LEGEND	
B18-1 0.12 AC CN 96	CONTRIBUTING BASIN BASIN NAME BASIN AREA CURVE NUMBER
S18-2	NODE NAME
58ST_CANAL	BOUNDARY NODE WITH CONSTANT TAILWATER
GWT 6-12	BOUNDARY NODE WITH VARIABLE TAILWATER
S18-3_S18-4 18"-42' 21.50 21.40	PIPE LINK WITH (QUANTITY)SIZE-LENGTH INVERT ELEVATIONS
WEX18_14	WEIR LINK
AREA 1_EXF	RATING CURVE LINK

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
826	MIAMI-DADE	447165-1-52-01 441830-1-52-01 441831-1-52-01

NODAL DIAGRAM BASIN 19

SHEET NO.

AMATHURA 11/10/2020 2:25:18 PM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\44716515201\zz_working\AM's Work

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
AREA1A	Basin 19	25YR-72HR	60.20	5.52	5.50	0.0018	16216	60.03	68.83	60.14	48.49
AREA1B	Basin 19	25YR-72HR	60.12	3.28	5.50	0.0046	3760	60.02	4.05	60.10	3.36
AREA2A	Basin 19	25YR-72HR	60.62	4.21	5.50	0.0008	101073	60.05	96.70	60.36	43.97
AREA2B	Basin 19	25YR-72HR	60.12	3.28	5.50	0.0005	4024	60.08	0.59	60.10	1.66
EX19-19	Basin 19	25YR-72HR	60.19	5.58	12.08	0.0301	159	60.06	26.96	51.17	70.80
EX19-20	Basin 19	25YR-72HR	60.20	5.56	13.71	-0.0339	181	51.17	70.86	88.35	33.98
EX19-46	Basin 19	25YR-72HR	60.62	4.02	5.50	-0.0110	123	60.36	37.26	60.62	36.41
EX19-53	Basin 19	25YR-72HR	60.57	4.25	6.72	0.0018	132	60.02	14.40	60.03	14.32
EX19-60	Basin 19	25YR-72HR	60.12	3.26	5.50	0.0016	127	60.11	3.42	60.12	3.24
GWT_20	Basin 19	25YR-72HR	72.00	2.70	99.00	0.3000	0	60.47	9.05	0.00	0.00
NW122_CANAL	Basin 19	25YR-72HR	0.00	1.65	99.00	0.0000	10	60.49	37.79	0.00	0.00
S19-1	Basin 19	25YR-72HR	60.02	22.69	27.33	-0.0003	213	60.02	1.80	60.02	1.79
S19-10	Basin 19	25YR-72HR	60.03	8.29	13.17	-0.0006	192	60.02	5.21	60.03	5.20
S19-10A	Basin 19	25YR-72HR	60.02	21.27	23.04	-0.0005	153	60.02	2.67	60.02	2.66
S19-11	Basin 19	25YR-72HR	60.02	9.16	13.17	-0.0006	156	60.02	4.28	60.02	4.28
S19-11A	Basin 19	25YR-72HR	60.62	4.20	5.50	0.0059	113	60.60	7.12	60.61	7.12
S19-12	Basin 19	25YR-72HR	60.07	4.29	6.72	0.0014	134	60.02	13.01	60.03	12.92
S19-13	Basin 19	25YR-72HR	60.06	4.62	6.34	0.0018	114	60.02	11.44	60.02	11.36
S19-14	Basin 19	25YR-72HR	60.07	4.32	7.22	0.0012	122	60.02	1.12	60.06	1.05
S19-16	Basin 19	25YR-72HR	60.07	3.38	5.86	0.0005	115	60.02	3.29	60.03	3.26
S19-17	Basin 19	25YR-72HR	60.12	3.28	6.50	-0.0046	161	60.10	4.55	60.11	3.42
S19-2	Basin 19	25YR-72HR	60.03	22.09	26.43	-0.0005	261	60.02	3.90	60.03	3.89
S19-2A	Basin 19	25YR-72HR	60.04	21.09	26.10	-0.0005	251	60.03	3.89	60.04	3.89
S19-3	Basin 19	25YR-72HR	60.04	20.52	23.90	-0.0008	254	60.03	6.97	60.04	6.96
S19-4	Basin 19	25YR-72HR	60.05	16.42	19.21	-0.0015	306	60.03	10.66	60.05	10.61
S19-5	Basin 19	25YR-72HR	60.06	10.85	13.79	-0.0032	264	60.03	14.41	60.07	14.28
S19-6	Basin 19	25YR-72HR	60.06	9.80	11.71	0.0117	128	60.05	16.73	60.07	16.73
S19-7	Basin 19	25YR-72HR	60.06	8.50	11.13	-0.0198	134	60.05	20.33	60.06	20.32
S19-8	Basin 19	25YR-72HR	60.05	6.66	11.30	-0.0021	163	60.05	21.77	60.05	21.77
S19-9	Basin 19	25YR-72HR	60.17	5.69	11.57	0.0202	206	60.05	26.93	60.06	26.96

Qpre = 37.79 cfs

==========
==== Basins ====
==========

Name: B19-1 Node: S19-1 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.290 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19-10 Node: S19-10 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.150 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19-10A Node: S19-10A Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.430 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19-11 Node: S19-11 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.690 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19-11A Node: AREA2A Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 3.930 Time Shift(hrs): 0.00
Curve Number: 66.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19-12 Node: S19-12 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00

Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.100 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19-14 Node: S19-14 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.180 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19-15 Node: AREA1B Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.820 Time Shift(hrs): 0.00
Curve Number: 61.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19-16 Node: S19-16 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.530 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19-2 Node: S19-2 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.340 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19-3 Node: S19-3 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.500 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19-4 Node: S19-4 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

```
        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.600                  Time Shift(hrs): 0.00
            Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: B19-5                    Node: S19-5                  Status: Onsite
        Group: Basin 19                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.620                  Time Shift(hrs): 0.00
            Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: B19-6                    Node: S19-6                  Status: Onsite
        Group: Basin 19                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.410                  Time Shift(hrs): 0.00
            Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: B19-7                    Node: S19-7                  Status: Onsite
        Group: Basin 19                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.600                  Time Shift(hrs): 0.00
            Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: B19-8                    Node: S19-8                  Status: Onsite
        Group: Basin 19                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.240                  Time Shift(hrs): 0.00
            Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: BX19-13                  Node: AREA1A                 Status: Onsite
        Group: Basin 19                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.690                  Time Shift(hrs): 0.00
            Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
--------------------------------------------------------------------------------------------------
         Name: BX19-16                 Node: AREA1A                Status: Onsite
        Group: Basin 19                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000            Time of Conc(min): 10.00
              Area(ac): 0.860               Time Shift(hrs): 0.00
          Curve Number: 96.00           Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------------------------
         Name: BX19-19                 Node: AREA1A                Status: Onsite
        Group: Basin 19                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000            Time of Conc(min): 10.00
              Area(ac): 0.520               Time Shift(hrs): 0.00
          Curve Number: 96.00           Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------------------------
         Name: BX19-2                  Node: AREA1A                Status: Onsite
        Group: Basin 19                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000            Time of Conc(min): 10.00
              Area(ac): 0.260               Time Shift(hrs): 0.00
          Curve Number: 96.00           Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------------------------
         Name: BX19-20                 Node: EX19-20               Status: Onsite
        Group: Basin 19                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000            Time of Conc(min): 10.00
              Area(ac): 0.490               Time Shift(hrs): 0.00
          Curve Number: 96.00           Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------------------------
         Name: BX19-201                Node: S19-13                Status: Onsite
        Group: Basin 19                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000            Time of Conc(min): 10.00
              Area(ac): 0.150               Time Shift(hrs): 0.00
          Curve Number: 77.00           Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------------------------
         Name: BX19-202                Node: S19-13                Status: Onsite
        Group: Basin 19                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000            Time of Conc(min): 10.00
              Area(ac): 0.330               Time Shift(hrs): 0.00
          Curve Number: 96.00           Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00
```

```
--------------------------------------------------------------------------------------------------
        Name: BX19-21                 Node: AREA1A                Status: Onsite
       Group: Basin 19                Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                 Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
           Area(ac): 0.520                  Time Shift(hrs): 0.00
       Curve Number: 96.00            Max Allowable Q(cfs): 999999.000
            DCIA(%): 0.00


--------------------------------------------------------------------------------------------------
        Name: BX19-26                 Node: AREA1A                Status: Onsite
       Group: Basin 19                Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                 Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
           Area(ac): 1.250                  Time Shift(hrs): 0.00
       Curve Number: 61.00            Max Allowable Q(cfs): 999999.000
            DCIA(%): 0.00


--------------------------------------------------------------------------------------------------
        Name: BX19-28                 Node: AREA2A                Status: Onsite
       Group: Basin 19                Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                 Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
           Area(ac): 0.170                  Time Shift(hrs): 0.00
       Curve Number: 96.00            Max Allowable Q(cfs): 999999.000
            DCIA(%): 0.00


--------------------------------------------------------------------------------------------------
        Name: BX19-30                 Node: AREA2A                Status: Onsite
       Group: Basin 19                Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                 Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
           Area(ac): 0.260                  Time Shift(hrs): 0.00
       Curve Number: 96.00            Max Allowable Q(cfs): 999999.000
            DCIA(%): 0.00


--------------------------------------------------------------------------------------------------
        Name: BX19-32                 Node: AREA2A                Status: Onsite
       Group: Basin 19                Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                 Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
           Area(ac): 0.630                  Time Shift(hrs): 0.00
       Curve Number: 96.00            Max Allowable Q(cfs): 999999.000
            DCIA(%): 0.00


--------------------------------------------------------------------------------------------------
        Name: BX19-34                 Node: AREA2A                Status: Onsite
       Group: Basin 19                Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                 Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
```

Area(ac): 0.220 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX19-36 Node: AREA2A Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.430 Time Shift(hrs): 0.00
Curve Number: 93.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX19-39 Node: AREA2A Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.190 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX19-4 Node: AREA1A Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.320 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX19-40 Node: AREA2A Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.220 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX19-42 Node: AREA2A Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.020 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX19-43 Node: AREA2A Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

```
        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
              Area(ac): 0.110                    Time Shift(hrs): 0.00
          Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: BX19-44                 Node: AREA2A                Status: Onsite
        Group: Basin 19                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
              Area(ac): 0.070                    Time Shift(hrs): 0.00
          Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: BX19-48                 Node: AREA2A                Status: Onsite
        Group: Basin 19                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
              Area(ac): 0.220                    Time Shift(hrs): 0.00
          Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: BX19-53                 Node: EX19-53               Status: Onsite
        Group: Basin 19                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
              Area(ac): 0.240                    Time Shift(hrs): 0.00
          Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: BX19-56                 Node: S19-13                Status: Onsite
        Group: Basin 19                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
              Area(ac): 1.530                    Time Shift(hrs): 0.00
          Curve Number: 72.00               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: BX19-6                  Node: AREA1A                Status: Onsite
        Group: Basin 19                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
              Area(ac): 0.420                    Time Shift(hrs): 0.00
          Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
```

Name: BX19-7 Node: AREA1A Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.820 Time Shift(hrs): 0.00
Curve Number: 72.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX19-9 Node: AREA1A Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.550 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

==========
==== Nodes ==========
==========

Name: AREA1A Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 5.500
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.2800
2.450	0.3000
5.000	0.3600
6.000	0.3800

Name: AREA1B Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 5.500
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0500
2.850	0.0600
5.000	0.1900
6.000	0.2500

Name: AREA2A Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 5.500
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	2.1900
2.450	2.2300
5.000	2.3600
6.000	2.4200

Name: AREA2B Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 5.500
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0600
2.850	0.0700
5.000	0.1800
6.000	0.2400

Name: EX19-19 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 12.080
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
12.080	0.0004

Name: EX19-20 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 13.710
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
13.710	0.0004

Name: EX19-46 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 5.500
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
3.950	0.0004

Name: EX19-53 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 6.720
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
6.720	0.0004

Name: EX19-60 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 5.500
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
5.500	0.0004

Name: GWT_20 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	1.650
108.00	1.650

Name: NW122_CANAL Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	1.650
108.00	1.650

Name: S19-1 Base Flow(cfs): 0.000 Init Stage(ft): 22.000
Group: Basin 19 Warn Stage(ft): 27.330
Type: Stage/Area

Stage(ft)	Area(ac)
20.000	0.0004
27.330	0.0004

Name: S19-10 Base Flow(cfs): 0.000 Init Stage(ft): 7.000
Group: Basin 19 Warn Stage(ft): 13.170
Type: Stage/Area

Stage(ft)	Area(ac)
5.000	0.0004
13.170	0.0004

Name: S19-10A Base Flow(cfs): 0.000 Init Stage(ft): 20.640
Group: Basin 19 Warn Stage(ft): 23.040
Type: Stage/Area

Stage(ft)	Area(ac)
18.640	0.0004
23.040	0.0004

Name: S19-11 Base Flow(cfs): 0.000 Init Stage(ft): 8.000
Group: Basin 19 Warn Stage(ft): 13.170
Type: Stage/Area

Stage(ft)	Area(ac)
6.000	0.0004
13.170	0.0004

Name: S19-11A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 19 Warn Stage(ft): 5.500
Type: Stage/Area

Stage(ft)	Area(ac)

1.000	0.0004
1.640	0.0004

Name: S19-12 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 6.720
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
6.720	0.0004

Name: S19-13 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 6.340
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
6.340	0.0004

Name: S19-14 Base Flow(cfs): 0.000 Init Stage(ft): 2.600
Group: Basin 19 Warn Stage(ft): 7.220
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
7.220	0.0004

Name: S19-16 Base Flow(cfs): 0.000 Init Stage(ft): 1.750
Group: Basin 19 Warn Stage(ft): 5.860
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
5.860	0.0004

Name: S19-17 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 6.500
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
6.500	0.0004

Name: S19-2 Base Flow(cfs): 0.000 Init Stage(ft): 21.000
Group: Basin 19 Warn Stage(ft): 26.430
Type: Stage/Area

Stage(ft)	Area(ac)
19.000	0.0004
26.430	0.0004

Name: S19-2A Base Flow(cfs): 0.000 Init Stage(ft): 20.000
Group: Basin 19 Warn Stage(ft): 26.100
Type: Stage/Area

Stage(ft)	Area(ac)
19.000	0.0004
26.100	0.0004

Name: S19-3 Base Flow(cfs): 0.000 Init Stage(ft): 18.900
Group: Basin 19 Warn Stage(ft): 23.900
Type: Stage/Area

Stage(ft)	Area(ac)
16.900	0.0004
23.900	0.0004

Name: S19-4 Base Flow(cfs): 0.000 Init Stage(ft): 14.000
Group: Basin 19 Warn Stage(ft): 19.210
Type: Stage/Area

Stage(ft)	Area(ac)
12.000	0.0004
19.210	0.0004

Name: S19-5 Base Flow(cfs): 0.000 Init Stage(ft): 8.000
Group: Basin 19 Warn Stage(ft): 13.790
Type: Stage/Area

Stage(ft)	Area(ac)
6.000	0.0004
13.790	0.0004

Name: S19-6 Base Flow(cfs): 0.000 Init Stage(ft): 6.000
Group: Basin 19 Warn Stage(ft): 11.710
Type: Stage/Area

Stage(ft)	Area(ac)
4.000	0.0004
11.710	0.0004

Name: S19-7 Base Flow(cfs): 0.000 Init Stage(ft): 5.500
Group: Basin 19 Warn Stage(ft): 11.130
Type: Stage/Area

Stage(ft)	Area(ac)
3.500	0.0004
11.130	0.0004

Name: S19-8 Base Flow(cfs): 0.000 Init Stage(ft): 4.200
Group: Basin 19 Warn Stage(ft): 11.300

Type: Stage/Area

Stage(ft)	Area(ac)
2.200	0.0004
11.300	0.0004

Name: S19-9 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 11.570
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
11.570	0.0004

Operating Tables

Name: E_OPT-19 Group: Basin 19
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.650	1.65	0.00
1.650	2.65	0.03
1.650	3.45	0.06
1.650	5.45	0.10
2.650	2.65	0.00
2.650	3.45	0.02
2.650	5.45	0.09

Pipes

Name: AREA1A_AREA2A From Node: AREA1A Length(ft): 122.00
Group: Basin 19 To Node: AREA2A Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	36.00	36.00	Flow:	Both
Rise(in):	36.00	36.00	Entrance Loss Coef:	0.50
Invert(ft):	0.140	0.140	Exit Loss Coef:	1.00
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: AREA1B_AREA2B From Node: AREA1B Length(ft): 112.00
Group: Basin 19 To Node: AREA2B Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	18.00	18.00	Flow:	Both
Rise(in):	18.00	18.00	Entrance Loss Coef:	0.50
			Exit Loss Coef:	1.00

Invert(ft):	1.750	1.750	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	AREA2B_S19-17	From Node: AREA2B	Length(ft):	22.00
Group:	Basin 19	To Node: S19-17	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	0.10
Invert(ft):	1.650	1.440	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX19-19_EX19-20	From Node: EX19-19	Length(ft):	205.00
Group:	Basin 19	To Node: EX19-20	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	66.00	66.00	Entrance Loss Coef:	0.50
Rise(in):	66.00	66.00	Exit Loss Coef:	0.10
Invert(ft):	-3.190	-3.350	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX19-20_AREA1A	From Node: EX19-20	Length(ft):	286.00
Group:	Basin 19	To Node: AREA1A	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	66.00	66.00	Entrance Loss Coef:	0.50
Rise(in):	66.00	66.00	Exit Loss Coef:	1.00
Invert(ft):	-3.350	-3.560	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX19-46_OUT	From Node:	EX19-46	Length(ft): 162.00
Group:	Basin 19	To Node:	NW122_CANAL	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	30.00	30.00		Entrance Loss Coef: 0.50
Rise(in):	30.00	30.00		Exit Loss Coef: 1.00
Invert(ft):	-2.560	-2.960		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX19-53_AREA2A	From Node:	EX19-53	Length(ft): 124.00
Group:	Basin 19	To Node:	AREA2A	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	30.00	30.00		Entrance Loss Coef: 0.50
Rise(in):	30.00	30.00		Exit Loss Coef: 1.00
Invert(ft):	-0.410	-0.660		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S19-10_AREA1A	From Node:	S19-10A	Length(ft): 58.00
Group:	Basin 19	To Node:	AREA1A	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	18.00	18.00		Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00		Exit Loss Coef: 1.00
Invert(ft):	20.640	1.650		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S19-10_S19-9	From Node: S19-10	Length(ft): 58.00
Group:	Basin 19	To Node: S19-9	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Always Inlet
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 1.46
Invert(ft):	7.000	4.500	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S19-11_S19-10	From Node: S19-11	Length(ft): 66.00
Group:	Basin 19	To Node: S19-10	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Always Inlet
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.10
Invert(ft):	8.000	7.000	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S19-12_EX19-53	From Node: S19-12	Length(ft): 181.00
Group:	Basin 19	To Node: EX19-53	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	30.00	30.00	Entrance Loss Coef: 0.50
Rise(in):	30.00	30.00	Exit Loss Coef: 0.10
Invert(ft):	-0.160	-0.410	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S19-13_S19-12	From Node: S19-13	Length(ft): 21.00
Group:	Basin 19	To Node: S19-12	Count: 1

			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	1.46
Invert(ft):	-0.060	-0.160	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S19-14_S19-12	From Node:	S19-14	Length(ft): 230.00
Group:	Basin 19	To Node:	S19-12	Count: 1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	0.10
Invert(ft):	2.600	2.250	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S19-16_S19-17	From Node:	S19-16	Length(ft): 46.00
Group:	Basin 19	To Node:	S19-17	Count: 1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	1.750	1.650	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S19-17_EX19-60	From Node:	S19-17	Length(ft): 78.00
Group:	Basin 19	To Node:	EX19-60	Count: 1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	0.10
Invert(ft):	1.440	1.240	Bend Loss Coef:	0.00

Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S19-1_S19-2	From Node: S19-1	Length(ft): 137.00
Group:	Basin 19	To Node: S19-2	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.10
Invert(ft):	22.000	21.000	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S19-2_S19-2A	From Node: S19-2	Length(ft): 77.00
Group:	Basin 19	To Node: S19-2A	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.10
Invert(ft):	21.000	20.000	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S19-2A_S19-3	From Node: S19-2A	Length(ft): 122.00
Group:	Basin 19	To Node: S19-3	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.10
Invert(ft):	20.000	18.900	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S19-3_S19-4	From Node: S19-3	Length(ft):	245.00
Group:	Basin 19	To Node: S19-4	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	0.10
Invert(ft):	18.900	14.000	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S19-4_S19-5	From Node: S19-4	Length(ft):	252.00
Group:	Basin 19	To Node: S19-5	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	0.10
Invert(ft):	14.000	8.500	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S19-5_S19-6	From Node: S19-5	Length(ft):	168.00
Group:	Basin 19	To Node: S19-6	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	0.10
Invert(ft):	8.000	6.000	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

```
---------------------------------------------------------------------------------------------------
         Name: S19-6_S19-7         From Node: S19-6              Length(ft): 137.00
        Group: Basin 19              To Node: S19-7                   Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Always Inlet
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 24.00          24.00                     Entrance Loss Coef: 0.50
     Rise(in): 24.00          24.00                         Exit Loss Coef: 0.10
   Invert(ft): 6.000          5.500                         Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


---------------------------------------------------------------------------------------------------
         Name: S19-7_S19-8         From Node: S19-7              Length(ft): 84.00
        Group: Basin 19              To Node: S19-8                   Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Always Inlet
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 24.00          24.00                     Entrance Loss Coef: 0.50
     Rise(in): 24.00          24.00                         Exit Loss Coef: 1.46
   Invert(ft): 5.500          5.000                         Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


---------------------------------------------------------------------------------------------------
         Name: S19-8_S19-9         From Node: S19-8              Length(ft): 33.00
        Group: Basin 19              To Node: S19-9                   Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 30.00          30.00                     Entrance Loss Coef: 0.50
     Rise(in): 30.00          30.00                         Exit Loss Coef: 0.10
   Invert(ft): 4.200          4.100                         Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


---------------------------------------------------------------------------------------------------
         Name: S19-9_EX19-19       From Node: S19-9              Length(ft): 176.00
        Group: Basin 19              To Node: EX19-19                 Count: 1
                                                          Friction Equation: Automatic
```

```
              UPSTREAM       DOWNSTREAM               Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                              Flow: Both
     Span(in): 48.00          48.00                  Entrance Loss Coef: 0.50
     Rise(in): 48.00          48.00                      Exit Loss Coef: 1.46
   Invert(ft): -2.490         -3.190                     Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                 Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                     Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                  Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


================================================================================
==== Drop Structures ===========================================================
================================================================================

         Name: DSEX19-60_OUT       From Node: EX19-60            Length(ft): 6.00
        Group: Basin 19              To Node: NW122_CANAL             Count: 1

              UPSTREAM       DOWNSTREAM                Friction Equation: Automatic
     Geometry: Circular       Circular                Solution Algorithm: Most Restrictive
     Span(in): 24.00          24.00                                 Flow: Both
     Rise(in): 24.00          24.00                  Entrance Loss Coef: 0.500
   Invert(ft): 1.240          1.140                      Exit Loss Coef: 1.000
  Manning's N: 0.012000       0.012000                 Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                     Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                       Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


*** Weir 1 of 1 for Drop Structure DSEX19-60_OUT ***
                                                                          TABLE
                 Count: 1                      Bottom Clip(in): 0.000
                  Type: Vertical: Mavis           Top Clip(in): 0.000
                  Flow: Both                   Weir Disc Coef: 3.130
              Geometry: Rectangular          Orifice Disc Coef: 0.600

              Span(in): 48.00                       Invert(ft): 2.850
              Rise(in): 6.00                 Control Elev(ft): 2.850


================================================================================
==== Weirs =====================================================================
================================================================================

         Name: W19-11A             From Node: AREA2A
        Group: Basin 19              To Node: S19-11A
         Flow: Both                    Count: 1
         Type: Horizontal           Geometry: Rectangular

                    Span(in): 63.00
                    Rise(in): 57.00
                  Invert(ft): 1.650
       Control Elevation(ft): 1.650
                                          TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 3.200
       Orifice Discharge Coef: 0.600
```

```
---------------------------------------------------------------------------------------------
         Name: W19-46              From Node: AREA2A
        Group: Basin 19              To Node: EX19-46
         Flow: Both                    Count: 1
         Type: Horizontal          Geometry: Rectangular

                    Span(in): 49.00
                    Rise(in): 37.00
                  Invert(ft): 3.950
       Control Elevation(ft): 3.950
                                          TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 3.130
      Orifice Discharge Coef: 0.600



---------------------------------------------------------------------------------------------
         Name: W19-46SL1           From Node: AREA2A
        Group: Basin 19              To Node: EX19-46
         Flow: Both                    Count: 4
         Type: Vertical: Mavis     Geometry: Rectangular

                    Span(in): 15.00
                    Rise(in): 7.00
                  Invert(ft): 2.450
       Control Elevation(ft): 2.450
                                          TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 3.130
      Orifice Discharge Coef: 0.600



---------------------------------------------------------------------------------------------
         Name: W19-46SL2           From Node: AREA2A
        Group: Basin 19              To Node: EX19-46
         Flow: Both                    Count: 2
         Type: Vertical: Mavis     Geometry: Rectangular

                    Span(in): 49.00
                    Rise(in): 17.00
                  Invert(ft): 2.450
       Control Elevation(ft): 2.450
                                          TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 3.130
      Orifice Discharge Coef: 0.600



=============================================================================================
==== Rating Curves ==========================================================================
=============================================================================================

         Name: S19-11A_EXF         From Node: S19-11A                Count: 142
        Group: Basin 19              To Node: GWT_20                  Flow: Both

              TABLE           ELEV ON(ft)     ELEV OFF(ft)
          #1: E_OPT-19        1.650           1.650
          #2:                 0.000           0.000
          #3:                 0.000           0.000
          #4:                 0.000           0.000



---------------------------------------------------------------------------------------------
         Name: S19-15_EXF          From Node: AREA1B                 Count: 142
        Group: Basin 19              To Node: GWT_20                  Flow: Both

              TABLE           ELEV ON(ft)     ELEV OFF(ft)
          #1: E_OPT-19        1.650           1.650
```

#2:	0.000	0.000
#3:	0.000	0.000
#4:	0.000	0.000

==========
==== Hydrology Simulations ==========
==========

Name: 100YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 5.00

Time(hrs)	Print Inc(min)
1.000	1.00
1.330	1.00

Name: 100YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 13.44

Time(hrs)	Print Inc(min)
8.000	5.00
16.000	1.00
24.000	5.00
24.330	5.00

Name: 100YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 9.60

Time(hrs)	Print Inc(min)
2.000	5.00
6.000	1.00
8.000	5.00
8.330	5.00

Name: 10YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 3.50

Time(hrs)	Print Inc(min)
1.000	1.00
1.330	1.00

Name: 10YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 24.00

Rainfall File: Fdot-24
Rainfall Amount(in): 8.88

Time(hrs)	Print Inc(min)
8.000	5.00
16.000	1.00
24.000	5.00
24.330	5.00

Name: 10YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 6.40

Time(hrs)	Print Inc(min)
2.000	5.00
6.000	1.00
8.000	5.00
8.330	5.00

Name: 25YR-72HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Sfwmd72
Rainfall Amount(in): 14.00

Time(hrs)	Print Inc(min)
48.000	15.00
56.000	5.00
64.000	1.00
72.000	5.00
72.330	5.00

==========
==== Routing Simulations ==========
==========

Name: 100YR-1HR Hydrology Sim: 100YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 25.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
1.000	1.000
25.000	15.000

Group	Run
Basin 19	Yes

Name: 100YR-24HR Hydrology Sim: 100YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

```
      Execute: No          Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 48.00
     Min Calc Time(sec): 0.5000               Max Calc Time(sec): 10.0000
        Boundary Stages: 24HR                    Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.000
16.000          1.000
24.000          5.000
48.000          15.000

Group           Run
--------------- -----
Basin 19        Yes


-------------------------------------------------------------------------------------------------
         Name: 100YR-8HR           Hydrology Sim: 100YR-8HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: No          Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 36.00
     Min Calc Time(sec): 0.5000               Max Calc Time(sec): 10.0000
        Boundary Stages: 8HR                     Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           5.000
6.000           1.000
8.000           5.000
36.000          15.000

Group           Run
--------------- -----
Basin 19        Yes


-------------------------------------------------------------------------------------------------
         Name: 10YR-1HR            Hydrology Sim: 10YR-1HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: No          Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 25.00
     Min Calc Time(sec): 0.5000               Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
1.000           1.000
25.000          15.000

Group           Run
--------------- -----
Basin 19        Yes
```

```
---------------------------------------------------------------------------------------------
         Name: 10YR-24HR           Hydrology Sim: 10YR-24HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: No          Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 48.00
     Min Calc Time(sec): 0.5000               Max Calc Time(sec): 60.0000
        Boundary Stages: 24HR                    Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.000
16.000          1.000
24.000          5.000
48.000          15.000

Group           Run
--------------- -----
Basin 19        Yes


---------------------------------------------------------------------------------------------
         Name: 10YR-8HR            Hydrology Sim: 10YR-8HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: No          Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 36.00
     Min Calc Time(sec): 0.5000               Max Calc Time(sec): 60.0000
        Boundary Stages: 8HR                     Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           5.000
6.000           1.000
8.000           5.000
36.000          15.000

Group           Run
--------------- -----
Basin 19        Yes


---------------------------------------------------------------------------------------------
         Name: 25YR-72HR           Hydrology Sim: 25YR-72HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: Yes         Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 96.00
     Min Calc Time(sec): 0.5000               Max Calc Time(sec): 60.0000
        Boundary Stages: 72HR                    Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.000
16.000          1.000
24.000          5.000
96.000          15.000
```

Group	Run
Basin 19	Yes

==========
==== Boundary Conditions ====
==========

Name: 8HR Node: GWT_20 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.950
1.000	1.970
1.950	1.950
2.000	2.050
3.000	2.160
4.000	2.480
5.000	2.600
6.000	2.640
7.000	2.680
8.000	2.700
12.000	1.950
36.000	1.950

Name: 24HR Node: GWT_20 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.950
1.000	1.960
2.000	1.970
3.000	2.000
4.000	2.020
5.000	2.040
6.000	2.070
7.000	2.100
8.000	2.130
9.000	2.180
10.000	2.220
11.000	2.280
12.000	2.360
13.000	2.410
14.000	2.450
15.000	2.500
16.000	2.540
17.000	2.570
18.000	2.600
19.000	2.630
20.000	2.650
21.000	2.670
22.000	2.690
23.000	2.690
24.000	2.700
36.000	1.950
48.000	1.950

Name: 72HR Node: GWT_20 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.950
24.000	2.030
36.000	2.090
48.000	2.150
49.000	2.150
50.000	2.160
51.000	2.170
52.000	2.170
53.000	2.180
54.000	2.190

55.000	2.210
56.000	2.220
57.000	2.240
57.500	2.250
58.000	2.270
58.500	2.280
59.000	2.300
59.500	2.320
60.000	2.510
60.500	2.550
61.000	2.570
61.500	2.590
62.000	2.600
62.500	2.610
63.000	2.620
64.000	2.630
65.000	2.640
66.000	2.650
68.000	2.670
70.000	2.690
72.000	2.700
96.000	1.950

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	0.00	0.0	0.0	0.0	0.0	0.00
25YR-72HR	0.08	0.0	-301.5	301.5	-0.0	-0.00
25YR-72HR	0.17	0.0	-469.3	469.3	0.0	0.00
25YR-72HR	0.25	0.0	-560.9	560.9	-0.0	-0.00
25YR-72HR	0.33	0.0	-617.0	617.0	0.0	0.00
25YR-72HR	0.42	0.0	-656.8	656.8	0.0	0.00
25YR-72HR	0.50	0.0	-683.1	683.1	0.0	0.00
25YR-72HR	0.59	0.0	-707.2	707.2	0.0	0.00
25YR-72HR	0.67	0.0	-727.2	727.2	0.0	0.00
25YR-72HR	0.75	0.0	-745.8	745.8	0.0	0.00
25YR-72HR	0.83	0.0	-763.7	763.7	0.0	0.00
25YR-72HR	0.92	0.0	-782.2	782.2	0.0	0.00
25YR-72HR	1.00	0.0	-799.6	799.6	0.0	0.00
25YR-72HR	1.08	0.0	-817.1	817.1	0.0	0.00
25YR-72HR	1.17	0.0	-834.6	834.6	0.0	0.00
25YR-72HR	1.25	0.0	-852.9	852.9	0.0	0.00
25YR-72HR	1.33	0.3	-870.0	870.3	0.0	0.00
25YR-72HR	1.42	1.4	-887.7	889.1	-0.0	-0.00
25YR-72HR	1.50	3.1	-905.5	908.6	-0.0	-0.00
25YR-72HR	1.58	7.0	-923.3	930.3	-0.0	-0.00
25YR-72HR	1.67	14.5	-941.2	955.7	-0.0	-0.00
25YR-72HR	1.75	25.7	-959.1	984.9	-0.0	-0.00
25YR-72HR	1.83	41.0	-977.1	1018.2	-0.0	-0.00
25YR-72HR	1.92	61.0	-995.2	1056.1	-0.0	-0.00
25YR-72HR	2.00	85.5	-1013.2	1098.7	-0.0	-0.00
25YR-72HR	2.08	114.6	-1031.4	1146.0	-0.0	-0.00
25YR-72HR	2.17	148.4	-1049.5	1198.0	-0.0	-0.00
25YR-72HR	2.25	186.9	-1067.8	1254.7	-0.0	-0.00
25YR-72HR	2.33	229.9	-1086.0	1315.9	-0.0	-0.00
25YR-72HR	2.42	277.2	-1104.4	1381.5	-0.0	-0.00
25YR-72HR	2.50	328.8	-1122.7	1451.5	-0.0	-0.00
25YR-72HR	2.58	384.6	-1141.2	1525.7	-0.0	-0.00
25YR-72HR	2.67	444.3	-1159.6	1603.9	-0.0	-0.00
25YR-72HR	2.75	508.0	-1178.2	1686.2	-0.0	-0.00
25YR-72HR	2.83	575.6	-1196.7	1772.3	-0.0	-0.00
25YR-72HR	2.92	646.7	-1286.5	1933.2	-0.0	-0.00
25YR-72HR	3.00	721.5	-1629.4	2351.0	-0.0	-0.00
25YR-72HR	3.08	799.9	-1972.1	2771.9	-0.0	-0.00
25YR-72HR	3.17	881.5	-2314.5	3196.0	-0.0	-0.00
25YR-72HR	3.25	966.5	-2656.6	3623.1	-0.0	-0.00
25YR-72HR	3.33	1054.7	-2998.2	4052.9	-0.0	-0.00
25YR-72HR	3.42	1145.9	-3339.2	4485.1	-0.0	-0.00
25YR-72HR	3.50	1240.2	-3679.3	4919.5	-0.0	-0.00
25YR-72HR	3.58	1337.4	-4018.4	5355.8	-0.0	-0.00
25YR-72HR	3.67	1437.4	-4356.2	5793.6	-0.0	-0.00
25YR-72HR	3.75	1540.2	-4692.5	6232.8	-0.0	-0.00
25YR-72HR	3.83	1645.7	-5027.2	6672.9	-0.0	-0.00
25YR-72HR	3.92	1753.8	-5359.9	7113.7	-0.0	-0.00
25YR-72HR	4.00	1864.5	-5690.5	7554.9	-0.0	-0.00
25YR-72HR	4.08	1977.6	-6018.5	7996.1	-0.0	-0.00
25YR-72HR	4.17	2093.1	-6343.8	8436.9	-0.0	-0.00
25YR-72HR	4.25	2211.0	-6665.9	8876.9	0.0	0.00
25YR-72HR	4.33	2331.1	-6984.5	9315.6	0.0	0.00
25YR-72HR	4.42	2453.4	-7299.2	9752.7	0.0	0.00
25YR-72HR	4.50	2577.9	-7609.7	10187.6	0.0	0.00
25YR-72HR	4.58	2704.6	-7915.5	10620.0	0.0	0.00
25YR-72HR	4.67	2833.2	-8216.3	11049.6	0.0	0.00
25YR-72HR	4.75	2963.9	-8512.0	11475.9	-0.0	-0.00
25YR-72HR	4.83	3096.5	-8802.3	11898.8	0.0	0.00
25YR-72HR	4.92	3231.0	-9087.3	12318.3	0.0	0.00
25YR-72HR	5.00	3367.4	-9367.2	12734.6	-0.0	-0.00
25YR-72HR	5.08	3505.6	-9642.2	13147.8	-0.0	-0.00
25YR-72HR	5.17	3645.6	-9912.5	13558.0	-0.0	-0.00
25YR-72HR	5.25	3787.2	-10178.1	13965.4	-0.0	-0.00
25YR-72HR	5.33	3930.6	-10439.3	14369.9	-0.0	-0.00
25YR-72HR	5.42	4075.6	-10696.0	14771.6	-0.0	-0.00
25YR-72HR	5.50	4222.2	-10948.3	15170.5	-0.0	-0.00
25YR-72HR	5.58	4370.4	-11196.3	15566.6	-0.0	-0.00
25YR-72HR	5.67	4520.1	-11440.0	15960.0	-0.0	-0.00
25YR-72HR	5.75	4671.3	-11679.4	16350.7	-0.0	-0.00
25YR-72HR	5.83	4823.9	-11914.7	16738.6	-0.0	-0.00
25YR-72HR	5.92	4978.0	-12145.8	17123.8	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	6.00	5133.5	-12372.8	17506.3	-0.0	-0.00
25YR-72HR	6.08	5290.3	-12595.7	17886.1	0.0	0.00
25YR-72HR	6.17	5448.5	-12814.6	18263.1	-0.0	-0.00
25YR-72HR	6.25	5608.0	-13029.5	18637.5	0.0	0.00
25YR-72HR	6.33	5768.8	-13240.4	19009.1	-0.0	-0.00
25YR-72HR	6.42	5930.8	-13447.3	19378.0	0.0	0.00
25YR-72HR	6.50	6094.0	-13650.3	19744.3	0.0	0.00
25YR-72HR	6.58	6258.4	-13849.4	20107.9	0.0	0.00
25YR-72HR	6.67	6424.0	-14044.7	20468.7	0.0	0.00
25YR-72HR	6.75	6590.8	-14236.2	20827.0	0.0	0.00
25YR-72HR	6.83	6758.7	-14423.8	21182.5	-0.0	-0.00
25YR-72HR	6.92	6927.6	-14607.8	21535.4	-0.0	-0.00
25YR-72HR	7.00	7097.7	-14787.9	21885.6	-0.0	-0.00
25YR-72HR	7.08	7268.8	-14964.4	22233.2	-0.0	-0.00
25YR-72HR	7.17	7440.9	-15137.3	22578.2	-0.0	-0.00
25YR-72HR	7.25	7614.1	-15306.5	22920.6	-0.0	-0.00
25YR-72HR	7.33	7788.2	-15472.1	23260.3	-0.0	-0.00
25YR-72HR	7.42	7963.4	-15634.1	23597.5	-0.0	-0.00
25YR-72HR	7.50	8139.4	-15792.6	23932.0	-0.0	-0.00
25YR-72HR	7.58	8316.5	-15947.6	24264.1	-0.0	-0.00
25YR-72HR	7.67	8494.4	-16099.1	24593.5	-0.0	-0.00
25YR-72HR	7.75	8673.2	-16247.2	24920.4	-0.0	-0.00
25YR-72HR	7.83	8852.9	-16391.9	25244.8	-0.0	-0.00
25YR-72HR	7.92	9033.5	-16533.1	25566.6	-0.0	-0.00
25YR-72HR	8.00	9214.9	-16671.1	25886.0	-0.0	-0.00
25YR-72HR	8.08	9397.2	-16805.7	26202.9	-0.0	-0.00
25YR-72HR	8.10	9433.7	-16832.2	26265.9	-0.0	-0.00
25YR-72HR	8.12	9470.3	-16858.6	26328.9	-0.0	-0.00
25YR-72HR	8.13	9506.9	-16884.9	26391.8	-0.0	-0.00
25YR-72HR	8.15	9543.6	-16911.0	26454.6	-0.0	-0.00
25YR-72HR	8.17	9580.2	-16937.0	26517.2	-0.0	-0.00
25YR-72HR	8.18	9617.0	-16962.9	26579.8	-0.0	-0.00
25YR-72HR	8.20	9653.7	-16988.6	26642.3	-0.0	-0.00
25YR-72HR	8.22	9690.5	-17014.2	26704.7	-0.0	-0.00
25YR-72HR	8.23	9727.3	-17039.7	26767.0	-0.0	-0.00
25YR-72HR	8.25	9764.1	-17065.1	26829.2	-0.0	-0.00
25YR-72HR	8.27	9801.0	-17090.3	26891.3	-0.0	-0.00
25YR-72HR	8.28	9837.9	-17115.4	26953.3	-0.0	-0.00
25YR-72HR	8.30	9874.8	-17140.3	27015.2	-0.0	-0.00
25YR-72HR	8.32	9911.8	-17165.2	27077.0	-0.0	-0.00
25YR-72HR	8.33	9948.8	-17189.9	27138.7	-0.0	-0.00
25YR-72HR	8.35	9985.8	-17214.5	27200.3	-0.0	-0.00
25YR-72HR	8.37	10022.9	-17238.9	27261.8	-0.0	-0.00
25YR-72HR	8.38	10060.0	-17263.2	27323.2	-0.0	-0.00
25YR-72HR	8.40	10097.1	-17287.4	27384.5	-0.0	-0.00
25YR-72HR	8.42	10134.2	-17311.5	27445.7	-0.0	-0.00
25YR-72HR	8.43	10171.4	-17335.5	27506.9	-0.0	-0.00
25YR-72HR	8.45	10208.6	-17359.3	27567.9	-0.0	-0.00
25YR-72HR	8.47	10245.9	-17383.0	27628.8	-0.0	-0.00
25YR-72HR	8.48	10283.1	-17406.5	27689.7	0.0	0.00
25YR-72HR	8.50	10320.4	-17430.0	27750.4	0.0	0.00
25YR-72HR	8.52	10357.8	-17453.3	27811.1	0.0	0.00
25YR-72HR	8.53	10395.1	-17476.5	27871.6	0.0	0.00
25YR-72HR	8.55	10432.5	-17499.5	27932.1	0.0	0.00
25YR-72HR	8.57	10469.9	-17522.5	27992.4	0.0	0.00
25YR-72HR	8.58	10507.4	-17545.3	28052.7	0.0	0.00
25YR-72HR	8.60	10544.8	-17568.0	28112.8	0.0	0.00
25YR-72HR	8.62	10582.4	-17590.6	28172.9	0.0	0.00
25YR-72HR	8.63	10619.9	-17613.0	28232.9	0.0	0.00
25YR-72HR	8.65	10657.5	-17635.3	28292.8	0.0	0.00
25YR-72HR	8.67	10695.0	-17657.5	28352.6	0.0	0.00
25YR-72HR	8.68	10732.7	-17679.6	28412.2	0.0	0.00
25YR-72HR	8.70	10770.3	-17701.5	28471.8	0.0	0.00
25YR-72HR	8.72	10808.0	-17723.4	28531.3	0.0	0.00
25YR-72HR	8.73	10845.7	-17745.1	28590.8	0.0	0.00
25YR-72HR	8.75	10883.4	-17766.6	28650.1	0.0	0.00
25YR-72HR	8.77	10921.2	-17788.1	28709.3	0.0	0.00
25YR-72HR	8.78	10959.0	-17809.4	28768.4	0.0	0.00
25YR-72HR	8.80	10996.8	-17830.7	28827.5	0.0	0.00
25YR-72HR	8.82	11034.7	-17851.7	28886.4	0.0	0.00
25YR-72HR	8.83	11072.5	-17872.7	28945.3	0.0	0.00
25YR-72HR	8.85	11110.4	-17893.6	29004.0	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	8.87	11148.4	-17914.3	29062.7	0.0	0.00
25YR-72HR	8.88	11186.3	-17934.9	29121.2	0.0	0.00
25YR-72HR	8.90	11224.3	-17955.4	29179.7	0.0	0.00
25YR-72HR	8.92	11262.3	-17975.8	29238.1	0.0	0.00
25YR-72HR	8.93	11300.4	-17996.0	29296.4	0.0	0.00
25YR-72HR	8.95	11338.4	-18016.2	29354.6	0.0	0.00
25YR-72HR	8.97	11376.5	-18036.2	29412.7	0.0	0.00
25YR-72HR	8.98	11414.6	-18056.1	29470.7	0.0	0.00
25YR-72HR	9.00	11452.8	-18075.8	29528.6	0.0	0.00
25YR-72HR	9.02	11491.0	-18095.5	29586.5	0.0	0.00
25YR-72HR	9.03	11529.2	-18115.0	29644.2	0.0	0.00
25YR-72HR	9.05	11567.4	-18134.4	29701.8	0.0	0.00
25YR-72HR	9.07	11605.7	-18153.7	29759.4	0.0	0.00
25YR-72HR	9.08	11643.9	-18172.9	29816.9	0.0	0.00
25YR-72HR	9.10	11682.2	-18192.0	29874.2	0.0	0.00
25YR-72HR	9.12	11720.6	-18210.9	29931.5	0.0	0.00
25YR-72HR	9.13	11758.9	-18229.8	29988.7	0.0	0.00
25YR-72HR	9.15	11797.3	-18248.5	30045.8	0.0	0.00
25YR-72HR	9.17	11835.7	-18267.1	30102.8	0.0	0.00
25YR-72HR	9.18	11874.2	-18285.6	30159.7	0.0	0.00
25YR-72HR	9.20	11912.6	-18303.9	30216.6	0.0	0.00
25YR-72HR	9.22	11951.1	-18322.2	30273.3	0.0	0.00
25YR-72HR	9.23	11989.6	-18340.3	30329.9	0.0	0.00
25YR-72HR	9.25	12028.2	-18358.3	30386.5	0.0	0.00
25YR-72HR	9.27	12066.7	-18376.2	30443.0	0.0	0.00
25YR-72HR	9.28	12105.3	-18394.0	30499.3	0.0	0.00
25YR-72HR	9.30	12144.0	-18411.7	30555.6	0.0	0.00
25YR-72HR	9.32	12182.6	-18429.2	30611.8	0.0	0.00
25YR-72HR	9.33	12221.3	-18446.7	30667.9	0.0	0.00
25YR-72HR	9.35	12260.0	-18464.0	30724.0	0.0	0.00
25YR-72HR	9.37	12298.7	-18481.2	30779.9	0.0	0.00
25YR-72HR	9.38	12337.4	-18498.3	30835.7	0.0	0.00
25YR-72HR	9.40	12376.2	-18515.3	30891.5	0.0	0.00
25YR-72HR	9.42	12415.0	-18532.2	30947.1	0.0	0.00
25YR-72HR	9.43	12453.8	-18548.9	31002.7	0.0	0.00
25YR-72HR	9.45	12492.6	-18565.6	31058.2	0.0	0.00
25YR-72HR	9.47	12531.5	-18582.1	31113.6	0.0	0.00
25YR-72HR	9.48	12570.4	-18598.5	31168.9	0.0	0.00
25YR-72HR	9.50	12609.3	-18614.9	31224.1	0.0	0.00
25YR-72HR	9.52	12648.2	-18631.1	31279.3	0.0	0.00
25YR-72HR	9.53	12687.2	-18647.1	31334.3	0.0	0.00
25YR-72HR	9.55	12726.2	-18663.1	31389.3	0.0	0.00
25YR-72HR	9.57	12765.2	-18679.0	31444.1	0.0	0.00
25YR-72HR	9.58	12804.2	-18694.7	31498.9	0.0	0.00
25YR-72HR	9.60	12843.3	-18710.4	31553.6	0.0	0.00
25YR-72HR	9.62	12882.3	-18725.9	31608.2	0.0	0.00
25YR-72HR	9.63	12921.4	-18741.3	31662.8	0.0	0.00
25YR-72HR	9.65	12960.6	-18756.6	31717.2	0.0	0.00
25YR-72HR	9.67	12999.7	-18771.8	31771.5	0.0	0.00
25YR-72HR	9.68	13038.9	-18786.9	31825.8	0.0	0.00
25YR-72HR	9.70	13078.1	-18801.9	31880.0	0.0	0.00
25YR-72HR	9.72	13117.3	-18816.8	31934.1	0.0	0.00
25YR-72HR	9.73	13156.5	-18831.5	31988.1	0.0	0.00
25YR-72HR	9.75	13195.8	-18846.2	32042.0	0.0	0.00
25YR-72HR	9.77	13235.1	-18860.7	32095.8	0.0	0.00
25YR-72HR	9.78	13274.4	-18875.2	32149.6	0.0	0.00
25YR-72HR	9.80	13313.8	-18889.5	32203.2	0.0	0.00
25YR-72HR	9.82	13353.1	-18903.7	32256.8	0.0	0.00
25YR-72HR	9.83	13392.5	-18917.8	32310.3	0.0	0.00
25YR-72HR	9.85	13431.9	-18931.8	32363.7	0.0	0.00
25YR-72HR	9.87	13471.3	-18945.7	32417.0	0.0	0.00
25YR-72HR	9.88	13510.8	-18959.5	32470.2	0.0	0.00
25YR-72HR	9.90	13550.2	-18973.2	32523.4	0.0	0.00
25YR-72HR	9.92	13589.7	-18986.7	32576.5	0.0	0.00
25YR-72HR	9.93	13629.2	-19000.2	32629.4	0.0	0.00
25YR-72HR	9.95	13668.8	-19013.6	32682.3	0.0	0.00
25YR-72HR	9.97	13708.3	-19026.8	32735.1	0.0	0.00
25YR-72HR	9.98	13747.9	-19040.0	32787.9	0.0	0.00
25YR-72HR	10.00	13787.5	-19053.0	32840.5	0.0	0.00
25YR-72HR	10.02	13827.1	-19065.9	32893.1	0.0	0.00
25YR-72HR	10.03	13866.8	-19078.8	32945.5	0.0	0.00
25YR-72HR	10.05	13906.4	-19091.5	32997.9	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	10.07	13946.1	-19104.1	33050.2	0.0	0.00
25YR-72HR	10.08	13985.8	-19116.6	33102.5	0.0	0.00
25YR-72HR	10.10	14025.6	-19129.0	33154.6	0.0	0.00
25YR-72HR	10.12	14065.3	-19141.3	33206.7	0.0	0.00
25YR-72HR	10.13	14105.1	-19153.5	33258.6	0.0	0.00
25YR-72HR	10.15	14144.9	-19165.6	33310.5	0.0	0.00
25YR-72HR	10.17	14184.7	-19177.6	33362.3	0.0	0.00
25YR-72HR	10.18	14224.5	-19189.5	33414.1	0.0	0.00
25YR-72HR	10.20	14264.4	-19201.3	33465.7	0.0	0.00
25YR-72HR	10.22	14304.3	-19213.0	33517.3	0.0	0.00
25YR-72HR	10.23	14344.2	-19224.6	33568.8	0.0	0.00
25YR-72HR	10.25	14384.1	-19236.0	33620.2	0.0	0.00
25YR-72HR	10.27	14424.1	-19247.4	33671.5	0.0	0.00
25YR-72HR	10.28	14464.0	-19258.7	33722.7	0.0	0.00
25YR-72HR	10.30	14504.0	-19269.9	33773.9	0.0	0.00
25YR-72HR	10.32	14544.0	-19280.9	33824.9	0.0	0.00
25YR-72HR	10.33	14584.0	-19291.9	33875.9	0.0	0.00
25YR-72HR	10.35	14624.1	-19302.7	33926.8	0.0	0.00
25YR-72HR	10.37	14664.1	-19313.5	33977.7	0.0	0.00
25YR-72HR	10.38	14704.2	-19324.2	34028.4	0.0	0.00
25YR-72HR	10.40	14744.3	-19334.7	34079.1	0.0	0.00
25YR-72HR	10.42	14784.5	-19345.2	34129.6	0.0	0.00
25YR-72HR	10.43	14824.6	-19355.5	34180.1	0.0	0.00
25YR-72HR	10.45	14864.8	-19365.8	34230.6	0.0	0.00
25YR-72HR	10.47	14905.0	-19376.0	34280.9	0.0	0.00
25YR-72HR	10.48	14945.2	-19386.0	34331.2	0.0	0.00
25YR-72HR	10.50	14985.4	-19396.0	34381.4	0.0	0.00
25YR-72HR	10.52	15025.6	-19405.8	34431.5	0.0	0.00
25YR-72HR	10.53	15065.9	-19415.6	34481.5	0.0	0.00
25YR-72HR	10.55	15106.2	-19425.2	34531.4	0.0	0.00
25YR-72HR	10.57	15146.5	-19434.8	34581.3	0.0	0.00
25YR-72HR	10.58	15186.8	-19444.3	34631.1	0.0	0.00
25YR-72HR	10.60	15227.2	-19453.6	34680.8	0.0	0.00
25YR-72HR	10.62	15267.5	-19462.9	34730.4	0.0	0.00
25YR-72HR	10.63	15307.9	-19472.0	34780.0	0.0	0.00
25YR-72HR	10.65	15348.3	-19481.1	34829.4	0.0	0.00
25YR-72HR	10.67	15388.7	-19490.1	34878.8	0.0	0.00
25YR-72HR	10.68	15429.2	-19498.9	34928.1	0.0	0.00
25YR-72HR	10.70	15469.6	-19507.7	34977.4	0.0	0.00
25YR-72HR	10.72	15510.1	-19516.4	35026.5	0.0	0.00
25YR-72HR	10.73	15550.6	-19525.0	35075.6	0.0	0.00
25YR-72HR	10.75	15591.1	-19533.5	35124.6	0.0	0.00
25YR-72HR	10.77	15631.7	-19541.8	35173.5	0.0	0.00
25YR-72HR	10.78	15672.2	-19550.1	35222.4	0.0	0.00
25YR-72HR	10.80	15712.8	-19558.3	35271.1	0.0	0.00
25YR-72HR	10.82	15753.4	-19566.4	35319.8	0.0	0.00
25YR-72HR	10.83	15794.0	-19574.4	35368.4	0.0	0.00
25YR-72HR	10.85	15834.6	-19582.3	35416.9	0.0	0.00
25YR-72HR	10.87	15875.3	-19590.1	35465.4	0.0	0.00
25YR-72HR	10.88	15915.9	-19597.8	35513.8	0.0	0.00
25YR-72HR	10.90	15956.6	-19605.4	35562.1	0.0	0.00
25YR-72HR	10.92	15997.3	-19613.0	35610.3	0.0	0.00
25YR-72HR	10.93	16038.1	-19620.4	35658.4	0.0	0.00
25YR-72HR	10.95	16078.8	-19627.7	35706.5	0.0	0.00
25YR-72HR	10.97	16119.6	-19635.0	35754.5	0.0	0.00
25YR-72HR	10.98	16160.3	-19642.1	35802.4	0.0	0.00
25YR-72HR	11.00	16201.1	-19649.2	35850.3	0.0	0.00
25YR-72HR	11.02	16241.9	-19656.1	35898.0	0.0	0.00
25YR-72HR	11.03	16282.8	-19663.0	35945.7	0.0	0.00
25YR-72HR	11.05	16323.6	-19669.7	35993.4	0.0	0.00
25YR-72HR	11.07	16364.5	-19676.4	36040.9	0.0	0.00
25YR-72HR	11.08	16405.4	-19683.0	36088.4	0.0	0.00
25YR-72HR	11.10	16446.3	-19689.5	36135.7	0.0	0.00
25YR-72HR	11.12	16487.2	-19695.9	36183.1	0.0	0.00
25YR-72HR	11.13	16528.1	-19702.2	36230.3	0.0	0.00
25YR-72HR	11.15	16569.1	-19708.4	36277.5	0.0	0.00
25YR-72HR	11.17	16610.0	-19714.5	36324.6	0.0	0.00
25YR-72HR	11.18	16651.0	-19720.5	36371.6	0.0	0.00
25YR-72HR	11.20	16692.0	-19726.5	36418.5	0.0	0.00
25YR-72HR	11.22	16733.1	-19732.3	36465.4	0.0	0.00
25YR-72HR	11.23	16774.1	-19738.1	36512.2	0.0	0.00
25YR-72HR	11.25	16815.2	-19743.7	36558.9	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	11.27	16856.2	-19749.3	36605.5	0.0	0.00
25YR-72HR	11.28	16897.3	-19754.8	36652.1	0.0	0.00
25YR-72HR	11.30	16938.5	-19760.1	36698.6	0.0	0.00
25YR-72HR	11.32	16979.6	-19765.4	36745.0	0.0	0.00
25YR-72HR	11.33	17020.7	-19770.6	36791.4	0.0	0.00
25YR-72HR	11.35	17061.9	-19775.7	36837.6	0.0	0.00
25YR-72HR	11.37	17103.1	-19780.8	36883.8	0.0	0.00
25YR-72HR	11.38	17144.3	-19785.7	36930.0	0.0	0.00
25YR-72HR	11.40	17185.5	-19790.5	36976.0	0.0	0.00
25YR-72HR	11.42	17226.7	-19795.3	37022.0	0.0	0.00
25YR-72HR	11.43	17267.9	-19800.0	37067.9	0.0	0.00
25YR-72HR	11.45	17309.2	-19804.5	37113.7	0.0	0.00
25YR-72HR	11.47	17350.5	-19809.0	37159.5	0.0	0.00
25YR-72HR	11.48	17391.8	-19813.4	37205.2	0.0	0.00
25YR-72HR	11.50	17433.1	-19817.7	37250.8	0.0	0.00
25YR-72HR	11.52	17474.4	-19821.9	37296.4	0.0	0.00
25YR-72HR	11.53	17515.8	-19826.1	37341.8	0.0	0.00
25YR-72HR	11.55	17557.1	-19830.1	37387.3	0.0	0.00
25YR-72HR	11.57	17598.5	-19834.1	37432.6	0.0	0.00
25YR-72HR	11.58	17639.9	-19837.9	37477.8	0.0	0.00
25YR-72HR	11.60	17681.3	-19841.7	37523.0	0.0	0.00
25YR-72HR	11.62	17722.7	-19845.4	37568.2	0.0	0.00
25YR-72HR	11.63	17764.2	-19849.0	37613.2	0.0	0.00
25YR-72HR	11.65	17805.6	-19852.5	37658.2	0.0	0.00
25YR-72HR	11.67	17847.1	-19856.0	37703.1	0.0	0.00
25YR-72HR	11.68	17888.6	-19859.3	37747.9	0.0	0.00
25YR-72HR	11.70	17930.1	-19862.6	37792.7	0.0	0.00
25YR-72HR	11.72	17971.6	-19865.7	37837.4	0.0	0.00
25YR-72HR	11.73	18013.2	-19868.8	37882.0	0.0	0.00
25YR-72HR	11.75	18054.7	-19871.8	37926.5	0.0	0.00
25YR-72HR	11.77	18096.3	-19874.7	37971.0	0.0	0.00
25YR-72HR	11.78	18137.9	-19877.6	38015.4	0.0	0.00
25YR-72HR	11.80	18179.5	-19880.3	38059.8	0.0	0.00
25YR-72HR	11.82	18221.1	-19882.9	38104.0	0.0	0.00
25YR-72HR	11.83	18262.7	-19885.5	38148.2	0.0	0.00
25YR-72HR	11.85	18304.4	-19888.0	38192.4	0.0	0.00
25YR-72HR	11.87	18346.0	-19890.4	38236.4	0.0	0.00
25YR-72HR	11.88	18387.7	-19892.7	38280.4	0.0	0.00
25YR-72HR	11.90	18429.4	-19894.9	38324.4	0.0	0.00
25YR-72HR	11.92	18471.1	-19897.1	38368.2	0.0	0.00
25YR-72HR	11.93	18512.8	-19899.1	38412.0	0.0	0.00
25YR-72HR	11.95	18554.6	-19901.1	38455.7	0.0	0.00
25YR-72HR	11.97	18596.3	-19903.0	38499.4	0.0	0.00
25YR-72HR	11.98	18638.1	-19904.8	38542.9	0.0	0.00
25YR-72HR	12.00	18679.9	-19906.6	38586.4	0.0	0.00
25YR-72HR	12.02	18721.7	-19908.2	38629.9	0.0	0.00
25YR-72HR	12.03	18763.5	-19909.8	38673.3	0.0	0.00
25YR-72HR	12.05	18805.3	-19911.2	38716.6	0.0	0.00
25YR-72HR	12.07	18847.2	-19912.6	38759.8	0.0	0.00
25YR-72HR	12.08	18889.0	-19913.9	38803.0	0.0	0.00
25YR-72HR	12.10	18930.9	-19915.2	38846.1	0.0	0.00
25YR-72HR	12.12	18972.8	-19916.3	38889.1	0.0	0.00
25YR-72HR	12.13	19014.7	-19917.4	38932.1	0.0	0.00
25YR-72HR	12.15	19056.6	-19918.3	38975.0	0.0	0.00
25YR-72HR	12.17	19098.6	-19919.2	39017.8	0.0	0.00
25YR-72HR	12.18	19140.5	-19920.1	39060.6	0.0	0.00
25YR-72HR	12.20	19182.5	-19920.8	39103.3	0.0	0.00
25YR-72HR	12.22	19224.5	-19921.4	39145.9	0.0	0.00
25YR-72HR	12.23	19266.4	-19922.0	39188.5	0.0	0.00
25YR-72HR	12.25	19308.5	-19922.5	39231.0	0.0	0.00
25YR-72HR	12.27	19350.5	-19922.9	39273.4	0.0	0.00
25YR-72HR	12.28	19392.5	-19923.2	39315.7	0.0	0.00
25YR-72HR	12.30	19434.6	-19923.5	39358.0	0.0	0.00
25YR-72HR	12.32	19476.6	-19923.6	39400.3	0.0	0.00
25YR-72HR	12.33	19518.7	-19923.7	39442.4	0.0	0.00
25YR-72HR	12.35	19560.8	-19923.7	39484.5	0.0	0.00
25YR-72HR	12.37	19602.9	-19923.7	39526.6	0.0	0.00
25YR-72HR	12.38	19645.0	-19923.5	39568.5	0.0	0.00
25YR-72HR	12.40	19687.2	-19923.3	39610.4	0.0	0.00
25YR-72HR	12.42	19729.3	-19923.0	39652.3	0.0	0.00
25YR-72HR	12.43	19771.5	-19922.6	39694.0	0.0	0.00
25YR-72HR	12.45	19813.7	-19922.1	39735.8	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	12.47	19855.8	-19921.5	39777.4	0.0	0.00
25YR-72HR	12.48	19898.1	-19920.9	39819.0	0.0	0.00
25YR-72HR	12.50	19940.3	-19920.2	39860.5	0.0	0.00
25YR-72HR	12.52	19982.5	-19919.4	39901.9	0.0	0.00
25YR-72HR	12.53	20024.8	-19918.6	39943.3	0.0	0.00
25YR-72HR	12.55	20067.0	-19917.6	39984.6	0.0	0.00
25YR-72HR	12.57	20109.3	-19916.6	40025.9	0.0	0.00
25YR-72HR	12.58	20151.6	-19915.5	40067.1	0.0	0.00
25YR-72HR	12.60	20193.9	-19914.3	40108.2	0.0	0.00
25YR-72HR	12.62	20236.3	-19913.0	40149.3	0.0	0.00
25YR-72HR	12.63	20278.6	-19911.7	40190.3	0.0	0.00
25YR-72HR	12.65	20321.0	-19910.3	40231.3	0.0	0.00
25YR-72HR	12.67	20363.4	-19908.8	40272.2	0.0	0.00
25YR-72HR	12.68	20405.7	-19907.2	40313.0	0.0	0.00
25YR-72HR	12.70	20448.2	-19905.6	40353.8	0.0	0.00
25YR-72HR	12.72	20490.6	-19903.9	40394.5	0.0	0.00
25YR-72HR	12.73	20533.0	-19902.1	40435.1	0.0	0.00
25YR-72HR	12.75	20575.5	-19900.2	40475.7	0.0	0.00
25YR-72HR	12.77	20618.0	-19898.3	40516.2	0.0	0.00
25YR-72HR	12.78	20660.5	-19896.2	40556.7	0.0	0.00
25YR-72HR	12.80	20703.0	-19894.1	40597.1	0.0	0.00
25YR-72HR	12.82	20745.5	-19891.9	40637.4	0.0	0.00
25YR-72HR	12.83	20788.0	-19889.7	40677.7	0.0	0.00
25YR-72HR	12.85	20830.6	-19887.4	40717.9	0.0	0.00
25YR-72HR	12.87	20873.2	-19885.0	40758.1	0.0	0.00
25YR-72HR	12.88	20915.8	-19882.5	40798.2	0.0	0.00
25YR-72HR	12.90	20958.4	-19879.9	40838.3	0.0	0.00
25YR-72HR	12.92	21001.0	-19877.3	40878.3	0.0	0.00
25YR-72HR	12.93	21043.6	-19874.6	40918.2	0.0	0.00
25YR-72HR	12.95	21086.3	-19871.8	40958.1	0.0	0.00
25YR-72HR	12.97	21129.0	-19868.9	40997.9	0.0	0.00
25YR-72HR	12.98	21171.7	-19866.0	41037.7	0.0	0.00
25YR-72HR	13.00	21214.4	-19863.0	41077.4	0.0	0.00
25YR-72HR	13.02	21257.1	-19859.9	41117.0	0.0	0.00
25YR-72HR	13.03	21299.9	-19856.7	41156.6	0.0	0.00
25YR-72HR	13.05	21342.6	-19853.5	41196.1	0.0	0.00
25YR-72HR	13.07	21385.4	-19850.2	41235.6	0.0	0.00
25YR-72HR	13.08	21428.2	-19846.8	41275.0	0.0	0.00
25YR-72HR	13.10	21471.0	-19843.4	41314.4	0.0	0.00
25YR-72HR	13.12	21513.8	-19839.8	41353.7	0.0	0.00
25YR-72HR	13.13	21556.7	-19836.2	41392.9	0.0	0.00
25YR-72HR	13.15	21599.5	-19832.6	41432.1	0.0	0.00
25YR-72HR	13.17	21642.4	-19828.8	41471.3	0.0	0.00
25YR-72HR	13.18	21685.3	-19825.0	41510.3	0.0	0.00
25YR-72HR	13.20	21728.2	-19821.1	41549.3	0.0	0.00
25YR-72HR	13.22	21771.2	-19817.1	41588.3	0.0	0.00
25YR-72HR	13.23	21814.1	-19813.1	41627.2	0.0	0.00
25YR-72HR	13.25	21857.1	-19809.0	41666.1	0.0	0.00
25YR-72HR	13.27	21900.1	-19804.8	41704.9	0.0	0.00
25YR-72HR	13.28	21943.1	-19800.5	41743.6	0.0	0.00
25YR-72HR	13.30	21986.1	-19796.2	41782.3	0.0	0.00
25YR-72HR	13.32	22029.1	-19791.8	41820.9	0.0	0.00
25YR-72HR	13.33	22072.2	-19787.3	41859.5	0.0	0.00
25YR-72HR	13.35	22115.2	-19782.8	41898.0	0.0	0.00
25YR-72HR	13.37	22158.3	-19778.2	41936.5	0.0	0.00
25YR-72HR	13.38	22201.4	-19773.5	41974.9	0.0	0.00
25YR-72HR	13.40	22244.5	-19768.7	42013.2	0.0	0.00
25YR-72HR	13.42	22287.7	-19763.9	42051.5	0.0	0.00
25YR-72HR	13.43	22330.8	-19759.0	42089.8	0.0	0.00
25YR-72HR	13.45	22374.0	-19754.0	42128.0	0.0	0.00
25YR-72HR	13.47	22417.1	-19749.0	42166.1	0.0	0.00
25YR-72HR	13.48	22460.3	-19743.8	42204.2	0.0	0.00
25YR-72HR	13.50	22503.6	-19738.7	42242.2	0.0	0.00
25YR-72HR	13.52	22546.8	-19733.4	42280.2	0.0	0.00
25YR-72HR	13.53	22590.0	-19728.1	42318.1	0.0	0.00
25YR-72HR	13.55	22633.3	-19722.7	42356.0	0.0	0.00
25YR-72HR	13.57	22676.6	-19717.2	42393.8	0.0	0.00
25YR-72HR	13.58	22719.9	-19711.7	42431.5	0.0	0.00
25YR-72HR	13.60	22763.2	-19706.0	42469.2	0.0	0.00
25YR-72HR	13.62	22806.5	-19700.4	42506.9	0.0	0.00
25YR-72HR	13.63	22849.9	-19694.6	42544.5	0.0	0.00
25YR-72HR	13.65	22893.2	-19688.8	42582.0	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	13.67	22936.6	-19682.9	42619.5	0.0	0.00
25YR-72HR	13.68	22980.0	-19676.9	42656.9	0.0	0.00
25YR-72HR	13.70	23023.4	-19670.9	42694.3	0.0	0.00
25YR-72HR	13.72	23066.8	-19664.8	42731.6	0.0	0.00
25YR-72HR	13.73	23110.3	-19658.6	42768.9	0.0	0.00
25YR-72HR	13.75	23153.7	-19652.4	42806.1	0.0	0.00
25YR-72HR	13.77	23197.2	-19646.1	42843.3	0.0	0.00
25YR-72HR	13.78	23240.7	-19639.7	42880.4	0.0	0.00
25YR-72HR	13.80	23284.2	-19633.3	42917.5	0.0	0.00
25YR-72HR	13.82	23327.7	-19626.8	42954.5	0.0	0.00
25YR-72HR	13.83	23371.2	-19620.2	42991.4	0.0	0.00
25YR-72HR	13.85	23414.8	-19613.5	43028.3	0.0	0.00
25YR-72HR	13.87	23458.3	-19606.8	43065.2	0.0	0.00
25YR-72HR	13.88	23501.9	-19600.0	43102.0	0.0	0.00
25YR-72HR	13.90	23545.5	-19593.2	43138.7	0.0	0.00
25YR-72HR	13.92	23589.1	-19586.3	43175.4	0.0	0.00
25YR-72HR	13.93	23632.8	-19579.3	43212.0	0.0	0.00
25YR-72HR	13.95	23676.4	-19572.2	43248.6	0.0	0.00
25YR-72HR	13.97	23720.1	-19565.1	43285.2	0.0	0.00
25YR-72HR	13.98	23763.7	-19557.9	43321.6	0.0	0.00
25YR-72HR	14.00	23807.4	-19550.7	43358.1	0.0	0.00
25YR-72HR	14.02	23851.1	-19543.3	43394.5	0.0	0.00
25YR-72HR	14.03	23894.8	-19535.9	43430.8	0.0	0.00
25YR-72HR	14.05	23938.6	-19528.5	43467.1	0.0	0.00
25YR-72HR	14.07	23982.3	-19521.0	43503.3	0.0	0.00
25YR-72HR	14.08	24026.1	-19513.4	43539.5	0.0	0.00
25YR-72HR	14.10	24069.9	-19505.7	43575.6	0.0	0.00
25YR-72HR	14.12	24113.7	-19498.0	43611.7	0.0	0.00
25YR-72HR	14.13	24157.5	-19490.2	43647.7	0.0	0.00
25YR-72HR	14.15	24201.3	-19482.3	43683.6	0.0	0.00
25YR-72HR	14.17	24245.1	-19474.4	43719.6	0.0	0.00
25YR-72HR	14.18	24289.0	-19466.4	43755.4	0.0	0.00
25YR-72HR	14.20	24332.9	-19458.4	43791.2	0.0	0.00
25YR-72HR	14.22	24376.8	-19450.2	43827.0	0.0	0.00
25YR-72HR	14.23	24420.7	-19442.1	43862.7	0.0	0.00
25YR-72HR	14.25	24464.6	-19433.8	43898.4	0.0	0.00
25YR-72HR	14.27	24508.5	-19425.5	43934.0	0.0	0.00
25YR-72HR	14.28	24552.5	-19417.1	43969.6	0.0	0.00
25YR-72HR	14.30	24596.4	-19408.7	44005.1	0.0	0.00
25YR-72HR	14.32	24640.4	-19400.1	44040.5	0.0	0.00
25YR-72HR	14.33	24684.4	-19391.6	44075.9	0.0	0.00
25YR-72HR	14.35	24728.4	-19382.9	44111.3	0.0	0.00
25YR-72HR	14.37	24772.4	-19374.2	44146.6	0.0	0.00
25YR-72HR	14.38	24816.4	-19365.4	44181.9	0.0	0.00
25YR-72HR	14.40	24860.5	-19356.6	44217.1	0.0	0.00
25YR-72HR	14.42	24904.5	-19347.7	44252.2	0.0	0.00
25YR-72HR	14.43	24948.6	-19338.7	44287.4	0.0	0.00
25YR-72HR	14.45	24992.7	-19329.7	44322.4	0.0	0.00
25YR-72HR	14.47	25036.8	-19320.6	44357.4	0.0	0.00
25YR-72HR	14.48	25080.9	-19311.5	44392.4	0.0	0.00
25YR-72HR	14.50	25125.1	-19302.2	44427.3	0.0	0.00
25YR-72HR	14.52	25169.2	-19293.0	44462.2	0.0	0.00
25YR-72HR	14.53	25213.4	-19283.6	44497.0	0.0	0.00
25YR-72HR	14.55	25257.6	-19274.2	44531.8	0.0	0.00
25YR-72HR	14.57	25301.8	-19264.7	44566.5	0.0	0.00
25YR-72HR	14.58	25346.0	-19255.2	44601.2	0.0	0.00
25YR-72HR	14.60	25390.2	-19245.6	44635.8	0.0	0.00
25YR-72HR	14.62	25434.4	-19235.9	44670.3	0.0	0.00
25YR-72HR	14.63	25478.7	-19226.2	44704.9	0.0	0.00
25YR-72HR	14.65	25522.9	-19216.4	44739.3	0.0	0.00
25YR-72HR	14.67	25567.2	-19206.5	44773.8	0.0	0.00
25YR-72HR	14.68	25611.5	-19196.6	44808.1	0.0	0.00
25YR-72HR	14.70	25655.8	-19186.6	44842.5	0.0	0.00
25YR-72HR	14.72	25700.1	-19176.6	44876.8	0.0	0.00
25YR-72HR	14.73	25744.5	-19166.5	44911.0	0.0	0.00
25YR-72HR	14.75	25788.8	-19156.3	44945.2	0.0	0.00
25YR-72HR	14.77	25833.2	-19146.1	44979.3	0.0	0.00
25YR-72HR	14.78	25877.6	-19135.8	45013.4	0.0	0.00
25YR-72HR	14.80	25922.0	-19125.5	45047.4	0.0	0.00
25YR-72HR	14.82	25966.4	-19115.1	45081.4	0.0	0.00
25YR-72HR	14.83	26010.8	-19104.6	45115.4	0.0	0.00
25YR-72HR	14.85	26055.2	-19094.0	45149.3	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	14.87	26099.7	-19083.5	45183.1	0.0	0.00
25YR-72HR	14.88	26144.1	-19072.8	45216.9	0.0	0.00
25YR-72HR	14.90	26188.6	-19062.1	45250.7	0.0	0.00
25YR-72HR	14.92	26233.1	-19051.3	45284.4	0.0	0.00
25YR-72HR	14.93	26277.6	-19040.5	45318.0	0.0	0.00
25YR-72HR	14.95	26322.1	-19029.6	45351.7	0.0	0.00
25YR-72HR	14.97	26366.6	-19018.6	45385.2	0.0	0.00
25YR-72HR	14.98	26411.2	-19007.6	45418.7	0.0	0.00
25YR-72HR	15.00	26455.7	-18996.5	45452.2	0.0	0.00
25YR-72HR	15.02	26500.3	-18985.3	45485.6	0.0	0.00
25YR-72HR	15.03	26544.9	-18974.1	45519.0	0.0	0.00
25YR-72HR	15.05	26589.5	-18962.9	45552.3	0.0	0.00
25YR-72HR	15.07	26634.1	-18951.5	45585.6	0.0	0.00
25YR-72HR	15.08	26678.7	-18940.2	45618.9	0.0	0.00
25YR-72HR	15.10	26723.4	-18928.7	45652.1	0.0	0.00
25YR-72HR	15.12	26768.0	-18917.2	45685.2	0.0	0.00
25YR-72HR	15.13	26812.7	-18905.6	45718.3	0.0	0.00
25YR-72HR	15.15	26857.3	-18894.0	45751.4	0.0	0.00
25YR-72HR	15.17	26902.0	-18882.3	45784.4	0.0	0.00
25YR-72HR	15.18	26946.7	-18870.6	45817.3	0.0	0.00
25YR-72HR	15.20	26991.5	-18858.8	45850.2	0.0	0.00
25YR-72HR	15.22	27036.2	-18846.9	45883.1	0.0	0.00
25YR-72HR	15.23	27080.9	-18835.0	45915.9	0.0	0.00
25YR-72HR	15.25	27125.7	-18823.0	45948.7	0.0	0.00
25YR-72HR	15.27	27170.5	-18811.0	45981.5	0.0	0.00
25YR-72HR	15.28	27215.2	-18798.9	46014.1	0.0	0.00
25YR-72HR	15.30	27260.0	-18786.7	46046.8	0.0	0.00
25YR-72HR	15.32	27304.9	-18774.5	46079.4	0.0	0.00
25YR-72HR	15.33	27349.7	-18762.3	46111.9	0.0	0.00
25YR-72HR	15.35	27394.5	-18749.9	46144.4	0.0	0.00
25YR-72HR	15.37	27439.4	-18737.5	46176.9	0.0	0.00
25YR-72HR	15.38	27484.2	-18725.1	46209.3	0.0	0.00
25YR-72HR	15.40	27529.1	-18712.6	46241.7	0.0	0.00
25YR-72HR	15.42	27574.0	-18700.0	46274.0	0.0	0.00
25YR-72HR	15.43	27618.9	-18687.4	46306.3	0.0	0.00
25YR-72HR	15.45	27663.8	-18674.7	46338.5	0.0	0.00
25YR-72HR	15.47	27708.7	-18662.0	46370.7	0.0	0.00
25YR-72HR	15.48	27753.7	-18649.2	46402.9	0.0	0.00
25YR-72HR	15.50	27798.6	-18636.3	46435.0	0.0	0.00
25YR-72HR	15.52	27843.6	-18623.4	46467.0	0.0	0.00
25YR-72HR	15.53	27888.6	-18610.5	46499.0	0.0	0.00
25YR-72HR	15.55	27933.6	-18597.4	46531.0	0.0	0.00
25YR-72HR	15.57	27978.6	-18584.4	46562.9	0.0	0.00
25YR-72HR	15.58	28023.6	-18571.2	46594.8	0.0	0.00
25YR-72HR	15.60	28068.6	-18558.0	46626.6	0.0	0.00
25YR-72HR	15.62	28113.6	-18544.8	46658.4	0.0	0.00
25YR-72HR	15.63	28158.7	-18531.5	46690.2	0.0	0.00
25YR-72HR	15.65	28203.8	-18518.1	46721.9	0.0	0.00
25YR-72HR	15.67	28248.9	-18504.7	46753.5	0.0	0.00
25YR-72HR	15.68	28293.9	-18491.2	46785.2	0.0	0.00
25YR-72HR	15.70	28339.0	-18477.7	46816.7	0.0	0.00
25YR-72HR	15.72	28384.2	-18464.1	46848.3	0.0	0.00
25YR-72HR	15.73	28429.3	-18450.4	46879.7	0.0	0.00
25YR-72HR	15.75	28474.4	-18436.7	46911.2	0.0	0.00
25YR-72HR	15.77	28519.6	-18423.0	46942.6	0.0	0.00
25YR-72HR	15.78	28564.8	-18409.2	46973.9	0.0	0.00
25YR-72HR	15.80	28609.9	-18395.3	47005.3	0.0	0.00
25YR-72HR	15.82	28655.1	-18381.4	47036.5	0.0	0.00
25YR-72HR	15.83	28700.3	-18367.4	47067.7	0.0	0.00
25YR-72HR	15.85	28745.6	-18353.4	47098.9	0.0	0.00
25YR-72HR	15.87	28790.8	-18339.3	47130.1	0.0	0.00
25YR-72HR	15.88	28836.0	-18325.1	47161.2	0.0	0.00
25YR-72HR	15.90	28881.3	-18310.9	47192.2	0.0	0.00
25YR-72HR	15.92	28926.6	-18296.7	47223.2	0.0	0.00
25YR-72HR	15.93	28971.8	-18282.4	47254.2	0.0	0.00
25YR-72HR	15.95	29017.1	-18268.0	47285.1	0.0	0.00
25YR-72HR	15.97	29062.4	-18253.6	47316.0	0.0	0.00
25YR-72HR	15.98	29107.7	-18239.1	47346.9	0.0	0.00
25YR-72HR	16.00	29153.1	-18224.6	47377.7	0.0	0.00
25YR-72HR	16.08	29379.9	-18151.1	47531.0	0.0	0.00
25YR-72HR	16.17	29607.0	-18076.3	47683.4	0.0	0.00
25YR-72HR	16.25	29834.4	-18000.2	47834.6	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	16.33	30062.2	-17922.7	47984.9	0.0	0.00
25YR-72HR	16.42	30290.2	-17844.0	48134.1	0.0	0.00
25YR-72HR	16.50	30518.5	-17763.9	48282.4	0.0	0.00
25YR-72HR	16.58	30747.1	-17682.5	48429.6	0.0	0.00
25YR-72HR	16.67	30976.1	-17599.9	48575.9	0.0	0.00
25YR-72HR	16.75	31205.4	-17516.0	48721.4	0.0	0.00
25YR-72HR	16.83	31435.1	-17430.8	48865.9	0.0	0.00
25YR-72HR	16.92	31665.2	-17344.4	49009.5	0.0	0.00
25YR-72HR	17.00	31895.6	-17256.7	49152.4	0.0	0.00
25YR-72HR	17.08	32126.5	-17167.8	49294.4	0.0	0.00
25YR-72HR	17.17	32357.8	-17077.7	49435.6	0.0	0.00
25YR-72HR	17.25	32589.5	-16986.4	49576.0	0.0	0.00
25YR-72HR	17.33	32821.7	-16893.9	49715.6	0.0	0.00
25YR-72HR	17.42	33054.2	-16800.2	49854.4	0.0	0.00
25YR-72HR	17.50	33287.1	-16705.3	49992.4	0.0	0.00
25YR-72HR	17.58	33520.5	-16609.2	50129.7	0.0	0.00
25YR-72HR	17.67	33754.2	-16512.0	50266.2	0.0	0.00
25YR-72HR	17.75	33988.4	-16413.6	50402.0	0.0	0.00
25YR-72HR	17.83	34222.9	-16314.0	50537.0	0.0	0.00
25YR-72HR	17.92	34457.9	-16213.4	50671.2	0.0	0.00
25YR-72HR	18.00	34693.2	-16111.5	50804.7	0.0	0.00
25YR-72HR	18.08	34928.9	-16008.6	50937.5	0.0	0.00
25YR-72HR	18.17	35165.1	-15904.5	51069.6	0.0	0.00
25YR-72HR	18.25	35401.6	-15799.4	51200.9	0.0	0.00
25YR-72HR	18.33	35638.5	-15693.1	51331.6	0.0	0.00
25YR-72HR	18.42	35875.7	-15585.8	51461.5	0.0	0.00
25YR-72HR	18.50	36113.4	-15477.3	51590.7	0.0	0.00
25YR-72HR	18.58	36351.4	-15367.8	51719.2	0.0	0.00
25YR-72HR	18.67	36589.8	-15257.2	51847.0	0.0	0.00
25YR-72HR	18.75	36828.6	-15145.6	51974.2	0.0	0.00
25YR-72HR	18.83	37067.7	-15032.9	52100.7	0.0	0.00
25YR-72HR	18.92	37307.2	-14919.2	52226.5	0.0	0.00
25YR-72HR	19.00	37547.1	-14804.4	52351.5	0.0	0.00
25YR-72HR	19.08	37787.4	-14688.5	52475.9	0.0	0.00
25YR-72HR	19.17	38028.0	-14571.4	52599.4	0.0	0.00
25YR-72HR	19.25	38268.9	-14453.3	52722.2	0.0	0.00
25YR-72HR	19.33	38510.3	-14333.9	52844.2	0.0	0.00
25YR-72HR	19.42	38751.9	-14213.5	52965.4	0.0	0.00
25YR-72HR	19.50	38994.0	-14091.9	53085.9	0.0	0.00
25YR-72HR	19.58	39236.4	-13969.1	53205.5	0.0	0.00
25YR-72HR	19.67	39479.1	-13845.2	53324.3	0.0	0.00
25YR-72HR	19.75	39722.2	-13720.2	53442.4	0.0	0.00
25YR-72HR	19.83	39965.6	-13594.2	53559.8	0.0	0.00
25YR-72HR	19.92	40209.4	-13467.3	53676.7	0.0	0.00
25YR-72HR	20.00	40453.5	-13339.4	53792.9	0.0	0.00
25YR-72HR	20.08	40697.9	-13210.6	53908.5	0.0	0.00
25YR-72HR	20.17	40942.7	-13080.9	54023.6	0.0	0.00
25YR-72HR	20.25	41187.9	-12950.2	54138.1	0.0	0.00
25YR-72HR	20.33	41433.3	-12818.7	54252.0	0.0	0.00
25YR-72HR	20.42	41679.1	-12686.2	54365.3	0.0	0.00
25YR-72HR	20.50	41925.3	-12552.8	54478.1	0.0	0.00
25YR-72HR	20.58	42171.7	-12418.6	54590.3	0.0	0.00
25YR-72HR	20.67	42418.6	-12283.5	54702.0	0.0	0.00
25YR-72HR	20.75	42665.8	-12147.4	54813.2	0.0	0.00
25YR-72HR	20.83	42913.3	-12010.5	54923.8	0.0	0.00
25YR-72HR	20.92	43161.2	-11872.8	55034.0	0.0	0.00
25YR-72HR	21.00	43409.6	-11734.1	55143.7	0.0	0.00
25YR-72HR	21.08	43658.2	-11594.6	55252.8	0.0	0.00
25YR-72HR	21.17	43907.3	-11454.2	55361.5	0.0	0.00
25YR-72HR	21.25	44156.7	-11313.0	55469.7	0.0	0.00
25YR-72HR	21.33	44406.5	-11170.9	55577.4	0.0	0.00
25YR-72HR	21.42	44656.7	-11027.9	55684.6	0.0	0.00
25YR-72HR	21.50	44907.3	-10884.1	55791.4	0.0	0.00
25YR-72HR	21.58	45158.2	-10739.5	55897.7	0.0	0.00
25YR-72HR	21.67	45409.5	-10594.0	56003.5	0.0	0.00
25YR-72HR	21.75	45661.2	-10447.7	56108.8	0.0	0.00
25YR-72HR	21.83	45913.2	-10300.5	56213.7	0.0	0.00
25YR-72HR	21.92	46165.6	-10152.6	56318.2	0.0	0.00
25YR-72HR	22.00	46418.4	-10003.8	56422.1	0.0	0.00
25YR-72HR	22.08	46671.5	-9854.2	56525.7	0.0	0.00
25YR-72HR	22.17	46925.0	-9703.8	56628.7	0.0	0.00
25YR-72HR	22.25	47178.8	-9552.6	56731.4	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	22.33	47433.0	-9400.6	56833.5	0.0	0.00
25YR-72HR	22.42	47687.5	-9247.8	56935.3	0.0	0.00
25YR-72HR	22.50	47942.4	-9094.2	57036.6	0.0	0.00
25YR-72HR	22.58	48197.7	-8939.8	57137.5	0.0	0.00
25YR-72HR	22.67	48453.3	-8784.6	57237.9	0.0	0.00
25YR-72HR	22.75	48709.2	-8628.7	57338.0	0.0	0.00
25YR-72HR	22.83	48965.5	-8472.0	57437.6	0.0	0.00
25YR-72HR	22.92	49222.2	-8314.6	57536.8	0.0	0.00
25YR-72HR	23.00	49479.2	-8156.4	57635.5	0.0	0.00
25YR-72HR	23.08	49736.5	-7997.4	57733.9	0.0	0.00
25YR-72HR	23.17	49994.2	-7837.7	57831.8	0.0	0.00
25YR-72HR	23.25	50252.2	-7677.2	57929.4	0.0	0.00
25YR-72HR	23.33	50510.5	-7516.0	58026.5	0.0	0.00
25YR-72HR	23.42	50769.2	-7354.1	58123.2	0.0	0.00
25YR-72HR	23.50	51028.2	-7191.4	58219.6	0.0	0.00
25YR-72HR	23.58	51287.6	-7028.0	58315.5	0.0	0.00
25YR-72HR	23.67	51547.2	-6863.9	58411.1	0.0	0.00
25YR-72HR	23.75	51807.2	-6699.0	58506.3	0.0	0.00
25YR-72HR	23.83	52067.6	-6533.5	58601.1	0.0	0.00
25YR-72HR	23.92	52328.4	-6367.2	58695.6	0.0	0.00
25YR-72HR	24.00	52589.5	-6200.2	58789.7	0.0	0.00
25YR-72HR	24.25	53482.3	-5695.1	59177.4	0.0	0.00
25YR-72HR	24.50	54532.9	-5178.0	59710.9	0.0	0.00
25YR-72HR	24.75	55654.7	-4644.5	60299.3	0.0	0.00
25YR-72HR	25.00	56806.6	-4093.7	60900.3	0.0	0.00
25YR-72HR	25.25	57969.0	-3525.9	61494.9	0.0	0.00
25YR-72HR	25.50	59137.1	-2942.0	62079.2	0.0	0.00
25YR-72HR	25.75	60310.8	-2342.9	62653.7	0.0	0.00
25YR-72HR	26.00	61490.0	-1728.9	63218.9	0.0	0.00
25YR-72HR	26.25	62674.5	-1100.6	63775.2	0.0	0.00
25YR-72HR	26.50	63864.4	-458.4	64322.8	0.0	0.00
25YR-72HR	26.75	65059.5	197.4	64862.1	0.0	0.00
25YR-72HR	27.00	66259.7	866.5	65393.2	0.0	0.00
25YR-72HR	27.25	67465.0	1548.6	65916.4	0.0	0.00
25YR-72HR	27.50	68675.2	2243.3	66431.9	0.0	0.00
25YR-72HR	27.75	69890.3	2950.6	66939.8	0.0	0.00
25YR-72HR	28.00	71110.3	3670.0	67440.3	0.0	0.00
25YR-72HR	28.25	72335.0	4401.3	67933.7	0.0	0.00
25YR-72HR	28.50	73564.4	5144.3	68420.1	0.0	0.00
25YR-72HR	28.75	74798.3	5898.7	68899.6	0.0	0.00
25YR-72HR	29.00	76036.9	6664.4	69372.5	0.0	0.00
25YR-72HR	29.25	77279.9	7441.0	69838.9	0.0	0.00
25YR-72HR	29.50	78527.3	8228.3	70298.9	-0.0	-0.00
25YR-72HR	29.75	79779.0	9026.2	70752.8	0.0	0.00
25YR-72HR	30.00	81035.0	9834.4	71200.6	-0.0	-0.00
25YR-72HR	30.25	82295.3	10652.8	71642.6	0.0	0.00
25YR-72HR	30.50	83559.7	11480.9	72078.8	-0.0	-0.00
25YR-72HR	30.75	84828.2	12318.8	72509.4	-0.0	-0.00
25YR-72HR	31.00	86100.8	13166.2	72934.6	-0.0	-0.00
25YR-72HR	31.25	87377.4	14023.0	73354.4	-0.0	-0.00
25YR-72HR	31.50	88657.9	14888.9	73769.0	-0.0	-0.00
25YR-72HR	31.75	89942.3	15763.7	74178.6	0.0	0.00
25YR-72HR	32.00	91230.5	16647.4	74583.2	0.0	0.00
25YR-72HR	32.25	92522.5	17539.6	74982.9	0.0	0.00
25YR-72HR	32.50	93818.3	18440.4	75377.9	0.0	0.00
25YR-72HR	32.75	95117.7	19349.4	75768.3	0.0	0.00
25YR-72HR	33.00	96420.8	20266.6	76154.2	0.0	0.00
25YR-72HR	33.25	97727.5	21191.7	76535.7	0.0	0.00
25YR-72HR	33.50	99037.7	22124.7	76912.9	0.0	0.00
25YR-72HR	33.75	100351.4	23065.5	77286.0	0.0	0.00
25YR-72HR	34.00	101668.6	24013.7	77654.9	0.0	0.00
25YR-72HR	34.25	102989.2	24969.4	78019.8	0.0	0.00
25YR-72HR	34.50	104313.1	25932.3	78380.9	0.0	0.00
25YR-72HR	34.75	105640.4	26902.3	78738.1	0.0	0.00
25YR-72HR	35.00	106971.0	27879.4	79091.7	0.0	0.00
25YR-72HR	35.25	108304.9	28863.3	79441.6	0.0	0.00
25YR-72HR	35.50	109641.9	29853.9	79788.0	0.0	0.00
25YR-72HR	35.75	110982.2	30851.2	80131.0	0.0	0.00
25YR-72HR	36.00	112325.5	31855.0	80470.5	0.0	0.00
25YR-72HR	36.25	113676.1	32865.2	80810.9	0.0	0.00
25YR-72HR	36.50	115035.8	33882.1	81153.7	0.0	0.00
25YR-72HR	36.75	116401.1	34905.6	81495.5	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	37.00	117770.4	35935.7	81834.8	0.0	0.00
25YR-72HR	37.25	119143.0	36972.2	82170.8	0.0	0.00
25YR-72HR	37.50	120518.5	38015.0	82503.5	0.0	0.00
25YR-72HR	37.75	121896.9	39063.9	82833.0	0.0	0.00
25YR-72HR	38.00	123278.3	40118.9	83159.4	0.0	0.00
25YR-72HR	38.25	124662.6	41179.8	83482.8	0.0	0.00
25YR-72HR	38.50	126049.7	42246.5	83803.1	0.0	0.00
25YR-72HR	38.75	127439.6	43319.0	84120.6	0.0	0.00
25YR-72HR	39.00	128832.3	44397.0	84435.3	0.0	0.00
25YR-72HR	39.25	130227.7	45480.6	84747.2	0.0	0.00
25YR-72HR	39.50	131625.9	46569.5	85056.4	0.0	0.00
25YR-72HR	39.75	133026.8	47663.8	85363.0	0.0	0.00
25YR-72HR	40.00	134430.3	48763.3	85667.0	0.0	0.00
25YR-72HR	40.25	135836.5	49868.0	85968.5	0.0	0.00
25YR-72HR	40.50	137245.2	50977.7	86267.5	0.0	0.00
25YR-72HR	40.75	138656.6	52092.4	86564.2	0.0	0.00
25YR-72HR	41.00	140070.4	53211.9	86858.5	0.0	0.00
25YR-72HR	41.25	141486.9	54336.4	87150.5	0.0	0.00
25YR-72HR	41.50	142905.8	55465.5	87440.2	0.0	0.00
25YR-72HR	41.75	144327.1	56599.3	87727.8	0.0	0.00
25YR-72HR	42.00	145750.9	57737.7	88013.2	0.0	0.00
25YR-72HR	42.25	147177.2	58880.6	88296.6	0.0	0.00
25YR-72HR	42.50	148605.8	60027.9	88577.9	0.0	0.00
25YR-72HR	42.75	150036.8	61179.5	88857.3	0.0	0.00
25YR-72HR	43.00	151470.1	62335.4	89134.7	0.0	0.00
25YR-72HR	43.25	152905.7	63495.6	89410.2	0.0	0.00
25YR-72HR	43.50	154343.7	64659.9	89683.8	0.0	0.00
25YR-72HR	43.75	155783.9	65828.2	89955.6	0.0	0.00
25YR-72HR	44.00	157226.3	67000.6	90225.7	0.0	0.00
25YR-72HR	44.25	158671.0	68177.0	90494.0	0.0	0.00
25YR-72HR	44.50	160117.9	69357.2	90760.6	0.0	0.00
25YR-72HR	44.75	161566.9	70541.3	91025.6	0.0	0.00
25YR-72HR	45.00	163018.1	71729.2	91288.9	0.0	0.00
25YR-72HR	45.25	164471.5	72920.8	91550.6	0.0	0.00
25YR-72HR	45.50	165926.9	74116.1	91810.8	0.0	0.00
25YR-72HR	45.75	167384.5	75315.0	92069.5	0.0	0.00
25YR-72HR	46.00	168844.1	76518.5	92325.6	0.0	0.00
25YR-72HR	46.25	170305.8	77730.6	92575.2	0.0	0.00
25YR-72HR	46.50	171769.5	78953.4	92816.1	0.0	0.00
25YR-72HR	46.75	173235.2	80187.9	93047.4	0.0	0.00
25YR-72HR	47.00	174702.9	81434.6	93268.3	0.0	0.00
25YR-72HR	47.25	176172.6	82693.9	93478.7	0.0	0.00
25YR-72HR	47.50	177644.3	83965.7	93678.6	0.0	0.00
25YR-72HR	47.75	179117.9	85249.7	93868.2	0.0	0.00
25YR-72HR	48.00	180593.4	86545.7	94047.7	0.0	0.00
25YR-72HR	48.25	182116.8	87858.8	94258.0	0.0	0.00
25YR-72HR	48.50	183719.1	89198.7	94520.4	0.0	0.00
25YR-72HR	48.75	185352.5	90568.6	94783.9	0.0	0.00
25YR-72HR	49.00	186999.0	91967.7	95031.3	0.0	0.00
25YR-72HR	49.25	188659.1	93386.4	95272.7	0.0	0.00
25YR-72HR	49.50	190337.8	94818.6	95519.2	0.0	0.00
25YR-72HR	49.75	192024.9	96266.6	95758.3	0.0	0.00
25YR-72HR	50.00	193716.7	97730.6	95986.1	0.0	0.00
25YR-72HR	50.25	195500.7	99213.3	96287.4	0.0	0.00
25YR-72HR	50.50	197428.8	100731.3	96697.5	0.0	0.00
25YR-72HR	50.75	199412.4	102293.9	97118.5	0.0	0.00
25YR-72HR	51.00	201418.9	103901.9	97516.9	0.0	0.00
25YR-72HR	51.25	203484.4	105562.8	97921.7	0.0	0.00
25YR-72HR	51.50	205638.0	107288.4	98349.5	0.0	0.00
25YR-72HR	51.75	207826.4	109078.2	98748.2	0.0	0.00
25YR-72HR	52.00	210030.2	110927.1	99103.1	0.0	0.00
25YR-72HR	52.25	212432.3	112828.4	99603.9	0.0	0.00
25YR-72HR	52.50	215148.6	114815.3	100333.3	0.0	0.00
25YR-72HR	52.75	217985.4	116912.2	101073.2	0.0	0.00
25YR-72HR	53.00	220871.2	119119.6	101751.7	0.0	0.00
25YR-72HR	53.25	223962.2	121436.2	102525.9	0.0	0.00
25YR-72HR	53.50	227372.6	123899.1	103473.5	0.0	0.00
25YR-72HR	53.75	230907.0	126525.6	104381.4	0.0	0.00
25YR-72HR	54.00	234493.1	129307.5	105185.7	0.0	0.00
25YR-72HR	54.25	238293.8	132227.8	106066.1	0.0	0.00
25YR-72HR	54.50	242430.6	135318.1	107112.5	0.0	0.00
25YR-72HR	54.75	246699.3	138596.9	108102.4	0.0	0.00

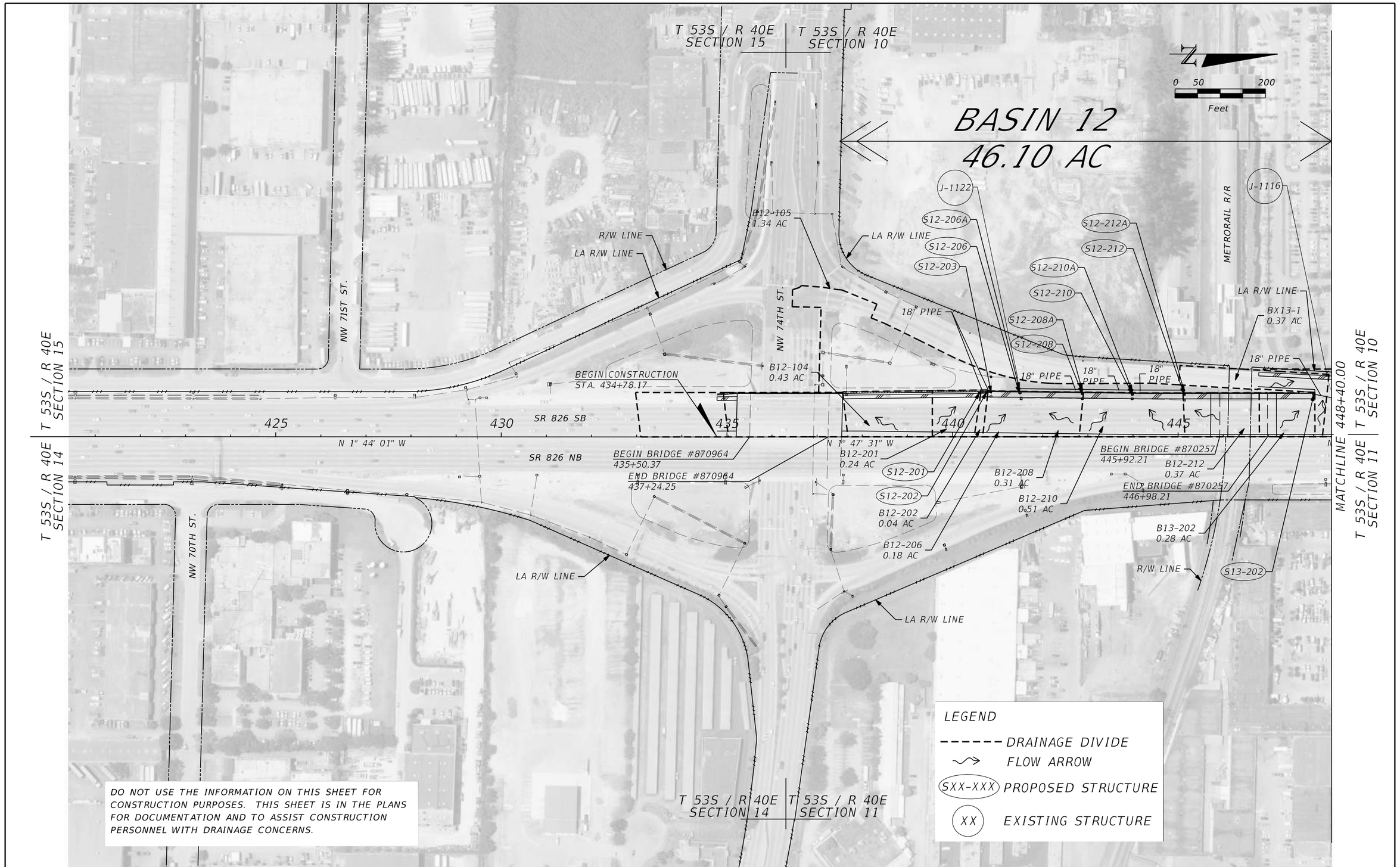
Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	55.00	251024.1	142051.4	108972.7	0.0	0.00
25YR-72HR	55.25	255566.8	145676.9	109889.9	0.0	0.00
25YR-72HR	55.50	260451.7	149514.6	110937.2	0.0	0.00
25YR-72HR	55.75	265472.4	153573.5	111898.9	0.0	0.00
25YR-72HR	56.00	270552.2	157831.7	112720.4	0.0	0.00
25YR-72HR	56.25	275890.3	162262.6	113627.7	0.0	0.00
25YR-72HR	56.50	281649.2	166911.8	114737.3	0.0	0.00
25YR-72HR	56.75	287571.8	171800.7	115771.1	0.0	0.00
25YR-72HR	57.00	293566.0	176907.4	116658.6	0.0	0.00
25YR-72HR	57.25	299890.9	182214.1	117676.8	0.0	0.00
25YR-72HR	57.50	306760.7	187796.2	118964.4	0.0	0.00
25YR-72HR	57.75	314018.5	193677.8	120340.6	0.0	0.00
25YR-72HR	58.00	321661.2	199884.7	121776.5	0.0	0.00
25YR-72HR	58.25	329675.6	206439.6	123236.0	0.0	0.00
25YR-72HR	58.50	338157.7	213394.2	124763.5	0.0	0.00
25YR-72HR	58.75	347626.8	220770.7	126856.2	0.0	0.00
25YR-72HR	59.00	358534.1	228817.6	129716.5	0.0	0.00
25YR-72HR	59.25	371822.9	237763.9	134059.0	0.0	0.00
25YR-72HR	59.50	388338.4	248274.6	140063.8	0.0	0.00
25YR-72HR	59.75	436053.0	262351.2	173701.7	0.0	0.00
25YR-72HR	60.00	535927.2	290308.1	245619.2	0.0	0.00
25YR-72HR	60.25	626727.7	328612.8	298115.0	0.0	0.00
25YR-72HR	60.50	677845.6	369957.6	307888.0	0.0	0.00
25YR-72HR	60.75	709289.1	411284.8	298004.2	0.0	0.00
25YR-72HR	61.00	728102.7	450401.2	277701.6	0.0	0.00
25YR-72HR	61.25	742618.6	486810.6	255808.0	0.0	0.00
25YR-72HR	61.50	754392.4	520439.6	233952.8	0.0	0.00
25YR-72HR	61.75	764866.3	551243.3	213623.0	0.0	0.00
25YR-72HR	62.00	774236.8	579236.4	195000.5	0.0	0.00
25YR-72HR	62.25	782581.4	604548.4	178033.1	0.0	0.00
25YR-72HR	62.50	789677.9	625980.9	163697.1	0.0	0.00
25YR-72HR	62.75	796155.6	642765.3	153390.3	0.0	0.00
25YR-72HR	63.00	802148.3	656200.7	145947.6	0.0	0.00
25YR-72HR	63.25	807995.6	667364.3	140631.3	0.0	0.00
25YR-72HR	63.50	813791.6	676978.0	136813.5	0.0	0.00
25YR-72HR	63.75	819580.2	685515.6	134064.6	0.0	0.00
25YR-72HR	64.00	825369.9	693296.4	132073.6	0.0	0.00
25YR-72HR	64.25	830500.4	700489.4	130011.0	0.0	0.00
25YR-72HR	64.50	834543.6	706993.0	127550.6	0.0	0.00
25YR-72HR	64.75	838181.2	712807.3	125373.9	0.0	0.00
25YR-72HR	65.00	841665.8	718046.8	123619.0	0.0	0.00
25YR-72HR	65.25	845135.6	722843.2	122292.4	0.0	0.00
25YR-72HR	65.50	848618.3	727311.9	121306.4	0.0	0.00
25YR-72HR	65.75	852106.3	731537.5	120568.8	0.0	0.00
25YR-72HR	66.00	855596.7	735580.9	120015.9	0.0	0.00
25YR-72HR	66.25	859088.0	739493.4	119594.5	0.0	0.00
25YR-72HR	66.50	862579.6	743312.2	119267.4	0.0	0.00
25YR-72HR	66.75	866071.8	747049.7	119022.2	0.0	0.00
25YR-72HR	67.00	869564.7	750697.3	118867.4	0.0	0.00
25YR-72HR	67.25	873058.2	754306.7	118751.5	0.0	0.00
25YR-72HR	67.50	876552.4	757885.6	118666.8	0.0	0.00
25YR-72HR	67.75	880047.2	761440.1	118607.1	0.0	0.00
25YR-72HR	68.00	883542.4	764975.3	118567.1	0.0	0.00
25YR-72HR	68.25	886692.2	768474.8	118217.4	0.0	0.00
25YR-72HR	68.50	889296.7	771831.6	117465.1	0.0	0.00
25YR-72HR	68.75	891698.4	774990.2	116708.2	0.0	0.00
25YR-72HR	69.00	894024.0	777964.1	116059.9	0.0	0.00
25YR-72HR	69.25	896338.8	780786.5	115552.3	0.0	0.00
25YR-72HR	69.50	898653.9	783491.0	115162.9	0.0	0.00
25YR-72HR	69.75	900969.2	786104.2	114865.0	0.0	0.00
25YR-72HR	70.00	903284.9	788646.5	114638.4	0.0	0.00
25YR-72HR	70.25	905604.6	791135.5	114469.1	0.0	0.00
25YR-72HR	70.50	907930.6	793581.4	114349.2	0.0	0.00
25YR-72HR	70.75	910259.2	795994.1	114265.1	0.0	0.00
25YR-72HR	71.00	912589.0	798384.0	114204.9	0.0	0.00
25YR-72HR	71.25	914919.1	800756.1	114163.0	0.0	0.00
25YR-72HR	71.50	917249.5	803114.0	114135.5	0.0	0.00
25YR-72HR	71.75	919580.1	805460.7	114119.4	0.0	0.00
25YR-72HR	72.00	921910.7	807798.6	114112.1	0.0	0.00
25YR-72HR	72.25	923567.1	810125.6	113441.4	0.0	0.00
25YR-72HR	72.50	923829.6	812154.2	111675.4	0.0	0.00
25YR-72HR	72.75	923829.6	813835.5	109994.2	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	73.00	923829.6	815238.8	108590.9	0.0	0.00
25YR-72HR	73.25	923829.6	816418.3	107411.4	0.0	0.00
25YR-72HR	73.50	923829.6	817405.2	106424.5	0.0	0.00
25YR-72HR	73.75	923829.6	818243.8	105585.8	0.0	0.00
25YR-72HR	74.00	923829.6	818980.0	104849.7	0.0	0.00
25YR-72HR	74.25	923829.6	819632.5	104197.1	0.0	0.00
25YR-72HR	74.50	923829.6	820215.6	103614.1	0.0	0.00
25YR-72HR	74.75	923829.6	820741.1	103088.5	0.0	0.00
25YR-72HR	75.00	923829.6	821219.0	102610.7	0.0	0.00
25YR-72HR	75.25	923829.6	821657.5	102172.2	0.0	0.00
25YR-72HR	75.50	923829.6	822063.4	101766.3	0.0	0.00
25YR-72HR	75.75	923829.6	822442.3	101387.3	0.0	0.00
25YR-72HR	76.00	923829.6	822799.1	101030.6	0.0	0.00
25YR-72HR	76.25	923829.6	823137.5	100692.2	0.0	0.00
25YR-72HR	76.50	923829.6	823460.8	100368.8	0.0	0.00
25YR-72HR	76.75	923829.6	823771.7	100057.9	0.0	0.00
25YR-72HR	77.00	923829.6	824072.5	99757.1	0.0	0.00
25YR-72HR	77.25	923829.6	824365.1	99464.5	0.0	0.00
25YR-72HR	77.50	923829.6	824651.1	99178.5	0.0	0.00
25YR-72HR	77.75	923829.6	824932.0	98897.6	0.0	0.00
25YR-72HR	78.00	923829.6	825209.0	98620.6	0.0	0.00
25YR-72HR	78.25	923829.6	825483.0	98346.6	0.0	0.00
25YR-72HR	78.50	923829.6	825755.0	98074.6	0.0	0.00
25YR-72HR	78.75	923829.6	826025.8	97803.8	0.0	0.00
25YR-72HR	79.00	923829.6	826296.0	97533.6	0.0	0.00
25YR-72HR	79.25	923829.6	826566.3	97263.3	0.0	0.00
25YR-72HR	79.50	923829.6	826837.4	96992.3	0.0	0.00
25YR-72HR	79.75	923829.6	827109.7	96720.0	0.0	0.00
25YR-72HR	80.00	923829.6	827383.8	96445.8	0.0	0.00
25YR-72HR	80.25	923829.6	827660.3	96169.3	0.0	0.00
25YR-72HR	80.50	923829.6	827939.7	95890.0	0.0	0.00
25YR-72HR	80.75	923829.6	828222.5	95607.2	0.0	0.00
25YR-72HR	81.00	923829.6	828509.2	95320.4	0.0	0.00
25YR-72HR	81.25	923829.6	828800.6	95029.1	0.0	0.00
25YR-72HR	81.50	923829.6	829097.1	94732.5	0.0	0.00
25YR-72HR	81.75	923829.6	829399.8	94429.9	0.0	0.00
25YR-72HR	82.00	923829.6	829709.3	94120.3	0.0	0.00
25YR-72HR	82.25	923829.6	830027.0	93802.6	0.0	0.00
25YR-72HR	82.50	923829.6	830354.4	93475.3	0.0	0.00
25YR-72HR	82.75	923829.6	830694.1	93135.5	0.0	0.00
25YR-72HR	83.00	923829.6	831050.8	92778.8	0.0	0.00
25YR-72HR	83.25	923829.6	831425.4	92404.3	0.0	0.00
25YR-72HR	83.50	923829.6	831817.2	92012.5	0.0	0.00
25YR-72HR	83.75	923829.6	832225.8	91603.8	0.0	0.00
25YR-72HR	84.00	923829.6	832650.7	91178.9	0.0	0.00
25YR-72HR	84.25	923829.6	833091.5	90738.1	0.0	0.00
25YR-72HR	84.50	923829.6	833548.0	90281.7	0.0	0.00
25YR-72HR	84.75	923829.6	834019.9	89809.8	0.0	0.00
25YR-72HR	85.00	923829.6	834506.3	89323.4	0.0	0.00
25YR-72HR	85.25	923829.6	835006.7	88822.9	0.0	0.00
25YR-72HR	85.50	923829.6	835520.9	88308.8	0.0	0.00
25YR-72HR	85.75	923829.6	836048.2	87781.4	0.0	0.00
25YR-72HR	86.00	923829.6	836588.5	87241.2	0.0	0.00
25YR-72HR	86.25	923829.6	837141.2	86688.4	0.0	0.00
25YR-72HR	86.50	923829.6	837706.1	86123.6	0.0	0.00
25YR-72HR	86.75	923829.6	838282.7	85546.9	0.0	0.00
25YR-72HR	87.00	923829.6	838870.8	84958.9	0.0	0.00
25YR-72HR	87.25	923829.6	839469.9	84359.7	0.0	0.00
25YR-72HR	87.50	923829.6	840079.8	83749.8	0.0	0.00
25YR-72HR	87.75	923829.6	840700.1	83129.5	0.0	0.00
25YR-72HR	88.00	923829.6	841330.6	82499.0	0.0	0.00
25YR-72HR	88.25	923829.6	841970.9	81858.7	0.0	0.00
25YR-72HR	88.50	923829.6	842620.7	81208.9	0.0	0.00
25YR-72HR	88.75	923829.6	843279.8	80549.9	0.0	0.00
25YR-72HR	89.00	923829.6	843947.8	79881.8	0.0	0.00
25YR-72HR	89.25	923829.6	844624.6	79205.1	0.0	0.00
25YR-72HR	89.50	923829.6	845309.7	78519.9	0.0	0.00
25YR-72HR	89.75	923829.6	846003.1	77826.6	0.0	0.00
25YR-72HR	90.00	923829.6	846704.4	77125.3	0.0	0.00
25YR-72HR	90.25	923829.6	847413.4	76416.3	0.0	0.00
25YR-72HR	90.50	923829.6	848129.8	75699.8	0.0	0.00
25YR-72HR	90.75	923829.6	848853.5	74976.1	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	91.00	923829.6	849584.2	74245.4	0.0	0.00
25YR-72HR	91.25	923829.6	850321.7	73507.9	0.0	0.00
25YR-72HR	91.50	923829.6	851065.8	72763.8	0.0	0.00
25YR-72HR	91.75	923829.6	851816.3	72013.3	0.0	0.00
25YR-72HR	92.00	923829.6	852573.0	71256.7	0.0	0.00
25YR-72HR	92.25	923829.6	853335.6	70494.0	0.0	0.00
25YR-72HR	92.50	923829.6	854104.1	69725.5	0.0	0.00
25YR-72HR	92.75	923829.6	854878.2	68951.5	0.0	0.00
25YR-72HR	93.00	923829.6	855657.7	68171.9	0.0	0.00
25YR-72HR	93.25	923829.6	856442.5	67387.2	0.0	0.00
25YR-72HR	93.50	923829.6	857232.3	66597.3	0.0	0.00
25YR-72HR	93.75	923829.6	858027.1	65802.5	0.0	0.00
25YR-72HR	94.00	923829.6	858826.6	65003.0	0.0	0.00
25YR-72HR	94.25	923829.6	859630.7	64198.9	0.0	0.00
25YR-72HR	94.50	923829.6	860439.3	63390.3	0.0	0.00
25YR-72HR	94.75	923829.6	861252.1	62577.5	0.0	0.00
25YR-72HR	95.00	923829.6	862069.1	61760.5	0.0	0.00
25YR-72HR	95.25	923829.6	862890.0	60939.6	0.0	0.00
25YR-72HR	95.50	923829.6	863714.8	60114.9	0.0	0.00
25YR-72HR	95.75	923829.6	864543.2	59286.4	0.0	0.00
25YR-72HR	96.00	923829.6	865374.7	58454.9	0.0	0.00

APPENDIX G
Post-Development Conditions – FPID 432687-1-52-01 (main line)
Curve Number Calcs,
French Drain Calcs
Rating Curve
Ad-ICPR Report

Basin 12



DO NOT USE THE INFORMATION ON THIS SHEET FOR CONSTRUCTION PURPOSES. THIS SHEET IS IN THE PLANS FOR DOCUMENTATION AND TO ASSIST CONSTRUCTION PERSONNEL WITH DRAINAGE CONCERNS.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01, 441830-1-52-01, 441831-1-52-01

DRAINAGE MAP

SHEET NO.

SUMMARY OF ADDITIONAL IMP. AREA - BASIN 12

PRE-DEVELOPMENT

SUB-BASIN	TOTAL DRAINAGE AREA (AC)	IMPERVIOUS DRAINAGE AREA (AC)	COMPOSITE CURVE NUMBER
B12-104	0.43	0.43	96
B12-105	1.67	1.67	96
B12-109	0.25	0.25	96
B12-111	0.03	0.03	96
BX12-112	0.32	0.32	96
BX12-113	0.45	0.45	96
BX12-114	0.27	0.27	96
TOTAL (PRE)	3.42	3.42	

POST-DEVELOPMENT CONDITIONS

SUB-BASIN	TOTAL DRAINAGE AREA (AC)	PERVIOUS DRAINAGE AREA (AC)	PERVIOUS AREA CURVE NUMBER	IMPERVIOUS DRAINAGE AREA (AC)	IMPERVIOUS AREA CURVE NUMBER	COMPOSITE CURVE NUMBER
B12-104	0.43	0.00	61	0.43	96	96
B12-105	1.34	0.00	61	1.34	96	96
B12-201	0.24	0.00	61	0.24	96	96
B12-202	0.04	0.00	61	0.04	96	96
B12-206	0.18	0.00	61	0.18	96	96
B12-208	0.31	0.00	61	0.31	96	96
B12-210	0.51	0.00	61	0.51	96	96
B12-212	0.37	0.00	61	0.37	96	96
TOTAL (POST)	3.42			3.42		

Additional Imp. Area = 0.00

Since there is no additional imp area within this basin, no additional treatment or attenuation volume is required

Note: This table is for additional imp area calculations only

Basin 13

SEABOARD MARINE

BASIN 13
25.56 AC

U-HAUL MOVING & STORAGE DORAL

0 50 200
Feet

T 53S / R 40E | SECTION 11
MATCHLINE 448+40.00

T 53S / R 40E | SECTION 10
MATCHLINE 476+40.00

NW 80TH ST.

SR 826 SB

SR 826 NB

1° 46' 40" W

N 1° 47' 57" W

N 1° 44' 02

450 455 460 465 470 475

END BRIDGE #870258
463+67.52

BEGIN BRIDGE #870258
462+17.70

S13-202A
S13-202B
BX13-4
0.45 AC
J-1115
J-1112
LA R/W LINE
B13-203
0.64 AC
B13-204
0.42 AC
18" PIPE
R/W LINE
S13-206
S13-206A
S13-206B
Y-118A
B13-207
0.58 AC
B13-206
0.43 AC
BX13-43
0.85 AC
18" PIPE
18" PIPE
S13-208
S13-208A
24" FD
18" PIPE
LA R/W LINE
B13-210
0.52 AC
18" PIPE
S13-210
S13-210A
S13-210B
LA R/W LINE
BX13-58
7.01 AC
Y-107
R/W LINE
LA R/W LINE

S13-203
S13-204
S13-204A
Y-116A
Y-115A
S13-205
S13-205A
S13-205B
Y-117A
B13-205
0.37 AC
S13-207
S13-207A
S13-207B
LA R/W LINE
B13-208
0.45 AC
S13-209
S13-209A
Y-160
B13-209
0.57 AC
BX13-46
0.52 AC
LA R/W LINE

DO NOT USE THE INFORMATION ON THIS SHEET FOR CONSTRUCTION PURPOSES. THIS SHEET IS IN THE PLANS FOR DOCUMENTATION AND TO ASSIST CONSTRUCTION PERSONNEL WITH DRAINAGE CONCERNS.

LEGEND

- DRAINAGE DIVIDE
- FLOW ARROW
- SXX-XXX PROPOSED STRUCTURE
- XX EXISTING STRUCTURE

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01, 441830-1-52-01, 441831-1-52-01

DRAINAGE MAP

SHEET NO.

CALLI 12/16/2020 4:37:13 PM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\44716515201\drainage\DRMPRD02.dgn

T 53S / R 40E SECTION 10 | T 53S / R 40E SECTION 03

RESTAURANT DEPOT

WALMART SUPERCENTER

0 50 200 Feet

R/W LINE

BASIN 13
25.56 AC

BASIN 15
11.32 AC

USA TRUCK SERVICE PLAZA

R/W LINE

BX13-58
7.01 AC

LA R/W LINE

LA R/W LINE

BX15-18
0.24 AC

S15-201D

S15-201E

S15-201C

F-3039

18" PIPE

S15-201B

B15-1A
1.91 AC

OUTFALL TO THE MIAMI CANAL

MIAMI CANAL (C6)

S15-201A

S15-22

S15-202B

S15FW-01

F-3037

S15FW-02

F-3026

B15-22
0.16 AC

B15-11
0.09 AC

S15-201

S15-201F

24" FD

B15-13A
0.21 AC

B15FW-1
0.07 AC

B15FW-2
0.03 AC

BX15-15A
0.11 AC

18" PIPE

NW 77TH AVE.

BEGIN BRIDGE #870975
481+20.19

480

485

490

495

500

SR 826 SB

SR 826 NB

18" PIPE

B15-11A
0.48 AC

S15-202A

N 1° 48' 01" W

S15-201G

S15-202

B15-203
0.74 AC

B15-16
0.66 AC

END BRIDGE #870975
485+91.63

B15-7
0.46 AC

B15-201
0.34 AC

B16FE-6
0.23 AC

B15-202A
0.36 AC

S15-203

B16FE-5
0.37 AC

W 20TH AVE.

24" FD

R/W LINE

24" FD

R/W LINE

T 53S / R 40E SECTION 11 MATCHLINE 476+40.00

NW SOUTH RIVER DR.

US-27/W OKEECHOBEE RD. EB

US-27/W OKEECHOBEE RD. WB

BX16-3
3.63 AC

B16FE-4
0.37 AC

B16FE-7
0.20 AC

W 39TH ST.

W 41ST ST.

LA R/W LINE

R/W LINE

B16FE-2
0.29 AC

LA R/W LINE

R/W LINE

B16FE-3
0.24 AC

24" FD

S16FE-06

BEST BUY

S16FE-07

S16FE-7A

R/W LINE

24" FD

S16FE-05

24" FD

24" FD

S16FE-02

24" FD

S16FE-04

S16FE-03

R/W LINE

WESTLAND PROMENADE

BASIN 16
13.66 AC (W 20TH AVENUE)

T 53S / R 40E SECTION 11 | T 53S / R 40E SECTION 02

T 53S / R 40E SECTION 11 MATCHLINE 504+40.00

T 53S / R 40E SECTION 02

LEGEND

DRAINAGE DIVIDE

FLOW ARROW

SXX-XXX PROPOSED STRUCTURE

XX EXISTING STRUCTURE

DO NOT USE THE INFORMATION ON THIS SHEET FOR CONSTRUCTION PURPOSES. THIS SHEET IS IN THE PLANS FOR DOCUMENTATION AND TO ASSIST CONSTRUCTION PERSONNEL WITH DRAINAGE CONCERNS.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01, 441830-1-52-01, 441831-1-52-01

DRAINAGE MAP

SHEET NO.

SUMMARY OF MAX STAGE - PROPOSED CONDITIONS - BASIN 13

NODE	STORM EVENT							WARNING
	10YR-1HR	10YR-8HR	10YR-24HR	100YR-1HR	100YR-8HR	100YR-24HR	25YR-72HR	STAGE (FT)
AREA1A	2.16	3.02	2.30	3.85	3.58	2.38	4.16	6.00
AREA1C	1.89	2.45	2.68	2.23	2.91	3.52	3.62	6.00
B13-204	14.28	14.05	14.00	14.47	14.18	14.00	14.37	19.13
B13-205	14.22	14.01	14.00	14.40	14.14	14.00	14.31	18.78
B13-206	14.29	14.05	14.00	14.49	14.19	14.00	14.38	19.02
B13-207	15.45	15.16	15.00	15.70	15.33	15.00	15.56	20.63
B13-208	23.31	23.07	23.00	23.52	23.21	23.00	23.41	26.67
B13-209	24.41	24.13	24.00	24.66	24.29	24.00	24.52	29.51
EX13-38	0.99	0.96	0.95	1.18	1.00	0.95	1.23	6.00
EX13-40	1.00	0.95	0.95	1.17	0.99	0.95	1.22	6.00
NODE-13B	4.07	3.88	2.53	4.32	4.06	3.00	4.29	6.00
POND13-1	1.57	2.23	2.68	1.89	2.81	3.52	3.62	6.00
S13-1	25.55	25.30	25.25	25.76	25.45	25.25	25.65	30.29
S13-11	14.24	14.02	14.00	14.41	14.15	14.00	14.32	19.03
S13-13	16.53	16.31	16.30	16.76	16.41	16.30	16.64	21.33
S13-15	21.91	21.90	21.90	22.06	21.90	21.90	21.98	26.92
S13-17	24.47	24.16	24.15	24.75	24.34	24.15	24.59	29.18
S13-18	18.06	17.77	17.49	18.42	17.93	17.58	18.21	20.54
S13-18A	18.06	17.77	17.49	18.43	17.93	17.58	18.22	19.68
S13-20	17.73	17.35	16.99	18.09	17.57	17.10	17.89	24.32
S13-202	26.31	26.13	25.94	26.46	26.24	26.00	26.38	30.77
S13-210	24.79	24.53	24.26	25.02	24.68	24.34	24.90	29.50
S13-24	26.21	25.93	25.65	26.46	26.10	25.74	26.32	28.96
S13-24A	26.94	26.73	26.52	27.11	26.86	26.59	27.02	29.64
S13-25	0.96	0.95	0.95	0.99	0.96	0.95	1.00	6.00
S13-3	22.80	22.70	22.70	22.98	22.72	22.70	22.89	27.71
S13-5	18.63	18.45	18.45	18.82	18.54	18.45	18.72	23.49
S13-7	14.43	14.15	14.00	14.67	14.31	14.00	14.54	19.06
S13-9	13.97	13.73	13.65	14.17	13.87	13.65	14.06	18.68

Curve Number Calculations

CN CALCULATIONS FOR PROPOSED CONDITIONS - BASIN B-13

SUB-BASIN	TOTAL DRAINAGE AREA (AC)	PERVIOUS DRAINAGE AREA (AC)	PERVIOUS AREA CURVE NUMBER	IMP. DRAINAGE AREA (AC)	IMP. AREA CURVE NUMBER	COMPOSITE CURVE NUMBER
B13-1	0.47	0	61	0.47	96	96
B13-3	0.36	0	61	0.36	96	96
B13-5	0.39	0	61	0.39	96	96
B13-7	0.56	0	61	0.56	96	96
B13-9	0.43	0	61	0.43	96	96
B13-11	0.37	0	61	0.37	96	96
B13-13	0.54	0	61	0.54	96	96
B13-15	0.33	0	61	0.33	96	96
B13-17	0.66	0	61	0.66	96	96
BX13-39	0.74	0.74	61	0	96	61
TOTAL SUB-BASIN B-13A	4.85	0.74		4.11		
BX13-1	0.37	0	61	0.37	96	96
BX13-4	0.45	0	61	0.45	96	96
B13-202	0.28	0	61	0.28	96	96
B13-203	0.64	0	61	0.64	96	96
B13-204	0.42	0	61	0.42	96	96
B13-205	0.37	0	61	0.37	96	96
B13-206	0.43	0	61	0.43	96	96
B13-207	0.58	0	61	0.58	96	96
B13-208	0.45	0	61	0.45	96	96
BX13-43	0.85	0.85	61	0	96	61
B13-209	0.57	0.57	61	0	96	61
TOTAL SUB-BASIN B-13B	5.41	1.42		3.99		
B13-210	0.52	0	61	0.52	96	96
BX13-46	0.52	0	61	0.52	96	96
BX13-58	7.01	5.71	61	1.3	96	67
B13-18	0.37	0	61	0.37	96	96
B13-18A	0.12	0	61	0.12	96	96
B13-20	0.37	0	61	0.37	96	96
B13-22	0.39	0	61	0.39	96	96
B13-24	0.21	0	61	0.21	96	96
B13-24A	0.35	0	61	0.35	96	96
BX13-47	0.53	0	61	0.53	96	96
BX13-51	0.53	0	61	0.53	96	96
BX13-54	0.4	0	61	0.4	96	96
BX13-64	0.22	0	61	0.22	96	96
BPOND13-1	2.43	2.43	61	0	96	61
B13-71	0.25	0	61	0.25	96	96
B13-73	1.08	1.08	61	0	96	61
TOTAL SUB-BASIN B-13B	15.3	9.22		6.08		
TOTAL BASIN B-13	25.56	11.38		14.18		

Average Hydraulic Conductivity

Average Hydraulic Conductivity

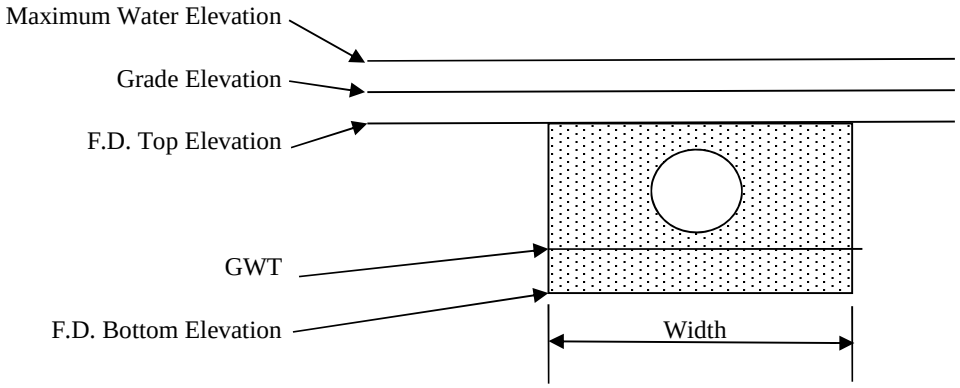
Basin B-13	
Percolation Test	P-26
Average Flow to 10 ft. depth (gpm)	18.40
Depth to Water Table (ft)	0.90
Head Maintained (ft)	0.50
Borehole Diameter (ft)	0.604
Borehole Depth (ft)	10.00
Du (ft)	0.50
Average Flow (cfs)	0.0410
Ds (ft)	9.10
Hydraulic Conductivity K (cfs/ft2-ft head)	**4.55E-03**

Rating Curve Calculations

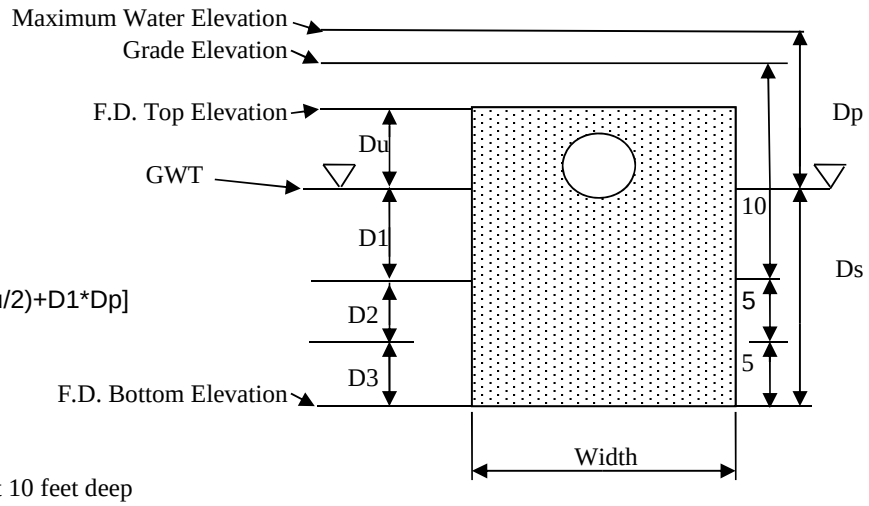
Made by: _____ _____
Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT_13



Maximum Water Elevation =	**6.00**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**3.00**	ft.NAVD	
F.D.Top Elevation =	**1.45**	ft.NAVD	
Ground Water Table =	**0.95**	ft.NAVD	
F.D. Bottom Elevation =	**-4.56**	ft.NAVD	
Width =	**4.00**	feet.	
Pipe Diameter =	**24**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**4.55E-03**	cfs/ft^2-ft head	(P-26)
Hydraulic Conductivity K15 =	**4.55E-03**	cfs/ft^2-ft head	(P-26)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____
Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT_13

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	0.95	***2.20***
(ft)	(cfs/ft)	(cfs/ft)
0.95	0.000	0.000
1.95	0.054	0.000
2.20	0.067	0.000
6.00	0.275	0.205

Rating Curve (Q)

Headwater	***Water Table Elev. (ft)***	
	0.95	***2.20***
(ft)	(cfs)	(cfs)
0.95	0.00	0.00
1.95	0.05	0.00
2.20	0.07	0.00
6.00	0.28	0.21

Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

Rating Curve Adjusted (Q)

Tailwater (ft)	Headwater (ft)	Discharge (cfs)
0.95	0.95	0.00
0.95	1.95	0.05
0.95	2.20	0.07
0.95	6.00	0.10
2.20	2.20	0.00
2.20	6.00	0.10

French Drain Length Calcs

SUMMARY OF ADDITIONAL IMP. AREA - BASIN 13

PRE-DEVELOPMENT

SUB-BASIN	TOTAL DRAINAGE AREA (AC)	IMPERVIOUS DRAINAGE AREA (AC)	COMPOSITE CURVE NUMBER
BX13-1	0.32	0.32	96
BX13-4	0.35	0.35	96
BX13-2	0.32	0.32	96
BX13-3	0.07	0.07	96
BX13-10	0.64	0.64	96
BX13-21	0.41	0.41	96
BX13-24	0.35	0.35	96
BX13-27	0.38	0.38	96
BX13-30	0.51	0.51	96
BX13-32	0.4	0.4	96
BX13-41	0.5	0.5	96
BX13-43	1.16	0.00	61
TOTAL SUB-BASIN B-13B	5.41	4.25	
BX13-45	0.47	0.47	96
BX13-46	0.50	0.50	96
BX13-58	7.08	1.13	67
TOTAL SUB-BASIN B-13C	8.05	2.1	

POST-DEVELOPMENT CONDITIONS

SUB-BASIN	TOTAL DRAINAGE AREA (AC)	PERVIOUS DRAINAGE AREA (AC)	PERVIOUS AREA CURVE NUMBER	IMPERVIOUS DRAINAGE AREA (AC)	IMPERVIOUS AREA CURVE NUMBER	COMPOSITE CURVE NUMBER
BX13-1	0.37	0.00	61	0.37	96	96
BX13-4	0.45	0.00	61	0.45	96	96
B13-202	0.28	0.00	61	0.28	96	96
B13-203	0.64	0.00	61	0.64	96	96
B13-204	0.42	0.00	61	0.42	96	96
B13-205	0.37	0.00	61	0.37	96	96
B13-206	0.43	0.00	61	0.43	96	96
B13-207	0.58	0.00	61	0.58	96	96
B13-208	0.45	0.00	61	0.45	96	96
EX13-43	0.85	0.85	61	0.00	96	61
B13-209	0.57	0.00	61	0.57	96	96
	5.41			4.56		
B13-210	0.52	0.00	61	0.52	96	96
EX13-46	0.52	0.00	61	0.52	96	96
BX13-58	7.01	5.71	61	1.30	96	67
	8.05			2.34		

Total Addtional Imp. Area for Basin B-13 (PRE) = 6.35 ac

Total Addtional Imp. Area for Basin B-13 (POST) = 6.90 ac

Total Additional Imp. Area for Basin 13= 0.55 ac

Note: This table is for additional imp area calculations only

REQUIRED VOLUME IN PROPOSED FRENCH DRAIN-BASIN13

Additional Imp. Area 0.55 ac

Required Treatment Volume

= 2.5" of Imp. area

Required Treatment Volume = 0.11 ac-ft (A)

Required Attenation Volume

$$Q = \frac{(P - 0.2S)^2}{(P + 0.8S)}$$

Q = Runoff (in) 13.51 in

P = Rainfall 25YR-72HR (in) = 14 in

S= maximum retention after runoff begins (in) 0.42 in

$$S = \frac{1000}{CN} - 10$$

CN = 96

Total Q in ac-ft 0.62 ac-ft (B)

Q (in) X Added Imp. Area/12

Provided Volume in French Drain =

maximum of (A) or (B) 0.62 ac-ft

Factor of Safety (F.S.) = 2

Required Volume in French Drain = 1.24 ac-ft

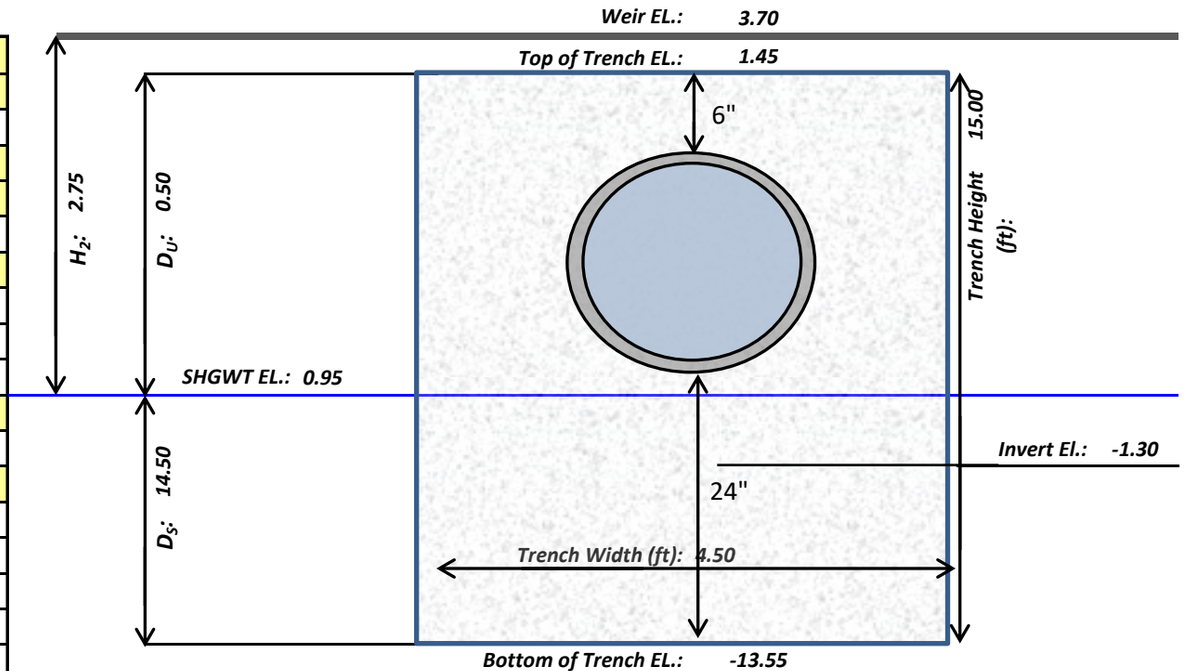
Provided in Volume in French Drain = 1.56 ac-ft

Basin 13

Palmetto Expressway Improvments

FRENCH DRAIN DESIGN VOLUMES

French Drain (ICPR Link Name):	AREA1A_EXF
Location	
SHGWT EL. (ft-NAVD):	0.95
Pipe Size (in):	24
Length of French Drain, L (LF):	50
Pipe Thickness (in):	3.00
Pipe Invert EL. (ft-NAVD):	-1.30
Top of Trench EL. (ft-NAVD):	1.45
Bottom of Trench EL. (ft-NAVD):	-13.55
Trench Height, H_T (ft):	15.00
Weir EL. (ft-NAVD):	3.70
Trench Width, W (ft):	4.50
Average Hydraulic Conductivity, K_{10} (cfs/ft^2/ft-head):	4.550E-03
Depth to Water Table, H_2 (ft):	2.75
Non-Saturated Trench Depth, D_U (ft):	0.50
Saturated Trench Depth, D_S (ft):	14.50
H_2W:	12.38
$2H_2D_U$:	2.75
D_U^2:	0.25
$2H_2D_S$:	79.75
$(1.39x10^{-4})WD_U$:	0.000313
If $D_U > D_S$ and $W < 2H_T$, Treatment Provided, V (ac-in):	21.54
If $D_S > D_U$ and/or $W > 2H_T$, Treatment Provided, V (ac-in):	18.73
$D_U > D_S$ and $W < 2H_T$ (Yes/No):	No
Treatment Volume Provided, V (Ac-ft):	**1.561**



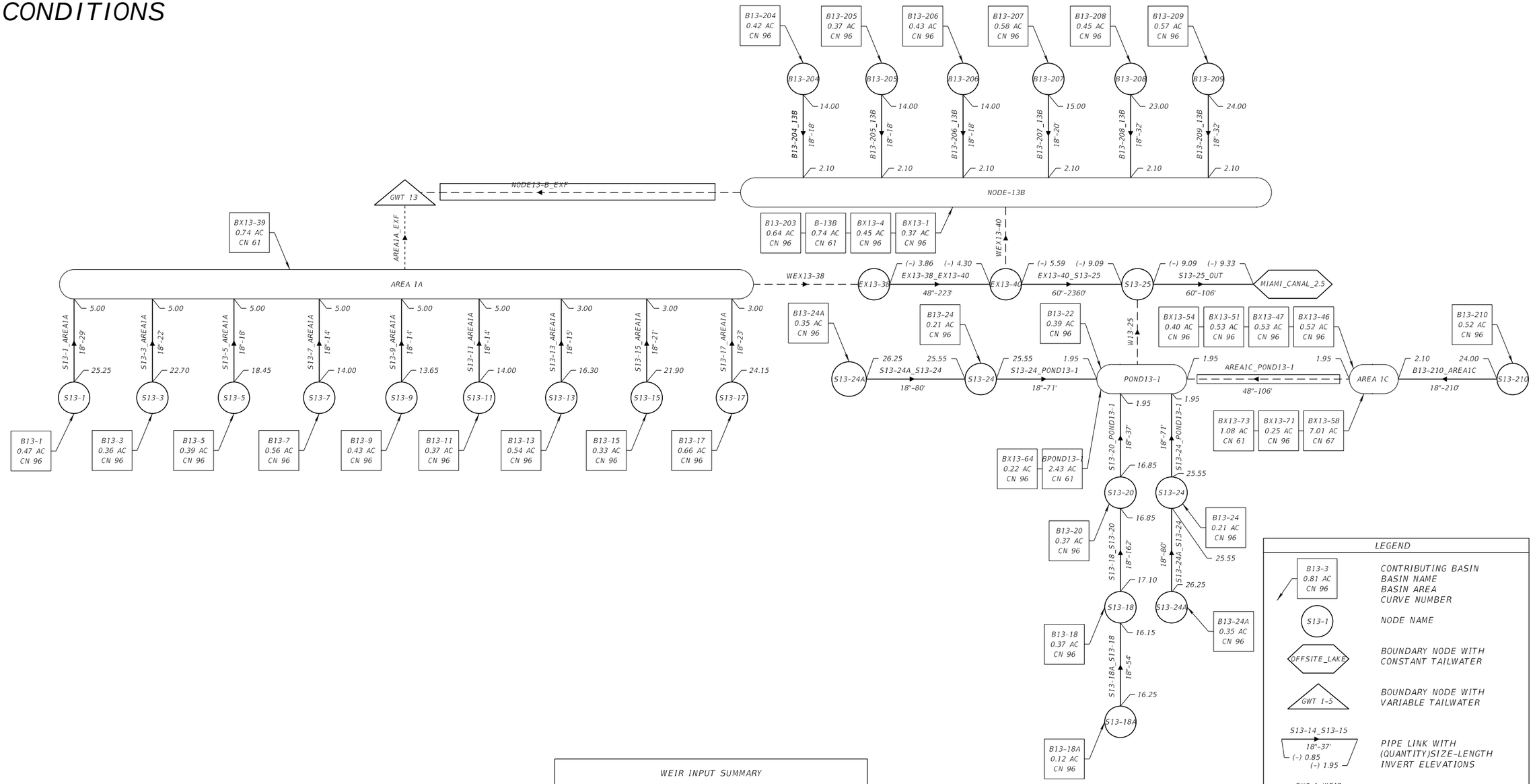
$$V = L[K_{10}(H_2W + 2H_2D_U - D_U^2 + 2H_2D_S) + (1.39x10^{-4})WD_U]$$

$$V = L[K_{10}(2H_2D_U - D_U^2 + 2H_2D_S) + (1.39x10^{-4})WD_U]$$

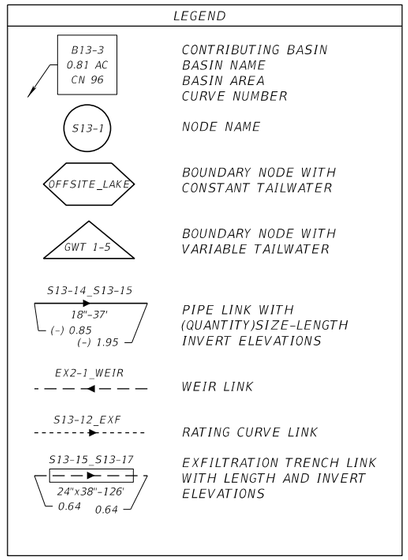
NOTE: Existing French Drain length for AREA1A_EXF = 274 ft
for Proposed conditions AREA1A_EXF = 274+50 = 324 ft

Nodal Diagram

POST-DEVELOPMENT CONDITIONS



WEIR INPUT SUMMARY							
WEIR	VERT. TYPE	HORIZ.	CIRC.	RECT.	INV.	SPAN	RISE
WEX13-40	-	X	-	X	3.70'	54"	36"
WEX13-25	-	X	-	X	3.65'	54"	36"
WEX13-38	-	X	-	X	3.95'	42"	47"



PROPOSED DESIGN

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01 441830-1-52-01 441831-1-52-01

NODAL DIAGRAM BASIN 13

SHEET NO.

KTABUTEAU 12/17/2020 9:44:27 AM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\44716515201\drainage\DRDTRD0101

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
AREA1A	Basin 13	100YR-1HR	0.81	3.85	6.00	-0.0371	8592	0.65	32.69	0.81	26.89
AREA1C	Basin 13	100YR-1HR	1.33	2.23	6.00	0.0009	121207	0.67	46.17	1.33	0.47
B13-204	Basin 13	100YR-1HR	0.65	14.47	19.13	0.0059	125	0.65	3.16	0.65	3.16
B13-205	Basin 13	100YR-1HR	0.65	14.40	18.78	0.0061	124	0.65	2.78	0.65	2.78
B13-206	Basin 13	100YR-1HR	0.65	14.49	19.02	0.0040	125	0.65	3.24	0.64	3.23
B13-207	Basin 13	100YR-1HR	0.65	15.70	20.63	0.0055	127	0.65	4.36	0.65	4.36
B13-208	Basin 13	100YR-1HR	0.65	23.52	26.67	0.0063	134	0.65	3.39	0.65	3.39
B13-209	Basin 13	100YR-1HR	0.65	24.66	29.51	0.0056	135	0.65	4.29	0.65	4.29
EX13-38	Basin 13	100YR-1HR	0.69	1.18	6.00	0.0068	135	0.00	0.00	0.50	7.10
EX13-40	Basin 13	100YR-1HR	0.69	1.17	6.00	-0.0036	430	0.69	27.95	0.69	22.77
GWT_13	Basin 13	100YR-1HR	0.00	0.95	99.00	0.0000	0	0.80	39.47	0.00	0.00
MIAMI_CANAL_2.5	Basin 13	100YR-1HR	0.00	0.95	99.00	0.0000	13	0.69	22.87	0.00	0.00
NODE-13B	Basin 13	100YR-1HR	0.69	4.32	6.00	-0.0264	6941	0.65	36.06	0.69	35.53
POND13-1	Basin 13	100YR-1HR	25.00	1.89	6.00	0.0009	131049	0.67	21.20	0.00	0.00
S13-1	Basin 13	100YR-1HR	0.65	25.76	30.29	-0.0061	132	0.65	3.54	0.65	3.54
S13-11	Basin 13	100YR-1HR	0.65	14.41	19.03	-0.0051	122	0.65	2.78	0.65	2.78
S13-13	Basin 13	100YR-1HR	0.65	16.76	21.33	-0.0092	123	0.65	4.06	0.64	4.06
S13-15	Basin 13	100YR-1HR	0.65	22.06	26.92	0.0098	123	0.65	2.48	0.65	2.48
S13-17	Basin 13	100YR-1HR	0.65	24.75	29.18	-0.0098	129	0.65	4.97	0.65	4.96
S13-18	Basin 13	100YR-1HR	0.67	18.42	20.54	0.0045	198	0.65	3.67	0.67	3.66
S13-18A	Basin 13	100YR-1HR	0.67	18.43	19.68	0.0045	115	0.65	0.90	0.68	0.90
S13-20	Basin 13	100YR-1HR	0.67	18.09	24.32	-0.0040	224	0.66	6.43	0.67	6.42
S13-202	Basin 13	100YR-1HR	0.65	26.46	30.77	0.0069	143	0.65	2.11	0.65	2.11
S13-210	Basin 13	100YR-1HR	0.65	25.02	29.50	0.0043	256	0.65	3.91	0.65	3.91
S13-24	Basin 13	100YR-1HR	0.66	26.46	28.96	-0.0022	220	0.65	4.21	0.66	4.21
S13-24A	Basin 13	100YR-1HR	0.65	27.11	29.64	0.0011	172	0.65	2.63	0.65	2.63
S13-25	Basin 13	100YR-1HR	0.69	0.99	6.00	0.0043	421	0.69	22.77	0.69	22.87
S13-3	Basin 13	100YR-1HR	0.65	22.98	27.71	0.0083	125	0.65	2.71	0.65	2.71
S13-5	Basin 13	100YR-1HR	0.65	18.82	23.49	-0.0068	124	0.65	2.93	0.64	2.93
S13-7	Basin 13	100YR-1HR	0.65	14.67	19.06	-0.0053	123	0.65	4.21	0.64	4.21
S13-9	Basin 13	100YR-1HR	0.65	14.17	18.68	-0.0048	122	0.65	3.24	0.65	3.23
AREA1A	Basin 13	100YR-24HR	21.00	2.38	6.00	0.0135	119	11.56	12.09	11.97	6.32
AREA1C	Basin 13	100YR-24HR	48.00	3.52	6.00	0.0003	128654	12.00	12.29	14.58	7.16
B13-204	Basin 13	100YR-24HR	11.73	14.00	19.13	-0.0031	115	11.98	0.57	11.91	0.96
B13-205	Basin 13	100YR-24HR	12.02	14.00	18.78	-0.0031	115	11.98	0.50	11.96	0.96
B13-206	Basin 13	100YR-24HR	11.97	14.00	19.02	-0.0031	115	11.98	0.58	11.97	0.96
B13-207	Basin 13	100YR-24HR	12.00	15.00	20.63	-0.0029	115	11.98	0.78	11.78	0.92
B13-208	Basin 13	100YR-24HR	12.02	23.00	26.67	-0.0030	117	11.98	0.61	12.05	0.94
B13-209	Basin 13	100YR-24HR	11.73	24.00	29.51	-0.0032	117	11.98	0.77	11.73	1.03
EX13-38	Basin 13	100YR-24HR	0.00	0.95	6.00	0.0000	135	0.00	0.00	0.00	0.00
EX13-40	Basin 13	100YR-24HR	0.00	0.95	6.00	0.0000	430	0.00	0.00	0.00	0.00
GWT_13	Basin 13	100YR-24HR	24.00	2.20	99.00	0.0001	0	11.97	12.95	0.00	0.00
MIAMI_CANAL_2.5	Basin 13	100YR-24HR	0.00	0.95	99.00	0.0000	13	0.00	0.00	0.00	0.00
NODE-13B	Basin 13	100YR-24HR	12.07	3.00	6.00	0.0079	3130	12.00	8.82	12.04	6.66
POND13-1	Basin 13	100YR-24HR	47.22	3.52	6.00	0.0013	151852	14.58	10.39	0.00	0.00
S13-1	Basin 13	100YR-24HR	11.84	25.25	30.29	-0.0049	116	11.98	0.63	11.72	1.07
S13-11	Basin 13	100YR-24HR	11.72	14.00	19.03	-0.0042	115	11.98	0.50	11.72	0.91
S13-13	Basin 13	100YR-24HR	11.98	16.30	21.33	-0.0049	115	11.98	0.73	11.68	1.65
S13-15	Basin 13	100YR-24HR	11.86	21.90	26.92	-0.0050	115	11.98	0.45	11.53	1.70
S13-17	Basin 13	100YR-24HR	11.43	24.15	29.18	0.0047	116	11.98	0.89	11.43	1.77
S13-18	Basin 13	100YR-24HR	12.00	17.58	20.54	-0.0012	241	12.00	0.66	12.00	0.66
S13-18A	Basin 13	100YR-24HR	12.00	17.58	19.68	-0.0015	136	11.98	0.16	10.15	0.29

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S13-20	Basin 13	100YR-24HR	12.00	17.10	24.32	-0.0047	234	12.00	1.16	11.96	1.16
S13-202	Basin 13	100YR-24HR	12.00	26.00	30.77	0.0005	136	11.98	0.38	11.94	0.38
S13-210	Basin 13	100YR-24HR	11.99	24.34	29.50	0.0004	235	11.98	0.70	11.99	0.70
S13-24	Basin 13	100YR-24HR	11.99	25.74	28.96	-0.0044	191	11.98	0.76	11.99	0.76
S13-24A	Basin 13	100YR-24HR	12.00	26.59	29.64	-0.0002	161	11.98	0.47	11.94	0.47
S13-25	Basin 13	100YR-24HR	0.00	0.95	6.00	0.0000	421	0.00	0.00	0.00	0.00
S13-3	Basin 13	100YR-24HR	12.02	22.70	27.71	-0.0046	116	11.98	0.49	11.45	1.38
S13-5	Basin 13	100YR-24HR	11.72	18.45	23.49	-0.0045	115	11.98	0.53	11.69	1.21
S13-7	Basin 13	100YR-24HR	11.97	14.00	19.06	-0.0042	115	11.98	0.76	11.92	0.91
S13-9	Basin 13	100YR-24HR	11.91	13.65	18.68	-0.0049	115	11.98	0.58	11.98	0.85
AREA1A	Basin 13	100YR-8HR	4.09	3.58	6.00	-0.0136	6695	4.00	18.91	4.07	17.09
AREA1C	Basin 13	100YR-8HR	5.45	2.91	6.00	0.0002	125193	4.00	34.75	5.45	7.06
B13-204	Basin 13	100YR-8HR	4.00	14.18	19.13	0.0025	122	4.00	1.70	3.98	1.70
B13-205	Basin 13	100YR-8HR	4.00	14.14	18.78	-0.0025	121	4.00	1.50	3.98	1.50
B13-206	Basin 13	100YR-8HR	4.00	14.19	19.02	0.0025	122	4.00	1.74	3.97	1.74
B13-207	Basin 13	100YR-8HR	4.00	15.33	20.63	0.0024	125	4.00	2.34	3.98	2.34
B13-208	Basin 13	100YR-8HR	3.99	23.21	26.67	-0.0023	129	4.00	1.82	3.99	1.82
B13-209	Basin 13	100YR-8HR	4.00	24.29	29.51	0.0027	131	4.00	2.30	3.99	2.30
EX13-38	Basin 13	100YR-8HR	4.03	1.00	6.00	0.0043	135	0.00	0.00	5.16	5.91
EX13-40	Basin 13	100YR-8HR	4.03	0.99	6.00	-0.0023	430	4.03	15.23	4.03	9.88
GWT_13	Basin 13	100YR-8HR	8.00	2.20	99.00	0.0003	0	3.81	27.23	0.00	0.00
MIAMI_CANAL_2.5	Basin 13	100YR-8HR	0.00	0.95	99.00	0.0000	13	4.03	10.16	0.00	0.00
NODE-13B	Basin 13	100YR-8HR	4.03	4.06	6.00	-0.0064	5794	4.00	20.36	4.02	20.22
POND13-1	Basin 13	100YR-8HR	35.63	2.81	6.00	0.0018	146373	4.03	16.21	0.00	0.00
S13-1	Basin 13	100YR-8HR	3.99	25.45	30.29	-0.0049	127	4.00	1.90	3.99	1.90
S13-11	Basin 13	100YR-8HR	4.00	14.15	19.03	-0.0042	119	4.00	1.50	4.00	1.50
S13-13	Basin 13	100YR-8HR	4.00	16.41	21.33	-0.0049	119	4.00	2.18	3.98	2.18
S13-15	Basin 13	100YR-8HR	3.37	21.90	26.92	-0.0050	116	4.00	1.33	3.37	1.71
S13-17	Basin 13	100YR-8HR	4.00	24.34	29.18	-0.0047	124	4.00	2.67	3.99	2.67
S13-18	Basin 13	100YR-8HR	4.00	17.93	20.54	0.0006	236	4.00	1.98	4.00	1.98
S13-18A	Basin 13	100YR-8HR	4.00	17.93	19.68	0.0006	115	4.00	0.49	4.01	0.49
S13-20	Basin 13	100YR-8HR	4.00	17.57	24.32	-0.0033	260	4.00	3.48	3.99	3.48
S13-202	Basin 13	100YR-8HR	4.00	26.24	30.77	0.0011	141	4.00	1.13	3.98	1.13
S13-210	Basin 13	100YR-8HR	4.00	24.68	29.50	0.0011	260	4.00	2.10	3.99	2.10
S13-24	Basin 13	100YR-8HR	4.00	26.10	28.96	-0.0044	214	4.00	2.26	3.99	2.26
S13-24A	Basin 13	100YR-8HR	4.00	26.86	29.64	0.0002	170	4.00	1.42	3.99	1.41
S13-25	Basin 13	100YR-8HR	4.03	0.96	6.00	0.0028	421	4.03	9.88	4.03	10.16
S13-3	Basin 13	100YR-8HR	4.00	22.72	27.71	-0.0047	118	4.00	1.46	3.99	1.46
S13-5	Basin 13	100YR-8HR	4.00	18.54	23.49	-0.0045	120	4.00	1.58	3.98	1.58
S13-7	Basin 13	100YR-8HR	4.00	14.31	19.06	-0.0042	121	4.00	2.26	3.99	2.26
S13-9	Basin 13	100YR-8HR	3.99	13.87	18.68	-0.0039	120	4.00	1.74	3.99	1.74
AREA1A	Basin 13	10YR-1HR	0.66	2.16	6.00	-0.0118	192	0.66	21.74	0.66	21.72
AREA1C	Basin 13	10YR-1HR	25.00	1.89	6.00	0.0009	111850	0.68	25.88	0.00	0.00
B13-204	Basin 13	10YR-1HR	0.65	14.28	19.13	0.0038	123	0.65	2.15	0.65	2.15
B13-205	Basin 13	10YR-1HR	0.65	14.22	18.78	0.0036	122	0.65	1.89	0.65	1.89
B13-206	Basin 13	10YR-1HR	0.65	14.29	19.02	0.0023	123	0.65	2.20	0.65	2.20
B13-207	Basin 13	10YR-1HR	0.65	15.45	20.63	0.0041	126	0.65	2.97	0.65	2.97
B13-208	Basin 13	10YR-1HR	0.65	23.31	26.67	0.0038	131	0.65	2.30	0.65	2.30
B13-209	Basin 13	10YR-1HR	0.65	24.41	29.51	0.0041	133	0.65	2.92	0.65	2.91
EX13-38	Basin 13	10YR-1HR	0.72	0.99	6.00	-0.0039	135	0.00	0.00	0.00	0.00
EX13-40	Basin 13	10YR-1HR	0.72	1.00	6.00	0.0020	430	0.72	5.44	0.72	10.77
GWT_13	Basin 13	10YR-1HR	0.00	0.95	99.00	0.0000	0	0.67	34.05	0.00	0.00

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
MIAMI_CANAL_2.5	Basin 13	10YR-1HR	0.00	0.95	99.00	0.0000	13	0.72	10.50	0.00	0.00
NODE-13B	Basin 13	10YR-1HR	0.72	4.07	6.00	-0.0157	5845	0.66	24.01	0.72	22.93
POND13-1	Basin 13	10YR-1HR	25.00	1.57	6.00	0.0007	85895	0.68	12.77	0.00	0.00
S13-1	Basin 13	10YR-1HR	0.65	25.55	30.29	-0.0039	129	0.65	2.40	0.65	2.40
S13-11	Basin 13	10YR-1HR	0.65	14.24	19.03	-0.0033	120	0.65	1.89	0.65	1.89
S13-13	Basin 13	10YR-1HR	0.65	16.53	21.33	-0.0049	121	0.65	2.76	0.65	2.76
S13-15	Basin 13	10YR-1HR	0.55	21.91	26.92	-0.0049	116	0.65	1.69	0.55	1.71
S13-17	Basin 13	10YR-1HR	0.65	24.47	29.18	-0.0046	126	0.65	3.38	0.65	3.38
S13-18	Basin 13	10YR-1HR	0.67	18.06	20.54	0.0017	232	0.65	2.50	0.67	2.49
S13-18A	Basin 13	10YR-1HR	0.67	18.06	19.68	0.0019	115	0.65	0.61	0.68	0.61
S13-20	Basin 13	10YR-1HR	0.67	17.73	24.32	-0.0016	258	0.66	4.37	0.67	4.37
S13-202	Basin 13	10YR-1HR	0.65	26.31	30.77	0.0033	142	0.65	1.43	0.65	1.43
S13-210	Basin 13	10YR-1HR	0.66	24.79	29.50	0.0027	261	0.65	2.66	0.65	2.65
S13-24	Basin 13	10YR-1HR	0.66	26.21	28.96	-0.0018	217	0.65	2.86	0.66	2.86
S13-24A	Basin 13	10YR-1HR	0.65	26.94	29.64	-0.0007	171	0.65	1.79	0.65	1.79
S13-25	Basin 13	10YR-1HR	0.72	0.96	6.00	-0.0018	421	0.72	10.77	0.72	10.50
S13-3	Basin 13	10YR-1HR	0.65	22.80	27.71	0.0045	122	0.65	1.84	0.65	1.84
S13-5	Basin 13	10YR-1HR	0.65	18.63	23.49	-0.0044	122	0.65	2.00	0.65	1.99
S13-7	Basin 13	10YR-1HR	0.65	14.43	19.06	-0.0034	122	0.65	2.87	0.65	2.86
S13-9	Basin 13	10YR-1HR	0.65	13.97	18.68	-0.0049	121	0.65	2.20	0.65	2.20
AREA1A	Basin 13	10YR-24HR	21.00	2.30	6.00	0.0139	119	11.59	11.75	11.97	4.08
AREA1C	Basin 13	10YR-24HR	48.00	2.68	6.00	0.0004	123887	12.00	7.15	18.85	3.26
B13-204	Basin 13	10YR-24HR	10.62	14.00	19.13	-0.0032	115	11.98	0.37	10.62	0.96
B13-205	Basin 13	10YR-24HR	10.63	14.00	18.78	-0.0032	115	11.98	0.33	10.21	0.96
B13-206	Basin 13	10YR-24HR	10.37	14.00	19.02	-0.0032	115	11.98	0.38	10.37	0.96
B13-207	Basin 13	10YR-24HR	11.84	15.00	20.63	-0.0030	115	11.98	0.51	11.67	0.92
B13-208	Basin 13	10YR-24HR	10.66	23.00	26.67	-0.0038	116	11.98	0.40	10.60	0.94
B13-209	Basin 13	10YR-24HR	10.57	24.00	29.51	-0.0041	117	11.98	0.51	10.57	1.02
EX13-38	Basin 13	10YR-24HR	0.00	0.95	6.00	0.0000	135	0.00	0.00	0.00	0.00
EX13-40	Basin 13	10YR-24HR	0.00	0.95	6.00	0.0000	430	0.00	0.00	0.00	0.00
GWT_13	Basin 13	10YR-24HR	24.00	2.20	99.00	0.0003	0	11.97	8.39	0.00	0.00
MIAMI_CANAL_2.5	Basin 13	10YR-24HR	0.00	0.95	99.00	0.0000	13	0.00	0.00	0.00	0.00
NODE-13B	Basin 13	10YR-24HR	19.05	2.53	6.00	0.0074	1958	11.99	7.66	12.04	4.32
POND13-1	Basin 13	10YR-24HR	48.00	2.68	6.00	0.0013	145359	18.85	4.76	0.00	0.00
S13-1	Basin 13	10YR-24HR	11.55	25.25	30.29	-0.0049	116	11.98	0.42	11.33	1.06
S13-11	Basin 13	10YR-24HR	11.96	14.00	19.03	-0.0042	115	11.98	0.33	11.15	0.91
S13-13	Basin 13	10YR-24HR	11.57	16.30	21.33	-0.0049	115	11.98	0.48	11.30	1.65
S13-15	Basin 13	10YR-24HR	11.95	21.90	26.92	-0.0046	115	11.98	0.29	11.95	1.69
S13-17	Basin 13	10YR-24HR	11.99	24.15	29.18	-0.0047	116	11.98	0.59	11.27	1.76
S13-18	Basin 13	10YR-24HR	12.00	17.49	20.54	-0.0009	242	24.41	0.64	12.00	0.43
S13-18A	Basin 13	10YR-24HR	12.00	17.49	19.68	-0.0011	142	11.98	0.11	24.41	0.64
S13-20	Basin 13	10YR-24HR	12.00	16.99	24.32	-0.0045	222	12.00	0.76	11.97	0.76
S13-202	Basin 13	10YR-24HR	12.00	25.94	30.77	0.0003	134	11.98	0.25	11.93	0.25
S13-210	Basin 13	10YR-24HR	12.00	24.26	29.50	0.0003	224	11.98	0.46	12.00	0.46
S13-24	Basin 13	10YR-24HR	11.97	25.65	28.96	-0.0044	180	11.98	0.50	11.97	0.50
S13-24A	Basin 13	10YR-24HR	11.96	26.52	29.64	-0.0002	157	11.98	0.31	11.96	0.31
S13-25	Basin 13	10YR-24HR	0.00	0.95	6.00	0.0000	421	0.00	0.00	0.00	0.00
S13-3	Basin 13	10YR-24HR	12.00	22.70	27.71	-0.0047	115	11.98	0.32	11.47	1.38
S13-5	Basin 13	10YR-24HR	11.87	18.45	23.49	-0.0045	115	11.98	0.35	11.87	1.21
S13-7	Basin 13	10YR-24HR	11.71	14.00	19.06	-0.0042	115	11.98	0.50	11.91	0.91
S13-9	Basin 13	10YR-24HR	11.64	13.65	18.68	-0.0049	114	11.98	0.38	11.23	0.85
AREA1A	Basin 13	10YR-8HR	4.05	3.02	6.00	0.0149	2794	4.00	13.57	3.95	11.90

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
AREA1C	Basin 13	10YR-8HR	7.63	2.45	6.00	0.0002	122525	4.00	19.89	7.63	1.79
B13-204	Basin 13	10YR-8HR	4.00	14.05	19.13	0.0025	118	4.00	1.13	3.99	1.13
B13-205	Basin 13	10YR-8HR	4.00	14.01	18.78	0.0027	116	4.00	0.99	3.99	0.99
B13-206	Basin 13	10YR-8HR	4.00	14.05	19.02	0.0026	119	4.00	1.15	4.00	1.15
B13-207	Basin 13	10YR-8HR	3.99	15.16	20.63	0.0023	122	4.00	1.55	3.99	1.55
B13-208	Basin 13	10YR-8HR	3.99	23.07	26.67	0.0024	124	4.00	1.21	3.99	1.21
B13-209	Basin 13	10YR-8HR	4.00	24.13	29.51	0.0027	126	4.00	1.53	3.99	1.53
EX13-38	Basin 13	10YR-8HR	3.91	0.96	6.00	0.0044	135	0.00	0.00	4.36	5.91
EX13-40	Basin 13	10YR-8HR	3.92	0.95	6.00	-0.0024	430	4.04	8.99	3.93	2.90
GWT_13	Basin 13	10YR-8HR	8.00	2.20	99.00	0.0003	0	3.79	21.74	0.00	0.00
MIAMI_CANAL_2.5	Basin 13	10YR-8HR	0.00	0.95	99.00	0.0000	13	3.90	7.71	0.00	0.00
NODE-13B	Basin 13	10YR-8HR	4.04	3.88	6.00	-0.0061	5191	4.00	13.17	4.03	12.97
POND13-1	Basin 13	10YR-8HR	36.00	2.23	6.00	0.0011	141819	4.01	8.58	0.00	0.00
S13-1	Basin 13	10YR-8HR	4.00	25.30	30.29	-0.0049	122	4.00	1.26	4.00	1.26
S13-11	Basin 13	10YR-8HR	4.00	14.02	19.03	-0.0042	116	4.00	0.99	3.99	0.99
S13-13	Basin 13	10YR-8HR	3.65	16.31	21.33	-0.0049	115	4.00	1.45	3.65	1.67
S13-15	Basin 13	10YR-8HR	3.50	21.90	26.92	-0.0046	116	4.00	0.88	3.48	1.70
S13-17	Basin 13	10YR-8HR	3.69	24.16	29.18	-0.0047	116	4.00	1.77	3.65	1.78
S13-18	Basin 13	10YR-8HR	4.00	17.77	20.54	0.0004	234	4.00	1.31	4.00	1.31
S13-18A	Basin 13	10YR-8HR	4.00	17.77	19.68	0.0004	115	4.00	0.32	4.09	0.37
S13-20	Basin 13	10YR-8HR	4.00	17.35	24.32	-0.0032	253	4.00	2.30	4.00	2.30
S13-202	Basin 13	10YR-8HR	4.00	26.13	30.77	0.0008	139	4.00	0.75	4.00	0.75
S13-210	Basin 13	10YR-8HR	4.00	24.53	29.50	0.0008	253	4.00	1.39	3.98	1.39
S13-24	Basin 13	10YR-8HR	4.00	25.93	28.96	-0.0044	206	4.00	1.50	3.99	1.50
S13-24A	Basin 13	10YR-8HR	4.00	26.73	29.64	0.0001	167	4.00	0.94	3.99	0.94
S13-25	Basin 13	10YR-8HR	3.90	0.95	6.00	0.0027	421	3.93	2.90	3.90	7.71
S13-3	Basin 13	10YR-8HR	3.61	22.70	27.71	-0.0046	116	4.00	0.96	3.61	1.39
S13-5	Basin 13	10YR-8HR	3.65	18.45	23.49	-0.0045	115	4.00	1.05	3.65	1.22
S13-7	Basin 13	10YR-8HR	4.00	14.15	19.06	-0.0042	119	4.00	1.50	3.98	1.50
S13-9	Basin 13	10YR-8HR	4.00	13.73	18.68	-0.0049	118	4.00	1.15	3.99	1.15
AREA1A	Basin 13	25YR-72HR	60.09	4.16	6.00	0.0161	10789	60.02	29.13	60.09	26.47
AREA1C	Basin 13	25YR-72HR	92.91	3.62	6.00	0.0004	129200	60.02	59.64	60.84	16.92
B13-204	Basin 13	25YR-72HR	60.02	14.37	19.13	-0.0032	124	60.02	2.60	60.02	2.60
B13-205	Basin 13	25YR-72HR	60.02	14.31	18.78	-0.0032	123	60.02	2.29	60.02	2.29
B13-206	Basin 13	25YR-72HR	60.02	14.38	19.02	-0.0040	124	60.02	2.67	60.02	2.67
B13-207	Basin 13	25YR-72HR	60.02	15.56	20.63	-0.0037	126	60.02	3.60	60.02	3.59
B13-208	Basin 13	25YR-72HR	60.02	23.41	26.67	-0.0031	133	60.02	2.79	60.02	2.79
B13-209	Basin 13	25YR-72HR	60.02	24.52	29.51	-0.0033	134	60.02	3.54	60.02	3.53
EX13-38	Basin 13	25YR-72HR	60.07	1.23	6.00	-0.0060	135	60.09	4.25	60.10	7.10
EX13-40	Basin 13	25YR-72HR	60.07	1.22	6.00	0.0020	430	60.07	27.61	60.07	24.92
GWT_13	Basin 13	25YR-72HR	72.00	2.20	99.00	0.0002	0	60.07	32.64	0.00	0.00
MIAMI_CANAL_2.5	Basin 13	25YR-72HR	0.00	0.95	99.00	0.0000	13	60.07	24.93	0.00	0.00
NODE-13B	Basin 13	25YR-72HR	60.04	4.29	6.00	0.0077	6797	60.02	31.92	60.04	31.55
POND13-1	Basin 13	25YR-72HR	96.00	3.62	6.00	0.0013	152659	60.05	34.59	0.00	0.00
S13-1	Basin 13	25YR-72HR	60.02	25.65	30.29	-0.0049	131	60.02	2.92	60.02	2.91
S13-11	Basin 13	25YR-72HR	60.02	14.32	19.03	-0.0042	121	60.02	2.29	60.02	2.29
S13-13	Basin 13	25YR-72HR	60.02	16.64	21.33	-0.0049	122	60.02	3.35	60.02	3.35
S13-15	Basin 13	25YR-72HR	60.02	21.98	26.92	0.0049	121	60.02	2.05	60.02	2.04
S13-17	Basin 13	25YR-72HR	60.02	24.59	29.18	-0.0048	128	60.02	4.09	60.02	4.09
S13-18	Basin 13	25YR-72HR	60.04	18.21	20.54	-0.0007	223	60.02	3.03	60.04	3.02
S13-18A	Basin 13	25YR-72HR	60.04	18.22	19.68	-0.0007	115	60.02	0.74	60.05	0.74
S13-20	Basin 13	25YR-72HR	60.04	17.89	24.32	-0.0040	248	60.02	5.30	60.03	5.29

Qpost = 24.93 cfs <
Qpre = 25.31 cfs

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S13-202	Basin 13	25YR-72HR	60.02	26.38	30.77	0.0004	142	60.02	1.74	60.02	1.73
S13-210	Basin 13	25YR-72HR	60.02	24.90	29.50	0.0006	260	60.02	3.23	60.02	3.22
S13-24	Basin 13	25YR-72HR	60.03	26.32	28.96	-0.0044	219	60.02	3.47	60.03	3.46
S13-24A	Basin 13	25YR-72HR	60.02	27.02	29.64	0.0005	172	60.02	2.17	60.02	2.17
S13-25	Basin 13	25YR-72HR	60.07	1.00	6.00	-0.0018	421	60.07	24.92	60.07	24.93
S13-3	Basin 13	25YR-72HR	60.02	22.89	27.71	-0.0047	124	60.02	2.23	60.02	2.23
S13-5	Basin 13	25YR-72HR	60.02	18.72	23.49	-0.0045	123	60.02	2.42	60.02	2.42
S13-7	Basin 13	25YR-72HR	60.02	14.54	19.06	-0.0048	122	60.02	3.47	60.02	3.47
S13-9	Basin 13	25YR-72HR	60.02	14.06	18.68	-0.0049	122	60.02	2.67	60.02	2.66

==========
==== Basins ====
==========

Name: B-13B | Node: NODE-13B | Status: Onsite
Group: Basin 13 | Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 | Peaking Factor: 256.0
Rainfall File: | Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 | Time of Conc(min): 10.00
Area(ac): 0.740 | Time Shift(hrs): 0.00
Curve Number: 61.00 | Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B13-1 | Node: S13-1 | Status: Onsite
Group: Basin 13 | Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 | Peaking Factor: 256.0
Rainfall File: | Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 | Time of Conc(min): 10.00
Area(ac): 0.470 | Time Shift(hrs): 0.00
Curve Number: 96.00 | Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B13-11 | Node: S13-11 | Status: Onsite
Group: Basin 13 | Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 | Peaking Factor: 256.0
Rainfall File: | Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 | Time of Conc(min): 10.00
Area(ac): 0.370 | Time Shift(hrs): 0.00
Curve Number: 96.00 | Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B13-13 | Node: S13-13 | Status: Onsite
Group: Basin 13 | Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 | Peaking Factor: 256.0
Rainfall File: | Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 | Time of Conc(min): 10.00
Area(ac): 0.540 | Time Shift(hrs): 0.00
Curve Number: 96.00 | Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B13-15 | Node: S13-15 | Status: Onsite
Group: Basin 13 | Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 | Peaking Factor: 256.0
Rainfall File: | Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 | Time of Conc(min): 10.00
Area(ac): 0.330 | Time Shift(hrs): 0.00
Curve Number: 96.00 | Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B13-17 | Node: S13-17 | Status: Onsite
Group: Basin 13 | Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 | Peaking Factor: 256.0
Rainfall File: | Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 | Time of Conc(min): 10.00

```
            Area(ac): 0.660                 Time Shift(hrs): 0.00
        Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B13-18                   Node: S13-18                Status: Onsite
        Group: Basin 13                 Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                   Peaking Factor: 256.0
         Rainfall File:                     Storm Duration(hrs): 0.00
  Rainfall Amount(in): 0.000                  Time of Conc(min): 10.00
            Area(ac): 0.370                   Time Shift(hrs): 0.00
        Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B13-18A                  Node: S13-18A               Status: Onsite
        Group: Basin 13                 Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                   Peaking Factor: 256.0
         Rainfall File:                     Storm Duration(hrs): 0.00
  Rainfall Amount(in): 0.000                  Time of Conc(min): 10.00
            Area(ac): 0.120                   Time Shift(hrs): 0.00
        Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B13-20                   Node: S13-20                Status: Onsite
        Group: Basin 13                 Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                   Peaking Factor: 256.0
         Rainfall File:                     Storm Duration(hrs): 0.00
  Rainfall Amount(in): 0.000                  Time of Conc(min): 10.00
            Area(ac): 0.370                   Time Shift(hrs): 0.00
        Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B13-202                  Node: S13-202               Status: Onsite
        Group: Basin 13                 Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                   Peaking Factor: 256.0
         Rainfall File:                     Storm Duration(hrs): 0.00
  Rainfall Amount(in): 0.000                  Time of Conc(min): 10.00
            Area(ac): 0.280                   Time Shift(hrs): 0.00
        Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B13-203                  Node: NODE-13B              Status: Onsite
        Group: Basin 13                 Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                   Peaking Factor: 256.0
         Rainfall File:                     Storm Duration(hrs): 0.00
  Rainfall Amount(in): 0.000                  Time of Conc(min): 10.00
            Area(ac): 0.640                   Time Shift(hrs): 0.00
        Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B13-204                  Node: B13-204               Status: Onsite
        Group: Basin 13                 Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                   Peaking Factor: 256.0
```

Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.420 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B13-205 Node: B13-205 Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.370 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B13-206 Node: B13-206 Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.430 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B13-207 Node: B13-207 Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.580 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B13-208 Node: B13-208 Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.450 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B13-209 Node: B13-209 Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.570 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B13-210 Node: S13-210 Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.520 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B13-22 Node: POND13-1 Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.390 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B13-24 Node: S13-24 Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.210 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B13-24A Node: S13-24A Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.350 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B13-3 Node: S13-3 Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.360 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B13-5 Node: S13-5 Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.390 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B13-7 Node: S13-7 Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.560 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B13-9 Node: S13-9 Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.430 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BPOND13-1 Node: POND13-1 Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 2.430 Time Shift(hrs): 0.00
Curve Number: 61.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX13-1 Node: NODE-13B Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.370 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX13-39 Node: AREA1A Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.740 Time Shift(hrs): 0.00
Curve Number: 61.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX13-4 Node: NODE-13B Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.450 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

```
---------------------------------------------------------------------------------------------
        Name: BX13-46                 Node: AREA1C                Status: Onsite
       Group: Basin 13                Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                  Peaking Factor: 256.0
         Rainfall File:                 Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
            Area(ac): 0.520                Time Shift(hrs): 0.00
        Curve Number: 96.00            Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


---------------------------------------------------------------------------------------------
        Name: BX13-47                 Node: AREA1C                Status: Onsite
       Group: Basin 13                Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                  Peaking Factor: 256.0
         Rainfall File:                 Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
            Area(ac): 0.530                Time Shift(hrs): 0.00
        Curve Number: 96.00            Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


---------------------------------------------------------------------------------------------
        Name: BX13-51                 Node: AREA1C                Status: Onsite
       Group: Basin 13                Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                  Peaking Factor: 256.0
         Rainfall File:                 Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
            Area(ac): 0.530                Time Shift(hrs): 0.00
        Curve Number: 96.00            Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


---------------------------------------------------------------------------------------------
        Name: BX13-54                 Node: AREA1C                Status: Onsite
       Group: Basin 13                Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                  Peaking Factor: 256.0
         Rainfall File:                 Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
            Area(ac): 0.400                Time Shift(hrs): 0.00
        Curve Number: 96.00            Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


---------------------------------------------------------------------------------------------
        Name: BX13-58                 Node: AREA1C                Status: Onsite
       Group: Basin 13                Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                  Peaking Factor: 256.0
         Rainfall File:                 Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
            Area(ac): 7.010                Time Shift(hrs): 0.00
        Curve Number: 67.00            Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


---------------------------------------------------------------------------------------------
        Name: BX13-64                 Node: POND13-1              Status: Onsite
       Group: Basin 13                Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                  Peaking Factor: 256.0
         Rainfall File:                 Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
            Area(ac): 0.220                Time Shift(hrs): 0.00
        Curve Number: 96.00            Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00
```

Name: BX13-71 Node: AREA1C Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.250 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX13-73 Node: AREA1C Status: Onsite
Group: Basin 13 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 1.080 Time Shift(hrs): 0.00
Curve Number: 61.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

==========
==== Nodes ==========
==========

Name: AREA1A Base Flow(cfs): 0.000 Init Stage(ft): 0.950
Group: Basin 13 Warn Stage(ft): 6.000
Type: Stage/Area

Stage(ft)	Area(ac)
0.950	0.0004
2.990	0.0004
3.000	0.0600
5.000	0.3800
6.000	0.5000

Name: AREA1C Base Flow(cfs): 0.000 Init Stage(ft): 0.950
Group: Basin 13 Warn Stage(ft): 6.000
Type: Stage/Area

Stage(ft)	Area(ac)
0.950	0.0004
1.950	2.7400
3.650	2.9600
5.000	3.1400
6.000	3.2700

Name: B13-204 Base Flow(cfs): 0.000 Init Stage(ft): 12.000
Group: Basin 13 Warn Stage(ft): 19.130
Type: Stage/Area

Stage(ft)	Area(ac)
12.000	0.0004
19.130	0.0004

Name: B13-205 Base Flow(cfs): 0.000 Init Stage(ft): 12.000

Group: Basin 13 Warn Stage(ft): 18.780
Type: Stage/Area

Stage(ft)	Area(ac)
12.000	0.0004
18.780	0.0004

Name: B13-206 Base Flow(cfs): 0.000 Init Stage(ft): 13.000
Group: Basin 13 Warn Stage(ft): 19.020
Type: Stage/Area

Stage(ft)	Area(ac)
13.000	0.0004
19.020	0.0004

Name: B13-207 Base Flow(cfs): 0.000 Init Stage(ft): 13.000
Group: Basin 13 Warn Stage(ft): 20.630
Type: Stage/Area

Stage(ft)	Area(ac)
13.000	0.0004
20.630	0.0004

Name: B13-208 Base Flow(cfs): 0.000 Init Stage(ft): 21.000
Group: Basin 13 Warn Stage(ft): 26.670
Type: Stage/Area

Stage(ft)	Area(ac)
21.000	0.0004
26.670	0.0004

Name: B13-209 Base Flow(cfs): 0.000 Init Stage(ft): 22.000
Group: Basin 13 Warn Stage(ft): 29.510
Type: Stage/Area

Stage(ft)	Area(ac)
22.000	0.0004
29.510	0.0004

Name: EX13-38 Base Flow(cfs): 0.000 Init Stage(ft): 0.950
Group: Basin 13 Warn Stage(ft): 6.000
Type: Stage/Area

Stage(ft)	Area(ac)
0.950	0.0004
3.950	0.0004

Name: EX13-40 Base Flow(cfs): 0.000 Init Stage(ft): 0.950
Group: Basin 13 Warn Stage(ft): 6.000
Type: Stage/Area

Stage(ft)	Area(ac)
0.950	0.0004
3.700	0.0004

Name: GWT_13 Base Flow(cfs): 0.000 Init Stage(ft): 0.950
Group: Basin 13 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	0.950
108.00	0.950

Name: MIAMI_CANAL_2.5 Base Flow(cfs): 0.000 Init Stage(ft): 0.950
Group: Basin 13 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	0.950
108.00	0.950

Name: NODE-13B Base Flow(cfs): 0.000 Init Stage(ft): 0.950
Group: Basin 13 Warn Stage(ft): 6.000
Type: Stage/Area

Stage(ft)	Area(ac)
0.950	0.0004
1.940	0.0004
1.950	0.0100
3.700	0.1100
3.950	0.1200
4.450	0.1700
5.000	0.2100
6.000	0.2800

Name: POND13-1 Base Flow(cfs): 0.000 Init Stage(ft): 0.950
Group: Basin 13 Warn Stage(ft): 6.000
Type: Stage/Area

Stage(ft)	Area(ac)
0.950	0.0004
1.950	3.2000
3.650	3.5000
5.000	3.7500
6.000	3.9400

Name: S13-1 Base Flow(cfs): 0.000 Init Stage(ft): 25.250
Group: Basin 13 Warn Stage(ft): 30.290
Type: Stage/Area

Stage(ft)	Area(ac)
25.200	0.0004
30.290	0.0004

Name: S13-11 Base Flow(cfs): 0.000 Init Stage(ft): 14.000
Group: Basin 13 Warn Stage(ft): 19.030
Type: Stage/Area

Stage(ft)	Area(ac)
13.000	0.0004
19.030	0.0004

Name: S13-13 Base Flow(cfs): 0.000 Init Stage(ft): 16.300
Group: Basin 13 Warn Stage(ft): 21.330
Type: Stage/Area

Stage(ft)	Area(ac)
15.300	0.0004
21.330	0.0004

Name: S13-15 Base Flow(cfs): 0.000 Init Stage(ft): 21.900
Group: Basin 13 Warn Stage(ft): 26.920
Type: Stage/Area

Stage(ft)	Area(ac)
20.900	0.0004
26.920	0.0004

Name: S13-17 Base Flow(cfs): 0.000 Init Stage(ft): 24.150
Group: Basin 13 Warn Stage(ft): 29.180
Type: Stage/Area

Stage(ft)	Area(ac)
23.000	0.0004
29.180	0.0004

Name: S13-18 Base Flow(cfs): 0.000 Init Stage(ft): 16.150
Group: Basin 13 Warn Stage(ft): 20.540
Type: Stage/Area

Stage(ft)	Area(ac)
14.150	0.0004
20.540	0.0004

Name: S13-18A Base Flow(cfs): 0.000 Init Stage(ft): 16.250
Group: Basin 13 Warn Stage(ft): 19.680
Type: Stage/Area

Stage(ft)	Area(ac)
14.250	0.0004
19.680	0.0004

Name: S13-20 Base Flow(cfs): 0.000 Init Stage(ft): 16.850
Group: Basin 13 Warn Stage(ft): 24.320
Type: Stage/Area

Stage(ft)	Area(ac)
14.850	0.0004
24.320	0.0004

Name: S13-202 Base Flow(cfs): 0.000 Init Stage(ft): 23.700
Group: Basin 13 Warn Stage(ft): 30.770
Type: Stage/Area

Stage(ft)	Area(ac)
23.700	0.0004
30.770	0.0004

Name: S13-210 Base Flow(cfs): 0.000 Init Stage(ft): 23.000
Group: Basin 13 Warn Stage(ft): 29.500
Type: Stage/Area

Stage(ft)	Area(ac)
23.000	0.0004
29.500	0.0004

Name: S13-24 Base Flow(cfs): 0.000 Init Stage(ft): 25.550
Group: Basin 13 Warn Stage(ft): 28.960
Type: Stage/Area

Stage(ft)	Area(ac)
23.550	0.0004
28.960	0.0004

Name: S13-24A Base Flow(cfs): 0.000 Init Stage(ft): 26.250
Group: Basin 13 Warn Stage(ft): 29.640
Type: Stage/Area

Stage(ft)	Area(ac)
24.250	0.0004
29.640	0.0004

Name: S13-25 Base Flow(cfs): 0.000 Init Stage(ft): 0.950
Group: Basin 13 Warn Stage(ft): 6.000
Type: Stage/Area

Stage(ft)	Area(ac)
0.950	0.0004
3.650	0.0004

Name: S13-3 Base Flow(cfs): 0.000 Init Stage(ft): 22.700
Group: Basin 13 Warn Stage(ft): 27.710
Type: Stage/Area

Stage(ft)	Area(ac)

21.700	0.0004
27.710	0.0004

Name: S13-5 Base Flow(cfs): 0.000 Init Stage(ft): 18.450
Group: Basin 13 Warn Stage(ft): 23.490
Type: Stage/Area

Stage(ft)	Area(ac)
17.450	0.0004
23.490	0.0004

Name: S13-7 Base Flow(cfs): 0.000 Init Stage(ft): 14.000
Group: Basin 13 Warn Stage(ft): 19.060
Type: Stage/Area

Stage(ft)	Area(ac)
13.000	0.0004
19.060	0.0004

Name: S13-9 Base Flow(cfs): 0.000 Init Stage(ft): 13.650
Group: Basin 13 Warn Stage(ft): 18.680
Type: Stage/Area

Stage(ft)	Area(ac)
12.650	0.0004
18.680	0.0004

==========
==== Operating Tables ====
==========

Name: E_OPT_13 Group: Basin 13
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
0.950	0.95	0.00
0.950	1.95	0.05
0.950	2.20	0.07
0.950	6.00	0.10
2.200	2.20	0.00
2.200	6.00	0.10

==========
==== Pipes ====
==========

Name: AREA1C_POND13-1 From Node: AREA1C Length(ft): 106.00
Group: Basin 13 To Node: POND13-1 Count: 2
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	48.00	48.00	Flow:	Both
Rise(in):	48.00	48.00	Entrance Loss Coef:	0.50
Invert(ft):	1.950	1.950	Exit Loss Coef:	1.00
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	B13-204_13B	From Node: B13-204	Length(ft):	18.00
Group:	Basin 13	To Node: NODE-13B	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	0.50
Invert(ft):	14.000	2.100	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	B13-205_13B	From Node: B13-205	Length(ft):	18.00
Group:	Basin 13	To Node: NODE-13B	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	0.50
Invert(ft):	14.000	2.100	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	B13-206_13B	From Node: B13-206	Length(ft):	18.00
Group:	Basin 13	To Node: NODE-13B	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	0.50
Invert(ft):	14.000	2.100	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	B13-207_13B	From Node: B13-207	Length(ft): 20.00
Group:	Basin 13	To Node: NODE-13B	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.50
Invert(ft):	15.000	2.100	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	B13-208_13B	From Node: B13-208	Length(ft): 32.00
Group:	Basin 13	To Node: NODE-13B	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.50
Invert(ft):	23.000	2.100	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	B13-209_13B	From Node: B13-209	Length(ft): 32.00
Group:	Basin 13	To Node: NODE-13B	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.50
Invert(ft):	24.000	2.100	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	B13-210_AREA1C	From Node: S13-210	Length(ft): 210.00
Group:	Basin 13	To Node: AREA1C	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both

Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.50
Invert(ft):	24.000	2.100	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: EX13-38_EX13-40 From Node: EX13-38 Length(ft): 223.00
Group: Basin 13 To Node: EX13-40 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM	
Geometry:	Circular	Circular	Solution Algorithm: Most Restrictive
Span(in):	48.00	48.00	Flow: Both
Rise(in):	48.00	48.00	Entrance Loss Coef: 0.50
Invert(ft):	-3.860	-4.300	Exit Loss Coef: 1.46
Manning's N:	0.012000	0.012000	Bend Loss Coef: 0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec: Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
			Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: EX13-40_S13-25 From Node: EX13-40 Length(ft): 2360.00
Group: Basin 13 To Node: S13-25 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM	
Geometry:	Circular	Circular	Solution Algorithm: Most Restrictive
Span(in):	60.00	60.00	Flow: Both
Rise(in):	60.00	60.00	Entrance Loss Coef: 0.50
Invert(ft):	-5.590	-9.090	Exit Loss Coef: 1.00
Manning's N:	0.012000	0.012000	Bend Loss Coef: 0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec: Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
			Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: P13-25_OUT From Node: S13-25 Length(ft): 106.00
Group: Basin 13 To Node: MIAMI_CANAL_2.5 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM	
Geometry:	Circular	Circular	Solution Algorithm: Most Restrictive
Span(in):	60.00	60.00	Flow: Both
Rise(in):	60.00	60.00	Entrance Loss Coef: 0.50
Invert(ft):	-9.090	-9.330	Exit Loss Coef: 1.00
Manning's N:	0.012000	0.012000	Bend Loss Coef: 0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec: Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
			Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S13-11_AREA1A	From Node:	S13-11	Length(ft):	14.00
Group:	Basin 13	To Node:	AREA1A	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	1.00
Invert(ft):	14.000	5.000		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S13-13_AREA1A	From Node:	S13-13	Length(ft):	15.00
Group:	Basin 13	To Node:	AREA1A	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	1.00
Invert(ft):	16.300	3.000		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S13-15_AREA1A	From Node:	S13-15	Length(ft):	21.00
Group:	Basin 13	To Node:	AREA1A	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	1.00
Invert(ft):	21.900	3.000		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S13-17_AREA1A	From Node:	S13-17	Length(ft):	23.00
Group:	Basin 13	To Node:	AREA1A	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	1.00
Invert(ft):	24.150	3.000		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S13-18_S13-20	From Node:	S13-18	Length(ft):	162.00
Group:	Basin 13	To Node:	S13-20	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	1.46
Invert(ft):	17.100	16.850		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S13-18A_S13-18	From Node:	S13-18A	Length(ft):	54.00
Group:	Basin 13	To Node:	S13-18	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	0.10
Invert(ft):	16.250	16.150		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S13-1_AREA1A	From Node:	S13-1	Length(ft):	29.00
Group:	Basin 13	To Node:	AREA1A	Count:	1
				Friction Equation:	Automatic

	UPSTREAM	DOWNSTREAM		
			Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.00
Invert(ft):	25.250	5.000	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S13-202	From Node: S13-202	Length(ft): 40.00
Group:	Basin 13	To Node: NODE-13B	Count: 1
			Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
			Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	0.50
Invert(ft):	25.700	25.500	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S13-20_POND13-1	From Node: S13-20	Length(ft): 37.00
Group:	Basin 13	To Node: POND13-1	Count: 1
			Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
			Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.00
Invert(ft):	16.850	1.950	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S13-24_POND13-1	From Node: S13-24	Length(ft): 71.00
Group:	Basin 13	To Node: POND13-1	Count: 1
			Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
			Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.00
Invert(ft):	25.550	1.950	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn

Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S13-24A_S13-24	From Node: S13-24A	Length(ft): 80.00
Group:	Basin 13	To Node: S13-24	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 1.46
Invert(ft):	26.250	25.550	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S13-3_AREA1A	From Node: S13-3	Length(ft): 22.00
Group:	Basin 13	To Node: AREA1A	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 1.00
Invert(ft):	22.700	5.000	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S13-5_AREA1A	From Node: S13-5	Length(ft): 18.00
Group:	Basin 13	To Node: AREA1A	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 1.00
Invert(ft):	18.450	5.000	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S13-7_AREA1A	From Node:	S13-7
Group:	Basin 13	To Node:	AREA1A

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	14.000	5.000
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Length(ft):	14.00
Count:	1
Friction Equation:	Automatic
Solution Algorithm:	Most Restrictive
Flow:	Both
Entrance Loss Coef:	0.50
Exit Loss Coef:	1.00
Bend Loss Coef:	0.00
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S13-9_AREA1A	From Node:	S13-9
Group:	Basin 13	To Node:	AREA1A

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	13.650	5.000
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Length(ft):	14.00
Count:	1
Friction Equation:	Automatic
Solution Algorithm:	Most Restrictive
Flow:	Both
Entrance Loss Coef:	0.50
Exit Loss Coef:	1.00
Bend Loss Coef:	0.00
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

==========
==== Weirs ==========
==========

Name:	W13-25	From Node:	POND13-1
Group:	Basin 13	To Node:	S13-25
Flow:	Both	Count:	1
Type:	Horizontal	Geometry:	Rectangular

Span(in):	54.00
Rise(in):	36.00
Invert(ft):	3.650
Control Elevation(ft):	3.650
	TABLE
Bottom Clip(in):	0.000
Top Clip(in):	0.000
Weir Discharge Coef:	3.130
Orifice Discharge Coef:	0.600

Name:	WEX13-38	From Node:	AREA1A
Group:	Basin 13	To Node:	EX13-38
Flow:	Both	Count:	1

```
         Type: Horizontal           Geometry: Rectangular

                    Span(in): 42.00
                    Rise(in): 42.00
                  Invert(ft): 3.950
       Control Elevation(ft): 3.950
                                          TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 3.130
       Orifice Discharge Coef: 0.600



------------------------------------------------------------------------------------------------------
         Name: WEX13-40            From Node: NODE-13B
        Group: Basin 13              To Node: EX13-40
         Flow: Both                    Count: 1
         Type: Horizontal           Geometry: Rectangular

                    Span(in): 54.00
                    Rise(in): 36.00
                  Invert(ft): 3.700
       Control Elevation(ft): 3.700
                                          TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 3.130
       Orifice Discharge Coef: 0.600



==============================================================================================
==== Rating Curves ===========================================================================
==============================================================================================

         Name: AREA1A_EXF          From Node: AREA1A                  Count: 324
        Group: Basin 13              To Node: GWT_13                   Flow: Both

               TABLE           ELEV ON(ft)     ELEV OFF(ft)
           #1: E_OPT_13        0.950           0.950
           #2:                 0.000           0.000
           #3:                 0.000           0.000
           #4:                 0.000           0.000



------------------------------------------------------------------------------------------------------
         Name: NODE-13B_EXF        From Node: NODE-13B                Count: 146
        Group: Basin 13              To Node: GWT_13                   Flow: Both

               TABLE           ELEV ON(ft)     ELEV OFF(ft)
           #1: E_OPT_13        0.950           0.950
           #2:                 0.000           0.000
           #3:                 0.000           0.000
           #4:                 0.000           0.000



==============================================================================================
==== Hydrology Simulations ===================================================================
==============================================================================================

         Name: 100YR-1HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 1.00
          Rainfall File: Fdot-1
    Rainfall Amount(in): 5.00

Time(hrs)       Print Inc(min)
--------------- ---------------
1.000           1.00
1.330           1.00
```

```
-------------------------------------------------------------------------------------------------
         Name: 100YR-24HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Fdot-24
    Rainfall Amount(in): 13.44

Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.00
16.000          1.00
24.000          5.00
24.330          5.00

-------------------------------------------------------------------------------------------------
         Name: 100YR-8HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 8.00
          Rainfall File: Fdot-8
    Rainfall Amount(in): 9.60

Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           5.00
6.000           1.00
8.000           5.00
8.330           5.00

-------------------------------------------------------------------------------------------------
         Name: 10YR-1HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 1.00
          Rainfall File: Fdot-1
    Rainfall Amount(in): 3.50

Time(hrs)       Print Inc(min)
--------------- ---------------
1.000           1.00
1.330           1.00

-------------------------------------------------------------------------------------------------
         Name: 10YR-24HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Fdot-24
    Rainfall Amount(in): 8.88

Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.00
16.000          1.00
24.000          5.00
24.330          5.00

-------------------------------------------------------------------------------------------------
         Name: 10YR-8HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 8.00
          Rainfall File: Fdot-8
    Rainfall Amount(in): 6.40

Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           5.00
6.000           1.00
8.000           5.00
```

8.330 5.00

Name: 25YR-72HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Sfwmd72
Rainfall Amount(in): 14.00

Time(hrs)	Print Inc(min)
48.000	15.00
56.000	5.00
64.000	1.00
72.000	5.00
72.330	5.00

==========
==== Routing Simulations ==========
==========

Name: 100YR-1HR Hydrology Sim: 100YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.01000
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 25.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
1.000	1.000
25.000	15.000

Group	Run
Basin 13	Yes

Name: 100YR-24HR Hydrology Sim: 100YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 48.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 24HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
48.000	15.000

Group	Run
Basin 13	Yes

Name: 100YR-8HR Hydrology Sim: 100YR-8HR

Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 36.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 8HR Boundary Flows:

Time(hrs)	Print Inc(min)
2.000	5.000
6.000	1.000
8.000	5.000
36.000	15.000

Group	Run
Basin 13	Yes

Name: 10YR-1HR Hydrology Sim: 10YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 25.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
1.000	1.000
25.000	15.000

Group	Run
Basin 13	Yes

Name: 10YR-24HR Hydrology Sim: 10YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 48.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 24HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
48.000	5.000

Group	Run
Basin 13	Yes

```
---------------------------------------------------------------------------------------------------
         Name: 10YR-8HR            Hydrology Sim: 10YR-8HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 36.00
     Min Calc Time(sec): 0.5000               Max Calc Time(sec): 60.0000
        Boundary Stages: 8HR                     Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           5.000
6.000           1.000
8.000           5.000
36.000          15.000

Group           Run
--------------- -----
Basin 13        Yes


---------------------------------------------------------------------------------------------------
         Name: 25YR-72HR           Hydrology Sim: 25YR-72HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 96.00
     Min Calc Time(sec): 0.5000               Max Calc Time(sec): 60.0000
        Boundary Stages: 72HR                    Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.000
16.000          1.000
24.000          5.000
96.000          15.000

Group           Run
--------------- -----
Basin 13        Yes


===================================================================================================
==== Boundary Conditions ==========================================================================
===================================================================================================

      Name: 8HR                  Node: GWT_13               Type: Stage

      Time(hrs)       Stage(ft)
--------------- ---------------
          0.000           0.950
          1.000           0.980
          2.000           1.110
          3.000           1.300
          4.000           1.830
          5.000           2.030
          6.000           2.100
          7.000           2.160
          8.000           2.200
         12.000           0.950
         36.000           0.950

---------------------------------------------------------------------------------------------------
```

Name: 24HR Node: GWT_13 Type: Stage

Time(hrs)	Stage(ft)
0.000	0.950
1.000	0.960
2.000	0.990
3.000	1.030
4.000	1.060
5.000	1.100
6.000	1.150
7.000	1.200
8.000	1.250
9.000	1.330
10.000	1.400
11.000	1.500
12.000	1.630
13.000	1.710
14.000	1.790
15.000	1.860
16.000	1.930
17.000	1.980
18.000	2.030
19.000	2.080
20.000	2.110
21.000	2.150
22.000	2.180
23.000	2.190
24.000	2.200
36.000	0.950
48.000	0.950

Name: 72HR Node: GWT_13 Type: Stage

Time(hrs)	Stage(ft)
0.000	0.950
24.000	1.080
36.000	1.180
48.000	1.280
49.000	1.290
50.000	1.300
51.000	1.310
52.000	1.320
53.000	1.340
54.000	1.360
55.000	1.380
56.000	1.410
57.000	1.440
57.500	1.460
58.000	1.480
58.500	1.500
59.000	1.530
59.500	1.570
60.000	1.880
60.500	1.950
61.000	1.990
61.500	2.010
62.000	2.030
62.500	2.050
63.000	2.060
64.000	2.090
65.000	2.110
66.000	2.120
68.000	2.160
70.000	2.180
72.000	2.200
96.000	0.950

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	0.00	0.0	0.0	0.0	0.0	0.00
25YR-72HR	0.08	0.0	-0.1	0.1	0.0	0.00
25YR-72HR	0.18	0.0	-0.4	0.4	0.0	0.00
25YR-72HR	0.25	0.0	-0.3	0.3	0.0	0.00
25YR-72HR	0.33	0.0	-0.5	0.5	0.0	0.00
25YR-72HR	0.42	0.0	-0.8	0.8	0.0	0.00
25YR-72HR	0.50	0.0	-0.6	0.6	-0.0	-0.00
25YR-72HR	0.59	0.0	-0.8	0.8	-0.0	-0.00
25YR-72HR	0.67	0.0	-0.9	0.9	0.0	0.00
25YR-72HR	0.76	0.0	-1.0	1.0	0.0	0.00
25YR-72HR	0.84	0.0	-1.1	1.1	0.0	0.00
25YR-72HR	0.92	0.0	-1.2	1.2	0.0	0.00
25YR-72HR	1.01	0.0	-1.3	1.3	0.0	0.00
25YR-72HR	1.08	0.0	-1.4	1.4	0.0	0.00
25YR-72HR	1.17	0.0	-1.5	1.5	0.0	0.00
25YR-72HR	1.25	0.0	-1.7	1.7	-0.0	-0.00
25YR-72HR	1.34	0.4	-1.7	2.1	0.0	0.00
25YR-72HR	1.42	1.5	-1.2	2.6	-0.0	-0.00
25YR-72HR	1.50	3.3	2.8	0.4	0.0	0.00
25YR-72HR	1.58	7.5	3.2	4.3	0.0	0.00
25YR-72HR	1.67	15.4	4.9	10.5	0.0	0.00
25YR-72HR	1.75	27.3	10.2	17.2	0.0	0.00
25YR-72HR	1.83	43.6	17.1	26.5	0.0	0.00
25YR-72HR	1.92	64.8	25.2	39.6	0.0	0.00
25YR-72HR	2.00	90.8	35.7	55.2	0.0	0.00
25YR-72HR	2.08	121.8	48.3	73.5	0.0	0.00
25YR-72HR	2.17	157.7	63.0	94.7	0.0	0.00
25YR-72HR	2.25	198.6	79.5	119.1	0.0	0.00
25YR-72HR	2.33	244.1	97.8	146.4	0.0	0.00
25YR-72HR	2.42	294.5	118.4	176.1	0.0	0.00
25YR-72HR	2.50	349.2	140.6	208.6	0.0	0.00
25YR-72HR	2.58	408.5	164.5	243.9	0.0	0.00
25YR-72HR	2.67	471.9	190.2	281.7	0.0	0.00
25YR-72HR	2.75	539.5	218.0	321.5	0.0	0.00
25YR-72HR	2.83	610.9	247.1	363.8	0.0	0.00
25YR-72HR	2.92	686.2	277.3	408.8	0.0	0.00
25YR-72HR	3.00	765.3	310.1	455.2	0.0	0.00
25YR-72HR	3.08	847.9	343.5	504.4	0.0	0.00
25YR-72HR	3.17	934.2	379.1	555.2	0.0	0.00
25YR-72HR	3.25	1023.6	415.3	608.3	-0.0	-0.00
25YR-72HR	3.33	1116.5	453.3	663.2	-0.0	-0.00
25YR-72HR	3.42	1212.3	492.2	720.1	-0.0	-0.00
25YR-72HR	3.50	1311.5	533.0	778.5	-0.0	-0.00
25YR-72HR	3.58	1413.8	575.1	838.7	-0.0	-0.00
25YR-72HR	3.67	1518.6	617.3	901.3	-0.0	-0.00
25YR-72HR	3.75	1626.7	661.8	964.8	-0.0	-0.00
25YR-72HR	3.83	1737.4	707.3	1030.1	-0.0	-0.00
25YR-72HR	3.92	1850.7	753.7	1097.0	-0.0	-0.00
25YR-72HR	4.00	1966.5	801.0	1165.5	-0.0	-0.00
25YR-72HR	4.08	2085.1	849.5	1235.6	-0.0	-0.00
25YR-72HR	4.17	2206.1	899.2	1306.9	-0.0	-0.00
25YR-72HR	4.25	2329.4	949.2	1380.2	-0.0	-0.00
25YR-72HR	4.33	2455.1	1000.8	1454.3	-0.0	-0.00
25YR-72HR	4.42	2583.0	1053.3	1529.7	-0.0	-0.00
25YR-72HR	4.50	2713.2	1106.6	1606.6	-0.0	-0.00
25YR-72HR	4.58	2845.5	1159.9	1685.6	-0.0	-0.00
25YR-72HR	4.67	2979.9	1215.5	1764.4	0.0	0.00
25YR-72HR	4.75	3116.5	1271.3	1845.2	0.0	0.00
25YR-72HR	4.83	3254.9	1328.0	1926.9	0.0	0.00
25YR-72HR	4.92	3395.5	1385.5	2010.1	0.0	0.00
25YR-72HR	5.00	3537.7	1443.5	2094.3	0.0	0.00
25YR-72HR	5.08	3681.9	1506.2	2175.7	0.0	0.00
25YR-72HR	5.17	3827.8	1570.6	2257.2	0.0	0.00
25YR-72HR	5.25	3975.7	1635.9	2339.8	0.0	0.00
25YR-72HR	5.33	4125.3	1701.7	2423.6	0.0	0.00
25YR-72HR	5.42	4276.4	1768.2	2508.1	0.0	0.00
25YR-72HR	5.50	4429.0	1835.7	2593.3	0.0	0.00
25YR-72HR	5.58	4583.5	1903.6	2679.9	0.0	0.00
25YR-72HR	5.67	4739.5	1972.4	2767.1	0.0	0.00
25YR-72HR	5.75	4896.9	2041.6	2855.3	0.0	0.00
25YR-72HR	5.83	5056.0	2112.2	2943.8	0.0	0.00
25YR-72HR	5.92	5216.4	2182.8	3033.6	0.0	0.00
25YR-72HR	6.00	5378.3	2258.1	3120.2	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	6.08	5541.5	2342.5	3198.9	0.0	0.00
25YR-72HR	6.17	5706.2	2429.4	3276.8	0.0	0.00
25YR-72HR	6.25	5871.9	2516.5	3355.4	0.0	0.00
25YR-72HR	6.33	6039.5	2604.2	3435.3	0.0	0.00
25YR-72HR	6.42	6207.8	2692.3	3515.5	0.0	0.00
25YR-72HR	6.50	6377.7	2781.3	3596.4	0.0	0.00
25YR-72HR	6.58	6548.6	2871.2	3677.4	0.0	0.00
25YR-72HR	6.67	6720.7	2961.2	3759.5	-0.0	-0.00
25YR-72HR	6.75	6893.9	3054.4	3839.6	-0.0	-0.00
25YR-72HR	6.83	7068.5	3151.8	3916.7	-0.0	-0.00
25YR-72HR	6.92	7244.1	3249.4	3994.7	-0.0	-0.00
25YR-72HR	7.00	7420.8	3352.2	4068.6	-0.0	-0.00
25YR-72HR	7.08	7598.8	3457.0	4141.8	-0.0	-0.00
25YR-72HR	7.17	7777.7	3561.8	4215.9	-0.0	-0.00
25YR-72HR	7.25	7957.5	3667.2	4290.2	-0.0	-0.00
25YR-72HR	7.33	8138.2	3774.3	4363.9	-0.0	-0.00
25YR-72HR	7.42	8320.1	3882.3	4437.8	-0.0	-0.00
25YR-72HR	7.50	8502.9	3995.2	4507.7	-0.0	-0.00
25YR-72HR	7.58	8687.0	4108.1	4578.9	-0.0	-0.00
25YR-72HR	7.67	8871.3	4221.6	4649.7	-0.0	-0.00
25YR-72HR	7.75	9057.0	4336.1	4720.9	-0.0	-0.00
25YR-72HR	7.83	9243.5	4450.5	4792.9	-0.0	-0.00
25YR-72HR	7.92	9431.1	4566.7	4864.4	-0.0	-0.00
25YR-72HR	8.00	9619.2	4682.1	4937.1	-0.0	-0.00
25YR-72HR	8.08	9808.2	4798.4	5009.9	-0.0	-0.00
25YR-72HR	8.10	9846.4	4822.2	5024.2	-0.0	-0.00
25YR-72HR	8.12	9884.4	4845.3	5039.1	-0.0	-0.00
25YR-72HR	8.13	9922.3	4868.6	5053.6	-0.0	-0.00
25YR-72HR	8.15	9960.2	4892.2	5068.0	-0.0	-0.00
25YR-72HR	8.17	9998.2	4915.2	5083.0	-0.0	-0.00
25YR-72HR	8.18	10036.6	4939.1	5097.5	-0.0	-0.00
25YR-72HR	8.20	10074.4	4962.2	5112.2	-0.0	-0.00
25YR-72HR	8.22	10112.7	4985.9	5126.8	-0.0	-0.00
25YR-72HR	8.23	10150.7	5009.2	5141.5	-0.0	-0.00
25YR-72HR	8.25	10189.2	5033.1	5156.1	-0.0	-0.00
25YR-72HR	8.27	10227.2	5056.2	5171.0	-0.0	-0.00
25YR-72HR	8.28	10265.5	5079.9	5185.6	-0.0	-0.00
25YR-72HR	8.30	10303.8	5103.4	5200.4	-0.0	-0.00
25YR-72HR	8.32	10342.4	5126.9	5215.5	-0.0	-0.00
25YR-72HR	8.33	10380.7	5150.6	5230.1	-0.0	-0.00
25YR-72HR	8.35	10419.0	5174.6	5244.4	-0.0	-0.00
25YR-72HR	8.37	10457.3	5197.9	5259.4	-0.0	-0.00
25YR-72HR	8.38	10495.8	5221.4	5274.4	-0.0	-0.00
25YR-72HR	8.40	10534.4	5245.6	5288.9	-0.0	-0.00
25YR-72HR	8.42	10572.8	5269.0	5303.9	-0.0	-0.00
25YR-72HR	8.43	10611.7	5292.9	5318.8	-0.0	-0.00
25YR-72HR	8.45	10650.1	5316.8	5333.3	-0.0	-0.00
25YR-72HR	8.47	10688.6	5340.5	5348.0	-0.0	-0.00
25YR-72HR	8.48	10727.2	5364.5	5362.7	-0.0	-0.00
25YR-72HR	8.50	10765.9	5388.1	5377.8	-0.0	-0.00
25YR-72HR	8.52	10804.8	5411.8	5393.0	-0.0	-0.00
25YR-72HR	8.53	10843.4	5436.0	5407.4	-0.0	-0.00
25YR-72HR	8.55	10882.3	5459.2	5423.1	-0.0	-0.00
25YR-72HR	8.57	10921.0	5483.5	5437.5	-0.0	-0.00
25YR-72HR	8.58	10959.9	5507.7	5452.2	-0.0	-0.00
25YR-72HR	8.60	10998.6	5531.0	5467.7	-0.0	-0.00
25YR-72HR	8.62	11037.5	5555.2	5482.3	0.0	0.00
25YR-72HR	8.63	11076.7	5579.1	5497.6	-0.0	-0.00
25YR-72HR	8.65	11115.6	5603.7	5511.9	-0.0	-0.00
25YR-72HR	8.67	11154.6	5627.8	5526.8	-0.0	-0.00
25YR-72HR	8.68	11193.7	5651.6	5542.1	-0.0	-0.00
25YR-72HR	8.70	11232.4	5676.1	5556.3	-0.0	-0.00
25YR-72HR	8.72	11271.6	5700.8	5570.8	-0.0	-0.00
25YR-72HR	8.73	11310.8	5725.3	5585.5	-0.0	-0.00
25YR-72HR	8.75	11349.7	5749.4	5600.3	-0.0	-0.00
25YR-72HR	8.77	11389.1	5774.7	5614.4	-0.0	-0.00
25YR-72HR	8.78	11428.3	5799.2	5629.0	-0.0	-0.00
25YR-72HR	8.80	11467.2	5824.0	5643.2	-0.0	-0.00
25YR-72HR	8.82	11506.7	5848.8	5657.9	-0.0	-0.00
25YR-72HR	8.83	11545.9	5873.7	5672.2	-0.0	-0.00
25YR-72HR	8.85	11585.0	5898.7	5686.3	-0.0	-0.00
25YR-72HR	8.87	11624.7	5924.1	5700.6	-0.0	-0.00
25YR-72HR	8.88	11663.8	5948.5	5715.3	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	8.90	11703.2	5973.9	5729.3	-0.0	-0.00
25YR-72HR	8.92	11742.4	5998.9	5743.5	-0.0	-0.00
25YR-72HR	8.93	11781.9	6023.9	5757.9	-0.0	-0.00
25YR-72HR	8.95	11821.6	6049.2	5772.4	-0.0	-0.00
25YR-72HR	8.97	11861.2	6074.3	5786.9	-0.0	-0.00
25YR-72HR	8.98	11900.5	6099.5	5801.1	-0.0	-0.00
25YR-72HR	9.00	11939.9	6124.1	5815.8	-0.0	-0.00
25YR-72HR	9.02	11979.5	6149.8	5829.8	-0.0	-0.00
25YR-72HR	9.03	12019.1	6174.7	5844.4	-0.0	-0.00
25YR-72HR	9.05	12058.7	6199.8	5858.9	-0.0	-0.00
25YR-72HR	9.07	12098.4	6225.5	5872.8	-0.0	-0.00
25YR-72HR	9.08	12138.3	6250.9	5887.4	-0.0	-0.00
25YR-72HR	9.10	12177.7	6275.6	5902.2	-0.0	-0.00
25YR-72HR	9.12	12217.8	6301.1	5916.7	-0.0	-0.00
25YR-72HR	9.13	12257.4	6326.3	5931.1	-0.0	-0.00
25YR-72HR	9.15	12296.9	6351.6	5945.4	-0.0	-0.00
25YR-72HR	9.17	12336.8	6376.7	5960.1	-0.0	-0.00
25YR-72HR	9.18	12376.7	6402.5	5974.2	-0.0	-0.00
25YR-72HR	9.20	12416.7	6427.5	5989.2	-0.0	-0.00
25YR-72HR	9.22	12456.7	6453.3	6003.4	-0.0	-0.00
25YR-72HR	9.23	12496.5	6478.3	6018.2	-0.0	-0.00
25YR-72HR	9.25	12536.4	6503.6	6032.7	-0.0	-0.00
25YR-72HR	9.27	12576.2	6529.3	6046.9	-0.0	-0.00
25YR-72HR	9.28	12616.4	6555.0	6061.4	-0.0	-0.00
25YR-72HR	9.30	12656.1	6579.9	6076.2	-0.0	-0.00
25YR-72HR	9.32	12696.4	6605.5	6090.9	-0.0	-0.00
25YR-72HR	9.33	12736.7	6631.6	6105.1	-0.0	-0.00
25YR-72HR	9.35	12776.3	6656.4	6119.9	-0.0	-0.00
25YR-72HR	9.37	12816.5	6682.6	6133.9	-0.0	-0.00
25YR-72HR	9.38	12856.7	6707.8	6148.9	-0.0	-0.00
25YR-72HR	9.40	12896.8	6733.4	6163.5	-0.0	-0.00
25YR-72HR	9.42	12937.0	6759.0	6178.0	-0.0	-0.00
25YR-72HR	9.43	12977.1	6784.2	6192.9	-0.0	-0.00
25YR-72HR	9.45	13017.5	6810.7	6206.9	-0.0	-0.00
25YR-72HR	9.47	13058.0	6835.8	6222.2	-0.0	-0.00
25YR-72HR	9.48	13098.2	6861.6	6236.6	-0.0	-0.00
25YR-72HR	9.50	13138.5	6887.3	6251.3	-0.0	-0.00
25YR-72HR	9.52	13178.7	6912.7	6266.0	-0.0	-0.00
25YR-72HR	9.53	13219.3	6938.8	6280.5	-0.0	-0.00
25YR-72HR	9.55	13259.6	6964.2	6295.4	-0.0	-0.00
25YR-72HR	9.57	13299.8	6990.0	6309.9	-0.0	-0.00
25YR-72HR	9.58	13340.4	7015.8	6324.6	-0.0	-0.00
25YR-72HR	9.60	13380.6	7041.5	6339.1	-0.0	-0.00
25YR-72HR	9.62	13421.5	7067.4	6354.1	-0.0	-0.00
25YR-72HR	9.63	13462.0	7093.5	6368.5	-0.0	-0.00
25YR-72HR	9.65	13502.5	7118.9	6383.5	-0.0	-0.00
25YR-72HR	9.67	13542.9	7144.6	6398.3	-0.0	-0.00
25YR-72HR	9.68	13583.3	7170.4	6412.9	-0.0	-0.00
25YR-72HR	9.70	13624.0	7196.3	6427.7	-0.0	-0.00
25YR-72HR	9.72	13664.7	7222.4	6442.3	-0.0	-0.00
25YR-72HR	9.73	13705.5	7248.4	6457.1	-0.0	-0.00
25YR-72HR	9.75	13746.1	7274.1	6472.0	-0.0	-0.00
25YR-72HR	9.77	13786.5	7299.7	6486.8	-0.0	-0.00
25YR-72HR	9.78	13827.6	7326.0	6501.6	-0.0	-0.00
25YR-72HR	9.80	13868.4	7351.9	6516.5	-0.0	-0.00
25YR-72HR	9.82	13908.8	7377.7	6531.1	-0.0	-0.00
25YR-72HR	9.83	13949.5	7403.5	6546.0	-0.0	-0.00
25YR-72HR	9.85	13990.3	7429.8	6560.5	-0.0	-0.00
25YR-72HR	9.87	14031.3	7456.0	6575.3	-0.0	-0.00
25YR-72HR	9.88	14072.0	7481.5	6590.5	-0.0	-0.00
25YR-72HR	9.90	14113.2	7507.8	6605.4	-0.0	-0.00
25YR-72HR	9.92	14153.8	7533.9	6619.9	-0.0	-0.00
25YR-72HR	9.93	14194.9	7559.7	6635.3	-0.0	-0.00
25YR-72HR	9.95	14235.7	7585.5	6650.2	-0.0	-0.00
25YR-72HR	9.97	14276.9	7612.2	6664.7	-0.0	-0.00
25YR-72HR	9.98	14318.0	7638.3	6679.6	-0.0	-0.00
25YR-72HR	10.00	14358.7	7664.2	6694.6	-0.0	-0.00
25YR-72HR	10.02	14399.6	7690.5	6709.1	-0.0	-0.00
25YR-72HR	10.03	14440.9	7716.9	6724.0	-0.0	-0.00
25YR-72HR	10.05	14481.9	7742.7	6739.2	-0.0	-0.00
25YR-72HR	10.07	14523.0	7769.0	6754.0	-0.0	-0.00
25YR-72HR	10.08	14564.1	7795.3	6768.8	-0.0	-0.00
25YR-72HR	10.10	14605.4	7821.5	6783.9	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	10.12	14646.7	7847.7	6799.0	-0.0	-0.00
25YR-72HR	10.13	14687.7	7873.5	6814.1	-0.0	-0.00
25YR-72HR	10.15	14728.8	7899.5	6829.3	-0.0	-0.00
25YR-72HR	10.17	14770.0	7925.9	6844.1	-0.0	-0.00
25YR-72HR	10.18	14811.3	7952.5	6858.8	-0.0	-0.00
25YR-72HR	10.20	14852.8	7978.6	6874.1	-0.0	-0.00
25YR-72HR	10.22	14893.8	8005.0	6888.7	-0.0	-0.00
25YR-72HR	10.23	14935.2	8031.5	6903.7	-0.0	-0.00
25YR-72HR	10.25	14976.6	8057.5	6919.0	-0.0	-0.00
25YR-72HR	10.27	15018.1	8083.9	6934.1	-0.0	-0.00
25YR-72HR	10.28	15059.2	8110.4	6948.8	-0.0	-0.00
25YR-72HR	10.30	15100.6	8136.5	6964.0	-0.0	-0.00
25YR-72HR	10.32	15141.9	8162.5	6979.4	-0.0	-0.00
25YR-72HR	10.33	15183.7	8189.3	6994.4	-0.0	-0.00
25YR-72HR	10.35	15225.0	8215.8	7009.2	-0.0	-0.00
25YR-72HR	10.37	15266.5	8241.8	7024.7	-0.0	-0.00
25YR-72HR	10.38	15307.9	8268.5	7039.4	-0.0	-0.00
25YR-72HR	10.40	15349.6	8294.9	7054.7	-0.0	-0.00
25YR-72HR	10.42	15390.9	8321.5	7069.3	-0.0	-0.00
25YR-72HR	10.43	15432.5	8347.6	7084.9	-0.0	-0.00
25YR-72HR	10.45	15474.4	8374.6	7099.7	-0.0	-0.00
25YR-72HR	10.47	15515.8	8401.0	7114.8	-0.0	-0.00
25YR-72HR	10.48	15557.5	8427.4	7130.0	-0.0	-0.00
25YR-72HR	10.50	15598.8	8453.7	7145.2	-0.0	-0.00
25YR-72HR	10.52	15640.9	8480.5	7160.4	-0.0	-0.00
25YR-72HR	10.53	15682.4	8507.5	7174.9	-0.0	-0.00
25YR-72HR	10.55	15723.9	8533.6	7190.2	-0.0	-0.00
25YR-72HR	10.57	15765.9	8560.2	7205.7	-0.0	-0.00
25YR-72HR	10.58	15807.6	8587.2	7220.4	-0.0	-0.00
25YR-72HR	10.60	15849.1	8613.4	7235.7	-0.0	-0.00
25YR-72HR	10.62	15890.9	8639.9	7251.0	-0.0	-0.00
25YR-72HR	10.63	15932.9	8666.8	7266.1	-0.0	-0.00
25YR-72HR	10.65	15974.5	8693.3	7281.2	-0.0	-0.00
25YR-72HR	10.67	16016.5	8719.9	7296.6	-0.0	-0.00
25YR-72HR	10.68	16058.6	8746.8	7311.8	-0.0	-0.00
25YR-72HR	10.70	16100.2	8773.3	7326.9	-0.0	-0.00
25YR-72HR	10.72	16142.1	8799.7	7342.4	-0.0	-0.00
25YR-72HR	10.73	16183.9	8826.5	7357.5	-0.0	-0.00
25YR-72HR	10.75	16226.2	8854.0	7372.2	-0.0	-0.00
25YR-72HR	10.77	16267.8	8879.9	7387.9	-0.0	-0.00
25YR-72HR	10.78	16310.1	8906.8	7403.2	-0.0	-0.00
25YR-72HR	10.80	16351.9	8933.4	7418.5	-0.0	-0.00
25YR-72HR	10.82	16394.0	8960.1	7434.0	-0.0	-0.00
25YR-72HR	10.83	16435.9	8987.3	7448.6	-0.0	-0.00
25YR-72HR	10.85	16478.0	9013.7	7464.3	-0.0	-0.00
25YR-72HR	10.87	16520.2	9040.9	7479.3	-0.0	-0.00
25YR-72HR	10.88	16562.0	9067.1	7494.9	-0.0	-0.00
25YR-72HR	10.90	16604.3	9094.3	7510.0	-0.0	-0.00
25YR-72HR	10.92	16646.2	9120.7	7525.4	-0.0	-0.00
25YR-72HR	10.93	16688.5	9148.0	7540.5	-0.0	-0.00
25YR-72HR	10.95	16730.5	9174.3	7556.1	-0.0	-0.00
25YR-72HR	10.97	16772.7	9201.9	7570.8	-0.0	-0.00
25YR-72HR	10.98	16815.0	9228.7	7586.4	-0.0	-0.00
25YR-72HR	11.00	16857.3	9255.3	7602.0	-0.0	-0.00
25YR-72HR	11.02	16899.7	9282.5	7617.2	-0.0	-0.00
25YR-72HR	11.03	16941.7	9309.1	7632.6	-0.0	-0.00
25YR-72HR	11.05	16984.1	9336.2	7647.9	-0.0	-0.00
25YR-72HR	11.07	17026.3	9363.1	7663.2	-0.0	-0.00
25YR-72HR	11.08	17068.5	9390.3	7678.2	-0.0	-0.00
25YR-72HR	11.10	17111.2	9417.4	7693.8	-0.0	-0.00
25YR-72HR	11.12	17153.5	9444.4	7709.0	-0.0	-0.00
25YR-72HR	11.13	17195.7	9470.7	7725.0	-0.0	-0.00
25YR-72HR	11.15	17238.0	9497.6	7740.5	-0.0	-0.00
25YR-72HR	11.17	17280.2	9525.0	7755.2	-0.0	-0.00
25YR-72HR	11.18	17322.6	9551.5	7771.1	-0.0	-0.00
25YR-72HR	11.20	17365.0	9578.5	7786.5	-0.0	-0.00
25YR-72HR	11.22	17407.5	9605.5	7802.0	-0.0	-0.00
25YR-72HR	11.23	17449.9	9632.5	7817.4	-0.0	-0.00
25YR-72HR	11.25	17492.5	9660.0	7832.5	-0.0	-0.00
25YR-72HR	11.27	17535.2	9687.2	7848.0	-0.0	-0.00
25YR-72HR	11.28	17577.8	9714.1	7863.7	-0.0	-0.00
25YR-72HR	11.30	17620.2	9741.3	7878.9	-0.0	-0.00
25YR-72HR	11.32	17662.8	9768.8	7894.0	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	11.33	17705.1	9795.5	7909.6	-0.0	-0.00
25YR-72HR	11.35	17748.0	9822.7	7925.3	-0.0	-0.00
25YR-72HR	11.37	17790.3	9849.8	7940.5	-0.0	-0.00
25YR-72HR	11.38	17833.0	9876.6	7956.4	-0.0	-0.00
25YR-72HR	11.40	17875.5	9903.5	7972.0	-0.0	-0.00
25YR-72HR	11.42	17918.3	9931.3	7987.0	-0.0	-0.00
25YR-72HR	11.43	17960.8	9958.3	8002.5	-0.0	-0.00
25YR-72HR	11.45	18003.7	9985.5	8018.1	-0.0	-0.00
25YR-72HR	11.47	18046.5	10012.6	8033.9	-0.0	-0.00
25YR-72HR	11.48	18089.2	10039.9	8049.3	-0.0	-0.00
25YR-72HR	11.50	18131.8	10066.6	8065.2	-0.0	-0.00
25YR-72HR	11.52	18174.7	10094.5	8080.2	-0.0	-0.00
25YR-72HR	11.53	18217.5	10121.7	8095.8	-0.0	-0.00
25YR-72HR	11.55	18260.0	10148.6	8111.4	-0.0	-0.00
25YR-72HR	11.57	18303.0	10176.1	8127.0	-0.0	-0.00
25YR-72HR	11.58	18345.7	10203.0	8142.6	-0.0	-0.00
25YR-72HR	11.60	18388.6	10230.5	8158.2	-0.0	-0.00
25YR-72HR	11.62	18431.6	10258.1	8173.4	-0.0	-0.00
25YR-72HR	11.63	18474.6	10285.6	8189.0	-0.0	-0.00
25YR-72HR	11.65	18517.1	10312.8	8204.3	-0.0	-0.00
25YR-72HR	11.67	18560.0	10339.7	8220.3	-0.0	-0.00
25YR-72HR	11.68	18602.8	10367.4	8235.4	-0.0	-0.00
25YR-72HR	11.70	18645.9	10394.6	8251.3	-0.0	-0.00
25YR-72HR	11.72	18689.2	10422.3	8266.9	-0.0	-0.00
25YR-72HR	11.73	18731.9	10448.9	8282.9	-0.0	-0.00
25YR-72HR	11.75	18775.0	10476.7	8298.3	-0.0	-0.00
25YR-72HR	11.77	18817.8	10503.9	8313.9	-0.0	-0.00
25YR-72HR	11.78	18860.7	10531.5	8329.2	-0.0	-0.00
25YR-72HR	11.80	18903.8	10558.9	8344.9	-0.0	-0.00
25YR-72HR	11.82	18946.8	10586.0	8360.9	-0.0	-0.00
25YR-72HR	11.83	18990.0	10613.8	8376.2	-0.0	-0.00
25YR-72HR	11.85	19033.1	10641.5	8391.6	-0.0	-0.00
25YR-72HR	11.87	19076.2	10668.6	8407.6	-0.0	-0.00
25YR-72HR	11.88	19119.0	10695.6	8423.3	-0.0	-0.00
25YR-72HR	11.90	19162.1	10723.0	8439.1	-0.0	-0.00
25YR-72HR	11.92	19205.4	10750.6	8454.8	-0.0	-0.00
25YR-72HR	11.93	19248.8	10778.3	8470.5	-0.0	-0.00
25YR-72HR	11.95	19291.7	10806.0	8485.7	-0.0	-0.00
25YR-72HR	11.97	19334.8	10833.3	8501.6	-0.0	-0.00
25YR-72HR	11.98	19378.1	10861.2	8516.9	-0.0	-0.00
25YR-72HR	12.00	19421.4	10888.5	8532.9	-0.0	-0.00
25YR-72HR	12.02	19464.5	10916.5	8548.0	-0.0	-0.00
25YR-72HR	12.03	19507.8	10943.3	8564.5	-0.0	-0.00
25YR-72HR	12.05	19551.0	10970.9	8580.1	-0.0	-0.00
25YR-72HR	12.07	19594.5	10999.1	8595.4	-0.0	-0.00
25YR-72HR	12.08	19637.5	11026.0	8611.5	-0.0	-0.00
25YR-72HR	12.10	19680.8	11053.5	8627.3	-0.0	-0.00
25YR-72HR	12.12	19724.1	11081.0	8643.2	-0.0	-0.00
25YR-72HR	12.13	19767.5	11108.6	8658.9	-0.0	-0.00
25YR-72HR	12.15	19810.7	11136.2	8674.6	-0.0	-0.00
25YR-72HR	12.17	19854.1	11164.3	8689.9	-0.0	-0.00
25YR-72HR	12.18	19897.6	11191.5	8706.1	-0.0	-0.00
25YR-72HR	12.20	19940.9	11219.2	8721.7	-0.0	-0.00
25YR-72HR	12.22	19984.5	11247.5	8737.0	-0.0	-0.00
25YR-72HR	12.23	20028.0	11274.6	8753.4	-0.0	-0.00
25YR-72HR	12.25	20071.3	11302.5	8768.8	-0.0	-0.00
25YR-72HR	12.27	20114.8	11330.1	8784.8	-0.0	-0.00
25YR-72HR	12.28	20158.1	11357.8	8800.4	-0.0	-0.00
25YR-72HR	12.30	20201.6	11385.5	8816.1	-0.0	-0.00
25YR-72HR	12.32	20245.0	11412.9	8832.1	-0.0	-0.00
25YR-72HR	12.33	20288.8	11440.5	8848.2	-0.0	-0.00
25YR-72HR	12.35	20332.3	11468.3	8863.9	-0.0	-0.00
25YR-72HR	12.37	20375.8	11496.2	8879.6	-0.0	-0.00
25YR-72HR	12.38	20419.3	11524.2	8895.1	-0.0	-0.00
25YR-72HR	12.40	20463.0	11551.5	8911.4	-0.0	-0.00
25YR-72HR	12.42	20506.4	11579.6	8926.8	-0.0	-0.00
25YR-72HR	12.43	20550.0	11607.0	8943.0	-0.0	-0.00
25YR-72HR	12.45	20593.8	11635.2	8958.6	-0.0	-0.00
25YR-72HR	12.47	20637.4	11663.2	8974.3	-0.0	-0.00
25YR-72HR	12.48	20680.7	11690.3	8990.4	-0.0	-0.00
25YR-72HR	12.50	20724.4	11718.1	9006.3	-0.0	-0.00
25YR-72HR	12.52	20768.1	11746.1	9022.0	-0.0	-0.00
25YR-72HR	12.53	20811.7	11773.5	9038.1	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	12.55	20855.5	11802.0	9053.5	-0.0	-0.00
25YR-72HR	12.57	20899.4	11830.0	9069.5	-0.0	-0.00
25YR-72HR	12.58	20942.9	11857.5	9085.4	-0.0	-0.00
25YR-72HR	12.60	20986.8	11885.5	9101.3	-0.0	-0.00
25YR-72HR	12.62	21030.2	11913.2	9117.0	-0.0	-0.00
25YR-72HR	12.63	21074.1	11941.2	9132.9	-0.0	-0.00
25YR-72HR	12.65	21117.7	11969.0	9148.7	-0.0	-0.00
25YR-72HR	12.67	21161.8	11996.5	9165.3	-0.0	-0.00
25YR-72HR	12.68	21205.5	12024.6	9180.9	-0.0	-0.00
25YR-72HR	12.70	21249.4	12052.6	9196.7	-0.0	-0.00
25YR-72HR	12.72	21293.4	12080.6	9212.8	-0.0	-0.00
25YR-72HR	12.73	21336.9	12108.2	9228.7	-0.0	-0.00
25YR-72HR	12.75	21380.6	12136.5	9244.2	-0.0	-0.00
25YR-72HR	12.77	21424.8	12164.2	9260.6	-0.0	-0.00
25YR-72HR	12.78	21468.5	12191.9	9276.6	-0.0	-0.00
25YR-72HR	12.80	21512.5	12219.8	9292.8	-0.0	-0.00
25YR-72HR	12.82	21556.7	12248.5	9308.2	-0.0	-0.00
25YR-72HR	12.83	21600.3	12276.0	9324.3	-0.0	-0.00
25YR-72HR	12.85	21644.2	12303.8	9340.4	-0.0	-0.00
25YR-72HR	12.87	21688.3	12331.7	9356.6	-0.0	-0.00
25YR-72HR	12.88	21732.3	12360.1	9372.2	-0.0	-0.00
25YR-72HR	12.90	21776.1	12387.8	9388.3	-0.0	-0.00
25YR-72HR	12.92	21820.3	12416.4	9403.8	-0.0	-0.00
25YR-72HR	12.93	21863.9	12443.7	9420.2	-0.0	-0.00
25YR-72HR	12.95	21908.0	12472.0	9436.0	-0.0	-0.00
25YR-72HR	12.97	21952.1	12499.8	9452.3	-0.0	-0.00
25YR-72HR	12.98	21996.3	12528.1	9468.2	-0.0	-0.00
25YR-72HR	13.00	22040.3	12556.6	9483.6	-0.0	-0.00
25YR-72HR	13.02	22084.0	12584.2	9499.8	-0.0	-0.00
25YR-72HR	13.03	22128.1	12612.4	9515.7	-0.0	-0.00
25YR-72HR	13.05	22172.4	12640.6	9531.8	-0.0	-0.00
25YR-72HR	13.07	22216.4	12668.4	9548.0	-0.0	-0.00
25YR-72HR	13.08	22260.6	12696.5	9564.2	-0.0	-0.00
25YR-72HR	13.10	22304.8	12724.6	9580.2	-0.0	-0.00
25YR-72HR	13.12	22348.9	12752.8	9596.1	-0.0	-0.00
25YR-72HR	13.13	22393.0	12780.7	9612.3	-0.0	-0.00
25YR-72HR	13.15	22436.9	12808.9	9628.0	-0.0	-0.00
25YR-72HR	13.17	22481.3	12836.9	9644.4	-0.0	-0.00
25YR-72HR	13.18	22525.7	12865.6	9660.1	-0.0	-0.00
25YR-72HR	13.20	22570.0	12893.5	9676.5	-0.0	-0.00
25YR-72HR	13.22	22614.1	12921.4	9692.7	-0.0	-0.00
25YR-72HR	13.23	22658.2	12949.4	9708.8	-0.0	-0.00
25YR-72HR	13.25	22702.4	12978.0	9724.4	-0.0	-0.00
25YR-72HR	13.27	22746.9	13006.4	9740.5	-0.0	-0.00
25YR-72HR	13.28	22790.9	13034.1	9756.8	-0.0	-0.00
25YR-72HR	13.30	22835.2	13062.4	9772.8	-0.0	-0.00
25YR-72HR	13.32	22879.5	13090.6	9788.8	-0.0	-0.00
25YR-72HR	13.33	22923.6	13118.1	9805.5	-0.0	-0.00
25YR-72HR	13.35	22968.0	13146.7	9821.3	-0.0	-0.00
25YR-72HR	13.37	23012.3	13175.0	9837.3	-0.0	-0.00
25YR-72HR	13.38	23056.5	13203.5	9853.0	-0.0	-0.00
25YR-72HR	13.40	23101.2	13231.6	9869.6	-0.0	-0.00
25YR-72HR	13.42	23145.2	13259.8	9885.4	-0.0	-0.00
25YR-72HR	13.43	23189.7	13288.1	9901.5	-0.0	-0.00
25YR-72HR	13.45	23234.1	13316.2	9917.9	-0.0	-0.00
25YR-72HR	13.47	23278.5	13344.4	9934.1	-0.0	-0.00
25YR-72HR	13.48	23322.8	13372.6	9950.2	-0.0	-0.00
25YR-72HR	13.50	23367.2	13401.1	9966.1	-0.0	-0.00
25YR-72HR	13.52	23412.0	13429.5	9982.4	-0.0	-0.00
25YR-72HR	13.53	23456.4	13458.1	9998.3	-0.0	-0.00
25YR-72HR	13.55	23500.7	13485.9	10014.8	-0.0	-0.00
25YR-72HR	13.57	23544.9	13514.1	10030.8	-0.0	-0.00
25YR-72HR	13.58	23589.5	13542.7	10046.8	0.0	0.00
25YR-72HR	13.60	23634.1	13570.9	10063.2	0.0	0.00
25YR-72HR	13.62	23678.5	13599.2	10079.3	0.0	0.00
25YR-72HR	13.63	23723.2	13627.4	10095.7	0.0	0.00
25YR-72HR	13.65	23767.8	13656.2	10111.6	0.0	0.00
25YR-72HR	13.67	23812.1	13684.5	10127.5	0.0	0.00
25YR-72HR	13.68	23856.5	13712.9	10143.5	0.0	0.00
25YR-72HR	13.70	23901.3	13741.3	10160.0	0.0	0.00
25YR-72HR	13.72	23945.9	13769.6	10176.2	0.0	0.00
25YR-72HR	13.73	23990.6	13798.3	10192.3	0.0	0.00
25YR-72HR	13.75	24034.7	13826.5	10208.3	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	13.77	24079.5	13854.5	10225.0	0.0	0.00
25YR-72HR	13.78	24124.3	13883.3	10241.0	0.0	0.00
25YR-72HR	13.80	24169.0	13911.7	10257.3	0.0	0.00
25YR-72HR	13.82	24213.4	13940.1	10273.3	0.0	0.00
25YR-72HR	13.83	24258.4	13968.7	10289.7	0.0	0.00
25YR-72HR	13.85	24302.7	13996.5	10306.2	0.0	0.00
25YR-72HR	13.87	24347.5	14025.1	10322.5	0.0	0.00
25YR-72HR	13.88	24392.1	14053.4	10338.7	0.0	0.00
25YR-72HR	13.90	24436.9	14082.4	10354.5	0.0	0.00
25YR-72HR	13.92	24481.7	14111.0	10370.7	0.0	0.00
25YR-72HR	13.93	24526.3	14138.9	10387.3	0.0	0.00
25YR-72HR	13.95	24571.0	14167.6	10403.4	0.0	0.00
25YR-72HR	13.97	24615.5	14196.0	10419.5	0.0	0.00
25YR-72HR	13.98	24660.5	14225.0	10435.5	0.0	0.00
25YR-72HR	14.00	24705.3	14253.2	10452.1	0.0	0.00
25YR-72HR	14.02	24749.8	14281.4	10468.4	0.0	0.00
25YR-72HR	14.03	24794.6	14309.9	10484.7	0.0	0.00
25YR-72HR	14.05	24839.6	14338.9	10500.7	0.0	0.00
25YR-72HR	14.07	24884.3	14367.2	10517.1	0.0	0.00
25YR-72HR	14.08	24928.8	14395.6	10533.2	0.0	0.00
25YR-72HR	14.10	24973.8	14424.6	10549.2	0.0	0.00
25YR-72HR	14.12	25018.8	14453.0	10565.9	0.0	0.00
25YR-72HR	14.13	25063.8	14481.6	10582.2	0.0	0.00
25YR-72HR	14.15	25108.3	14509.9	10598.4	0.0	0.00
25YR-72HR	14.17	25153.3	14539.1	10614.3	0.0	0.00
25YR-72HR	14.18	25198.2	14567.1	10631.1	0.0	0.00
25YR-72HR	14.20	25243.0	14595.7	10647.3	0.0	0.00
25YR-72HR	14.22	25287.8	14624.4	10663.4	0.0	0.00
25YR-72HR	14.23	25332.9	14653.3	10679.5	0.0	0.00
25YR-72HR	14.25	25377.6	14681.3	10696.3	0.0	0.00
25YR-72HR	14.27	25422.7	14710.0	10712.7	0.0	0.00
25YR-72HR	14.28	25467.6	14738.7	10728.8	0.0	0.00
25YR-72HR	14.30	25512.3	14767.0	10745.3	0.0	0.00
25YR-72HR	14.32	25557.7	14796.3	10761.4	0.0	0.00
25YR-72HR	14.33	25602.6	14824.7	10777.9	0.0	0.00
25YR-72HR	14.35	25647.7	14853.4	10794.2	0.0	0.00
25YR-72HR	14.37	25692.4	14881.7	10810.7	0.0	0.00
25YR-72HR	14.38	25737.5	14910.8	10826.7	0.0	0.00
25YR-72HR	14.40	25782.4	14939.2	10843.3	0.0	0.00
25YR-72HR	14.42	25827.6	14968.1	10859.5	0.0	0.00
25YR-72HR	14.43	25872.6	14996.7	10875.9	0.0	0.00
25YR-72HR	14.45	25917.4	15025.1	10892.3	0.0	0.00
25YR-72HR	14.47	25962.7	15054.5	10908.2	0.0	0.00
25YR-72HR	14.48	26007.5	15082.6	10924.9	0.0	0.00
25YR-72HR	14.50	26052.6	15111.6	10941.0	0.0	0.00
25YR-72HR	14.52	26097.8	15140.3	10957.4	0.0	0.00
25YR-72HR	14.53	26143.0	15169.2	10973.7	0.0	0.00
25YR-72HR	14.55	26187.8	15197.4	10990.4	0.0	0.00
25YR-72HR	14.57	26233.0	15226.2	11006.8	0.0	0.00
25YR-72HR	14.58	26278.0	15255.1	11022.9	0.0	0.00
25YR-72HR	14.60	26323.6	15284.4	11039.2	0.0	0.00
25YR-72HR	14.62	26368.4	15312.4	11056.0	0.0	0.00
25YR-72HR	14.63	26413.4	15341.8	11071.6	0.0	0.00
25YR-72HR	14.65	26458.6	15370.2	11088.4	0.0	0.00
25YR-72HR	14.67	26503.7	15399.0	11104.7	0.0	0.00
25YR-72HR	14.68	26548.9	15427.7	11121.2	0.0	0.00
25YR-72HR	14.70	26594.1	15456.1	11138.0	0.0	0.00
25YR-72HR	14.72	26639.3	15485.1	11154.2	0.0	0.00
25YR-72HR	14.73	26684.8	15514.0	11170.8	0.0	0.00
25YR-72HR	14.75	26730.1	15543.2	11186.8	0.0	0.00
25YR-72HR	14.77	26775.0	15572.0	11203.1	0.0	0.00
25YR-72HR	14.78	26820.5	15600.3	11220.2	0.0	0.00
25YR-72HR	14.80	26865.7	15629.5	11236.2	0.0	0.00
25YR-72HR	14.82	26910.8	15658.1	11252.7	0.0	0.00
25YR-72HR	14.83	26956.2	15686.9	11269.3	0.0	0.00
25YR-72HR	14.85	27001.7	15716.3	11285.5	0.0	0.00
25YR-72HR	14.87	27046.5	15744.2	11302.3	0.0	0.00
25YR-72HR	14.88	27092.0	15773.3	11318.8	0.0	0.00
25YR-72HR	14.90	27137.6	15802.6	11335.0	0.0	0.00
25YR-72HR	14.92	27182.5	15831.3	11351.2	0.0	0.00
25YR-72HR	14.93	27227.8	15860.0	11367.8	0.0	0.00
25YR-72HR	14.95	27273.1	15888.8	11384.3	0.0	0.00
25YR-72HR	14.97	27318.6	15918.1	11400.5	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	14.98	27363.7	15946.4	11417.3	0.0	0.00
25YR-72HR	15.00	27409.2	15975.9	11433.3	0.0	0.00
25YR-72HR	15.02	27454.5	16004.6	11449.8	0.0	0.00
25YR-72HR	15.03	27500.0	16033.2	11466.9	0.0	0.00
25YR-72HR	15.05	27545.6	16062.1	11483.5	0.0	0.00
25YR-72HR	15.07	27590.8	16091.4	11499.5	0.0	0.00
25YR-72HR	15.08	27636.3	16120.6	11515.7	0.0	0.00
25YR-72HR	15.10	27681.4	16149.3	11532.2	0.0	0.00
25YR-72HR	15.12	27727.2	16178.3	11548.9	0.0	0.00
25YR-72HR	15.13	27772.3	16206.5	11565.8	0.0	0.00
25YR-72HR	15.15	27817.8	16235.8	11582.0	0.0	0.00
25YR-72HR	15.17	27863.5	16265.0	11598.5	0.0	0.00
25YR-72HR	15.18	27909.0	16293.7	11615.3	0.0	0.00
25YR-72HR	15.20	27954.3	16322.2	11632.0	0.0	0.00
25YR-72HR	15.22	27999.6	16351.6	11648.1	0.0	0.00
25YR-72HR	15.23	28045.4	16380.9	11664.5	0.0	0.00
25YR-72HR	15.25	28090.8	16409.4	11681.4	0.0	0.00
25YR-72HR	15.27	28136.1	16438.0	11698.1	0.0	0.00
25YR-72HR	15.28	28181.8	16467.6	11714.2	0.0	0.00
25YR-72HR	15.30	28227.3	16496.8	11730.5	0.0	0.00
25YR-72HR	15.32	28272.7	16525.7	11747.0	0.0	0.00
25YR-72HR	15.33	28318.5	16554.5	11763.9	0.0	0.00
25YR-72HR	15.35	28364.0	16583.5	11780.5	0.0	0.00
25YR-72HR	15.37	28409.7	16612.5	11797.2	0.0	0.00
25YR-72HR	15.38	28455.1	16641.4	11813.7	0.0	0.00
25YR-72HR	15.40	28500.8	16670.2	11830.6	0.0	0.00
25YR-72HR	15.42	28546.5	16699.3	11847.2	0.0	0.00
25YR-72HR	15.43	28591.9	16728.6	11863.3	0.0	0.00
25YR-72HR	15.45	28637.2	16757.4	11879.8	0.0	0.00
25YR-72HR	15.47	28683.1	16786.7	11896.4	0.0	0.00
25YR-72HR	15.48	28728.6	16815.6	11912.9	0.0	0.00
25YR-72HR	15.50	28774.1	16844.7	11929.4	0.0	0.00
25YR-72HR	15.52	28819.8	16873.5	11946.3	0.0	0.00
25YR-72HR	15.53	28865.5	16902.5	11963.0	0.0	0.00
25YR-72HR	15.55	28911.1	16932.0	11979.1	0.0	0.00
25YR-72HR	15.57	28956.9	16961.3	11995.6	0.0	0.00
25YR-72HR	15.58	29002.5	16989.8	12012.7	0.0	0.00
25YR-72HR	15.60	29048.4	17018.9	12029.4	0.0	0.00
25YR-72HR	15.62	29093.8	17047.9	12045.9	0.0	0.00
25YR-72HR	15.63	29139.7	17077.2	12062.5	0.0	0.00
25YR-72HR	15.65	29185.2	17106.2	12079.0	0.0	0.00
25YR-72HR	15.67	29231.1	17135.2	12095.9	0.0	0.00
25YR-72HR	15.68	29277.0	17164.8	12112.2	0.0	0.00
25YR-72HR	15.70	29322.4	17193.6	12128.8	0.0	0.00
25YR-72HR	15.72	29368.2	17222.6	12145.5	0.0	0.00
25YR-72HR	15.73	29414.2	17251.8	12162.4	0.0	0.00
25YR-72HR	15.75	29459.6	17280.9	12178.7	0.0	0.00
25YR-72HR	15.77	29505.5	17309.9	12195.6	0.0	0.00
25YR-72HR	15.78	29551.2	17339.1	12212.1	0.0	0.00
25YR-72HR	15.80	29596.9	17368.5	12228.4	0.0	0.00
25YR-72HR	15.82	29642.9	17397.7	12245.2	0.0	0.00
25YR-72HR	15.83	29688.5	17427.0	12261.5	0.0	0.00
25YR-72HR	15.85	29734.6	17455.9	12278.7	0.0	0.00
25YR-72HR	15.87	29780.3	17484.8	12295.5	0.0	0.00
25YR-72HR	15.88	29826.1	17514.0	12312.1	0.0	0.00
25YR-72HR	15.90	29872.1	17543.3	12328.8	0.0	0.00
25YR-72HR	15.92	29918.1	17572.7	12345.3	0.0	0.00
25YR-72HR	15.93	29963.8	17601.7	12362.2	0.0	0.00
25YR-72HR	15.95	30010.0	17631.6	12378.4	0.0	0.00
25YR-72HR	15.97	30055.8	17660.2	12395.6	0.0	0.00
25YR-72HR	15.98	30101.6	17689.3	12412.3	0.0	0.00
25YR-72HR	16.00	30147.5	17718.7	12428.8	0.0	0.00
25YR-72HR	16.08	30377.7	17865.0	12512.6	0.0	0.00
25YR-72HR	16.17	30607.9	18011.5	12596.5	0.0	0.00
25YR-72HR	16.25	30838.8	18158.1	12680.6	0.0	0.00
25YR-72HR	16.33	31069.5	18304.2	12765.3	0.0	0.00
25YR-72HR	16.42	31301.2	18450.9	12850.3	0.0	0.00
25YR-72HR	16.50	31533.3	18597.9	12935.5	0.0	0.00
25YR-72HR	16.58	31766.0	18744.5	13021.5	0.0	0.00
25YR-72HR	16.67	31999.1	18891.6	13107.5	0.0	0.00
25YR-72HR	16.75	32232.5	19039.0	13193.4	0.0	0.00
25YR-72HR	16.83	32466.2	19185.7	13280.5	0.0	0.00
25YR-72HR	16.92	32700.7	19333.4	13367.3	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	17.00	32935.8	19480.9	13454.9	0.0	0.00
25YR-72HR	17.08	33170.8	19628.6	13542.2	0.0	0.00
25YR-72HR	17.17	33406.4	19776.4	13630.0	0.0	0.00
25YR-72HR	17.25	33642.9	19924.2	13718.6	0.0	0.00
25YR-72HR	17.33	33879.4	20072.4	13807.1	0.0	0.00
25YR-72HR	17.42	34116.5	20220.4	13896.1	0.0	0.00
25YR-72HR	17.50	34353.7	20368.5	13985.1	0.0	0.00
25YR-72HR	17.58	34591.8	20517.1	14074.8	0.0	0.00
25YR-72HR	17.67	34829.9	20665.2	14164.7	0.0	0.00
25YR-72HR	17.75	35068.5	20813.8	14254.8	0.0	0.00
25YR-72HR	17.83	35307.9	20962.3	14345.6	0.0	0.00
25YR-72HR	17.92	35547.1	21110.8	14436.4	0.0	0.00
25YR-72HR	18.00	35787.2	21259.4	14527.7	0.0	0.00
25YR-72HR	18.08	36027.8	21408.5	14619.2	0.0	0.00
25YR-72HR	18.17	36268.7	21557.6	14711.1	0.0	0.00
25YR-72HR	18.25	36509.5	21706.2	14803.3	0.0	0.00
25YR-72HR	18.33	36751.1	21855.4	14895.8	0.0	0.00
25YR-72HR	18.42	36993.5	22005.0	14988.5	-0.0	-0.00
25YR-72HR	18.50	37235.7	22154.0	15081.7	-0.0	-0.00
25YR-72HR	18.58	37478.6	22303.8	15174.8	-0.0	-0.00
25YR-72HR	18.67	37721.9	22452.8	15269.1	-0.0	-0.00
25YR-72HR	18.75	37965.7	22603.2	15362.5	0.0	0.00
25YR-72HR	18.83	38209.5	22752.4	15457.1	0.0	0.00
25YR-72HR	18.92	38453.8	22902.1	15551.7	0.0	0.00
25YR-72HR	19.00	38698.6	23051.8	15646.8	0.0	0.00
25YR-72HR	19.08	38943.8	23201.9	15741.9	0.0	0.00
25YR-72HR	19.17	39189.7	23351.8	15837.9	0.0	0.00
25YR-72HR	19.25	39435.3	23502.0	15933.4	0.0	0.00
25YR-72HR	19.33	39681.9	23652.3	16029.6	0.0	0.00
25YR-72HR	19.42	39928.3	23802.3	16126.0	0.0	0.00
25YR-72HR	19.50	40175.7	23952.8	16222.9	0.0	0.00
25YR-72HR	19.58	40422.9	24103.3	16319.6	0.0	0.00
25YR-72HR	19.67	40670.7	24254.0	16416.7	-0.0	-0.00
25YR-72HR	19.75	40919.1	24404.4	16514.7	-0.0	-0.00
25YR-72HR	19.83	41167.5	24554.8	16612.7	-0.0	-0.00
25YR-72HR	19.92	41416.8	24706.2	16710.6	-0.0	-0.00
25YR-72HR	20.00	41666.0	24856.8	16809.2	-0.0	-0.00
25YR-72HR	20.08	41915.5	25007.8	16907.8	-0.0	-0.00
25YR-72HR	20.17	42165.9	25159.1	17006.8	-0.0	-0.00
25YR-72HR	20.25	42416.2	25309.8	17106.3	-0.0	-0.00
25YR-72HR	20.33	42666.8	25460.7	17206.0	-0.0	-0.00
25YR-72HR	20.42	42917.6	25612.0	17305.6	-0.0	-0.00
25YR-72HR	20.50	43169.2	25763.5	17405.7	-0.0	-0.00
25YR-72HR	20.58	43421.4	25914.6	17506.8	-0.0	-0.00
25YR-72HR	20.67	43673.3	26066.1	17607.2	-0.0	-0.00
25YR-72HR	20.75	43926.2	26217.9	17708.3	-0.0	-0.00
25YR-72HR	20.83	44179.3	26369.4	17809.8	-0.0	-0.00
25YR-72HR	20.92	44433.1	26521.4	17911.7	-0.0	-0.00
25YR-72HR	21.00	44687.1	26673.1	18014.0	-0.0	-0.00
25YR-72HR	21.08	44941.6	26825.4	18116.2	-0.0	-0.00
25YR-72HR	21.17	45196.5	26977.3	18219.2	-0.0	-0.00
25YR-72HR	21.25	45452.1	27130.2	18322.0	-0.0	-0.00
25YR-72HR	21.33	45708.4	27282.3	18426.0	-0.0	-0.00
25YR-72HR	21.42	45964.6	27434.4	18530.2	-0.0	-0.00
25YR-72HR	21.50	46221.7	27587.4	18634.3	-0.0	-0.00
25YR-72HR	21.58	46479.3	27740.3	18739.1	-0.0	-0.00
25YR-72HR	21.67	46737.1	27892.7	18844.4	-0.0	-0.00
25YR-72HR	21.75	46995.2	28044.9	18950.2	-0.0	-0.00
25YR-72HR	21.83	47254.2	28198.2	19056.0	-0.0	-0.00
25YR-72HR	21.92	47513.9	28351.8	19162.0	-0.0	-0.00
25YR-72HR	22.00	47773.5	28504.4	19269.1	-0.0	-0.00
25YR-72HR	22.08	48034.0	28657.6	19376.4	-0.0	-0.00
25YR-72HR	22.17	48294.4	28811.4	19483.0	-0.0	-0.00
25YR-72HR	22.25	48556.0	28964.6	19591.3	-0.0	-0.00
25YR-72HR	22.33	48817.4	29117.9	19699.5	-0.0	-0.00
25YR-72HR	22.42	49079.7	29272.2	19807.5	-0.0	-0.00
25YR-72HR	22.50	49342.3	29425.3	19917.0	-0.0	-0.00
25YR-72HR	22.58	49605.4	29579.4	20026.0	-0.0	-0.00
25YR-72HR	22.67	49868.9	29733.4	20135.5	-0.0	-0.00
25YR-72HR	22.75	50132.7	29887.9	20244.8	-0.0	-0.00
25YR-72HR	22.83	50397.4	30041.8	20355.6	-0.0	-0.00
25YR-72HR	22.92	50662.3	30195.9	20466.4	-0.0	-0.00
25YR-72HR	23.00	50927.6	30350.4	20577.1	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	23.08	51193.2	30504.9	20688.4	-0.0	-0.00
25YR-72HR	23.17	51459.4	30660.1	20799.3	-0.0	-0.00
25YR-72HR	23.25	51726.1	30814.4	20911.7	-0.0	-0.00
25YR-72HR	23.33	51993.3	30969.4	21023.9	-0.0	-0.00
25YR-72HR	23.42	52261.0	31124.2	21136.8	-0.0	-0.00
25YR-72HR	23.50	52529.0	31279.3	21249.7	-0.0	-0.00
25YR-72HR	23.58	52797.6	31434.2	21363.5	-0.0	-0.00
25YR-72HR	23.67	53066.2	31589.3	21476.8	-0.0	-0.00
25YR-72HR	23.75	53335.6	31744.6	21591.0	-0.0	-0.00
25YR-72HR	23.83	53605.6	31899.9	21705.6	-0.0	-0.00
25YR-72HR	23.92	53875.5	32055.3	21820.3	-0.0	-0.00
25YR-72HR	24.00	54146.3	32210.9	21935.4	-0.0	-0.00
25YR-72HR	24.25	55072.7	32739.3	22333.4	-0.0	-0.00
25YR-72HR	24.50	56163.9	33360.9	22803.0	-0.0	-0.00
25YR-72HR	24.75	57331.3	34024.8	23306.6	-0.0	-0.00
25YR-72HR	25.00	58531.0	34704.7	23826.3	-0.0	-0.00
25YR-72HR	25.25	59743.7	35389.4	24354.3	-0.0	-0.00
25YR-72HR	25.50	60963.8	36075.9	24887.9	-0.0	-0.00
25YR-72HR	25.75	62191.0	36763.1	25427.8	-0.0	-0.00
25YR-72HR	26.00	63425.7	37452.0	25973.7	-0.0	-0.00
25YR-72HR	26.25	64667.6	38141.9	26525.7	-0.0	-0.00
25YR-72HR	26.50	65916.2	38834.4	27081.8	-0.0	-0.00
25YR-72HR	26.75	67172.6	39527.7	27644.9	-0.0	-0.00
25YR-72HR	27.00	68435.4	40222.8	28212.6	-0.0	-0.00
25YR-72HR	27.25	69705.4	40919.2	28786.2	-0.0	-0.00
25YR-72HR	27.50	70981.5	41616.4	29365.1	-0.0	-0.00
25YR-72HR	27.75	72264.8	42315.4	29949.4	-0.0	-0.00
25YR-72HR	28.00	73553.7	43014.4	30539.3	-0.0	-0.00
25YR-72HR	28.25	74849.6	43715.4	31134.2	-0.0	-0.00
25YR-72HR	28.50	76152.1	44417.5	31734.6	-0.0	-0.00
25YR-72HR	28.75	77460.7	45120.9	32339.8	-0.0	-0.00
25YR-72HR	29.00	78775.6	45825.5	32950.1	-0.0	-0.00
25YR-72HR	29.25	80095.7	46530.6	33565.1	-0.0	-0.00
25YR-72HR	29.50	81423.1	47238.1	34184.9	-0.0	-0.00
25YR-72HR	29.75	82755.3	47945.4	34810.0	-0.0	-0.00
25YR-72HR	30.00	84093.6	48654.5	35439.1	-0.0	-0.00
25YR-72HR	30.25	85438.1	49364.8	36073.2	-0.0	-0.00
25YR-72HR	30.50	86788.6	50076.0	36712.5	-0.0	-0.00
25YR-72HR	30.75	88144.2	50788.0	37356.1	-0.0	-0.00
25YR-72HR	31.00	89505.1	51500.9	38004.2	-0.0	-0.00
25YR-72HR	31.25	90871.9	52214.5	38657.4	-0.0	-0.00
25YR-72HR	31.50	92244.3	52929.6	39314.7	-0.0	-0.00
25YR-72HR	31.75	93621.9	53645.9	39976.0	-0.0	-0.00
25YR-72HR	32.00	95004.5	54362.7	40641.7	-0.0	-0.00
25YR-72HR	32.25	96392.3	55080.2	41312.0	-0.0	-0.00
25YR-72HR	32.50	97785.8	55799.6	41986.2	-0.0	-0.00
25YR-72HR	32.75	99183.4	56519.2	42664.2	-0.0	-0.00
25YR-72HR	33.00	100587.0	57239.6	43347.4	-0.0	-0.00
25YR-72HR	33.25	101995.2	57960.9	44034.2	-0.0	-0.00
25YR-72HR	33.50	103409.0	58683.4	44725.5	-0.0	-0.00
25YR-72HR	33.75	104827.3	59406.7	45420.5	-0.0	-0.00
25YR-72HR	34.00	106249.5	60129.5	46120.0	-0.0	-0.00
25YR-72HR	34.25	107678.0	60854.7	46823.2	-0.0	-0.00
25YR-72HR	34.50	109110.4	61579.8	47530.6	-0.0	-0.00
25YR-72HR	34.75	110546.8	62305.8	48241.1	-0.0	-0.00
25YR-72HR	35.00	111988.6	63033.0	48955.6	-0.0	-0.00
25YR-72HR	35.25	113435.2	63760.8	49674.4	-0.0	-0.00
25YR-72HR	35.50	114886.1	64489.9	50396.3	-0.0	-0.00
25YR-72HR	35.75	116341.0	65219.1	51121.9	-0.0	-0.00
25YR-72HR	36.00	117800.5	65949.6	51850.9	-0.0	-0.00
25YR-72HR	36.25	119269.4	66682.3	52587.1	-0.0	-0.00
25YR-72HR	36.50	120748.5	67419.5	53329.0	-0.0	-0.00
25YR-72HR	36.75	122235.0	68158.7	54076.2	-0.0	-0.00
25YR-72HR	37.00	123726.5	68899.2	54827.4	-0.0	-0.00
25YR-72HR	37.25	125223.0	69640.6	55582.4	-0.0	-0.00
25YR-72HR	37.50	126723.5	70382.5	56341.0	-0.0	-0.00
25YR-72HR	37.75	128228.9	71125.2	57103.7	-0.0	-0.00
25YR-72HR	38.00	129737.4	71868.0	57869.3	-0.0	-0.00
25YR-72HR	38.25	131250.1	72612.3	58637.8	-0.0	-0.00
25YR-72HR	38.50	132766.6	73356.4	59410.2	-0.0	-0.00
25YR-72HR	38.75	134287.7	74102.0	60185.7	-0.0	-0.00
25YR-72HR	39.00	135812.6	74848.2	60964.4	-0.0	-0.00
25YR-72HR	39.25	137341.0	75594.7	61746.3	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	39.50	138873.5	76341.9	62531.6	-0.0	-0.00
25YR-72HR	39.75	140410.3	77090.2	63320.1	-0.0	-0.00
25YR-72HR	40.00	141950.8	77838.3	64112.4	-0.0	-0.00
25YR-72HR	40.25	143494.4	78587.2	64907.1	-0.0	-0.00
25YR-72HR	40.50	145042.0	79336.8	65705.3	-0.0	-0.00
25YR-72HR	40.75	146593.6	80087.1	66506.5	-0.0	-0.00
25YR-72HR	41.00	148149.0	80838.2	67310.8	-0.0	-0.00
25YR-72HR	41.25	149707.5	81589.4	68118.1	-0.0	-0.00
25YR-72HR	41.50	151269.8	82341.4	68928.5	-0.0	-0.00
25YR-72HR	41.75	152835.1	83093.7	69741.4	-0.0	-0.00
25YR-72HR	42.00	154404.3	83846.8	70557.5	-0.0	-0.00
25YR-72HR	42.25	155977.4	84600.3	71377.1	-0.0	-0.00
25YR-72HR	42.50	157553.8	85354.6	72199.2	-0.0	-0.00
25YR-72HR	42.75	159132.8	86109.1	73023.7	-0.0	-0.00
25YR-72HR	43.00	160716.2	86864.3	73852.0	-0.0	-0.00
25YR-72HR	43.25	162301.7	87619.0	74682.7	-0.0	-0.00
25YR-72HR	43.50	163891.8	88375.3	75516.6	-0.0	-0.00
25YR-72HR	43.75	165484.0	89131.3	76352.7	-0.0	-0.00
25YR-72HR	44.00	167080.3	89888.7	77191.6	-0.0	-0.00
25YR-72HR	44.25	168680.1	90646.6	78033.5	-0.0	-0.00
25YR-72HR	44.50	170281.9	91404.0	78878.0	-0.0	-0.00
25YR-72HR	44.75	171887.5	92162.8	79724.7	-0.0	-0.00
25YR-72HR	45.00	173495.9	92922.3	80573.6	-0.0	-0.00
25YR-72HR	45.25	175107.7	93681.9	81425.7	-0.0	-0.00
25YR-72HR	45.50	176723.1	94442.4	82280.7	-0.0	-0.00
25YR-72HR	45.75	178340.9	95202.5	83138.4	-0.0	-0.00
25YR-72HR	46.00	179961.9	95964.0	83998.0	-0.0	-0.00
25YR-72HR	46.25	181585.6	96725.7	84859.9	-0.0	-0.00
25YR-72HR	46.50	183212.8	97487.6	85725.2	-0.0	-0.00
25YR-72HR	46.75	184842.8	98250.4	86592.4	-0.0	-0.00
25YR-72HR	47.00	186474.1	99012.8	87461.3	-0.0	-0.00
25YR-72HR	47.25	188110.0	99776.9	88333.2	-0.0	-0.00
25YR-72HR	47.50	189748.1	100541.1	89207.0	0.0	0.00
25YR-72HR	47.75	191389.0	101305.3	90083.7	0.0	0.00
25YR-72HR	48.00	193033.6	102070.5	90963.1	0.0	0.00
25YR-72HR	48.25	194731.4	102858.2	91873.2	0.0	0.00
25YR-72HR	48.50	196517.7	103686.7	92831.0	0.0	0.00
25YR-72HR	48.75	198340.1	104531.9	93808.2	0.0	0.00
25YR-72HR	49.00	200177.6	105382.4	94795.2	0.0	0.00
25YR-72HR	49.25	202031.4	106239.3	95792.0	0.0	0.00
25YR-72HR	49.50	203906.3	107105.8	96800.5	0.0	0.00
25YR-72HR	49.75	205791.1	107975.7	97815.4	0.0	0.00
25YR-72HR	50.00	207682.5	108847.1	98835.4	0.0	0.00
25YR-72HR	50.25	209678.2	109763.7	99914.5	0.0	0.00
25YR-72HR	50.50	211834.5	110754.3	101080.1	0.0	0.00
25YR-72HR	50.75	214054.5	111773.8	102280.7	0.0	0.00
25YR-72HR	51.00	216302.0	112804.8	103497.2	0.0	0.00
25YR-72HR	51.25	218616.9	113864.8	104752.2	0.0	0.00
25YR-72HR	51.50	221029.5	114967.8	106061.7	0.0	0.00
25YR-72HR	51.75	223484.8	116090.1	107394.7	0.0	0.00
25YR-72HR	52.00	225957.8	117219.4	108738.4	0.0	0.00
25YR-72HR	52.25	228652.7	118441.7	110211.0	0.0	0.00
25YR-72HR	52.50	231703.6	119827.5	111876.1	0.0	0.00
25YR-72HR	52.75	234891.7	121274.8	113616.9	0.0	0.00
25YR-72HR	53.00	238138.0	122746.4	115391.5	0.0	0.00
25YR-72HR	53.25	241615.3	124317.2	117298.0	0.0	0.00
25YR-72HR	53.50	245453.9	126050.0	119403.9	0.0	0.00
25YR-72HR	53.75	249437.5	127847.5	121590.1	0.0	0.00
25YR-72HR	54.00	253478.7	129667.9	123810.9	0.0	0.00
25YR-72HR	54.25	257766.9	131591.4	126175.5	0.0	0.00
25YR-72HR	54.50	262436.5	133686.7	128749.8	0.0	0.00
25YR-72HR	54.75	267259.1	135846.5	131412.6	0.0	0.00
25YR-72HR	55.00	272149.4	138033.8	134115.5	0.0	0.00
25YR-72HR	55.25	277288.2	140322.4	136965.9	0.0	0.00
25YR-72HR	55.50	282820.2	142783.5	140036.7	0.0	0.00
25YR-72HR	55.75	288510.3	145312.8	143197.5	0.0	0.00
25YR-72HR	56.00	294270.9	147868.9	146402.0	0.0	0.00
25YR-72HR	56.25	300329.3	150544.4	149784.9	0.0	0.00
25YR-72HR	56.50	306869.5	153430.7	153438.8	0.0	0.00
25YR-72HR	56.75	313602.0	156399.2	157202.8	0.0	0.00
25YR-72HR	57.00	320423.3	159402.2	161021.1	0.0	0.00
25YR-72HR	57.25	327621.6	162554.7	165066.9	0.0	0.00
25YR-72HR	57.50	335453.2	165983.4	169469.8	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	57.75	343728.6	169597.0	174131.6	0.0	0.00
25YR-72HR	58.00	352452.9	173402.7	179050.2	0.0	0.00
25YR-72HR	58.25	361609.4	177385.5	184223.9	0.0	0.00
25YR-72HR	58.50	371310.5	181600.0	189710.5	0.0	0.00
25YR-72HR	58.75	382147.7	186235.9	195911.8	0.0	0.00
25YR-72HR	59.00	394647.3	191591.3	203056.0	0.0	0.00
25YR-72HR	59.25	409887.0	197915.2	211971.8	0.0	0.00
25YR-72HR	59.50	428858.4	205817.3	223041.1	0.0	0.00
25YR-72HR	59.75	483881.8	222313.1	261568.7	0.0	0.00
25YR-72HR	60.00	599546.8	263195.0	336351.8	0.0	0.00
25YR-72HR	60.25	705077.9	309920.0	395157.9	0.0	0.00
25YR-72HR	60.50	764540.5	339854.8	424685.6	0.0	0.00
25YR-72HR	60.75	801210.3	358408.9	442801.4	0.0	0.00
25YR-72HR	61.00	823179.7	368827.9	454351.9	0.0	0.00
25YR-72HR	61.25	840140.9	377009.1	463131.8	0.0	0.00
25YR-72HR	61.50	853903.0	383428.7	470474.3	0.0	0.00
25YR-72HR	61.75	866149.3	388837.5	477311.8	0.0	0.00
25YR-72HR	62.00	877108.1	393531.4	483576.8	0.0	0.00
25YR-72HR	62.25	886869.5	397709.0	489160.5	0.0	0.00
25YR-72HR	62.50	895172.1	401254.8	493917.3	0.0	0.00
25YR-72HR	62.75	902752.0	404446.0	498306.0	0.0	0.00
25YR-72HR	63.00	909765.4	407366.9	502398.4	0.0	0.00
25YR-72HR	63.25	916609.5	410175.7	506433.8	0.0	0.00
25YR-72HR	63.50	923394.3	412943.2	510451.1	0.0	0.00
25YR-72HR	63.75	930171.4	415699.3	514472.1	0.0	0.00
25YR-72HR	64.00	936950.6	418455.1	518495.5	0.0	0.00
25YR-72HR	64.25	942958.9	421002.8	521956.1	0.0	0.00
25YR-72HR	64.50	947694.2	423041.6	524652.6	0.0	0.00
25YR-72HR	64.75	951954.7	424820.6	527134.1	0.0	0.00
25YR-72HR	65.00	956036.4	426495.7	529540.7	0.0	0.00
25YR-72HR	65.25	960100.9	428151.4	531949.6	0.0	0.00
25YR-72HR	65.50	964180.9	429811.9	534369.0	0.0	0.00
25YR-72HR	65.75	968267.4	431475.1	536792.3	0.0	0.00
25YR-72HR	66.00	972357.0	433139.9	539217.1	0.0	0.00
25YR-72HR	66.25	976447.8	434801.9	541645.9	0.0	0.00
25YR-72HR	66.50	980539.4	436462.9	544076.5	0.0	0.00
25YR-72HR	66.75	984631.9	438123.3	546508.7	0.0	0.00
25YR-72HR	67.00	988725.5	439784.0	548941.5	0.0	0.00
25YR-72HR	67.25	992820.1	441444.4	551375.6	-0.0	-0.00
25YR-72HR	67.50	996915.7	443105.0	553810.7	-0.0	-0.00
25YR-72HR	67.75	1001012.4	444765.6	556246.8	0.0	0.00
25YR-72HR	68.00	1005109.7	446426.3	558683.4	0.0	0.00
25YR-72HR	68.25	1008802.5	447976.4	560826.1	0.0	0.00
25YR-72HR	68.50	1011856.1	449269.6	562586.6	0.0	0.00
25YR-72HR	68.75	1014672.1	450435.1	564237.0	0.0	0.00
25YR-72HR	69.00	1017398.9	451549.3	565849.7	0.0	0.00
25YR-72HR	69.25	1020113.2	452651.9	567461.3	0.0	0.00
25YR-72HR	69.50	1022827.9	453753.2	569074.7	0.0	0.00
25YR-72HR	69.75	1025543.0	454854.9	570688.2	0.0	0.00
25YR-72HR	70.00	1028258.6	455956.4	572302.2	0.0	0.00
25YR-72HR	70.25	1030979.0	457059.2	573919.8	0.0	0.00
25YR-72HR	70.50	1033707.1	458164.6	575542.4	0.0	0.00
25YR-72HR	70.75	1036438.2	459271.4	577166.8	0.0	0.00
25YR-72HR	71.00	1039170.7	460378.9	578791.8	0.0	0.00
25YR-72HR	71.25	1041903.9	461487.0	580416.9	0.0	0.00
25YR-72HR	71.50	1044637.4	462595.0	582042.5	0.0	0.00
25YR-72HR	71.75	1047371.4	463703.1	583668.3	0.0	0.00
25YR-72HR	72.00	1050105.3	464811.0	585294.3	0.0	0.00
25YR-72HR	72.25	1052048.8	465712.5	586336.3	0.0	0.00
25YR-72HR	72.50	1052356.9	465980.7	586376.2	0.0	0.00
25YR-72HR	72.75	1052356.9	466008.4	586348.5	0.0	0.00
25YR-72HR	73.00	1052356.9	466023.9	586333.0	0.0	0.00
25YR-72HR	73.25	1052356.9	466038.3	586318.6	0.0	0.00
25YR-72HR	73.50	1052356.9	466052.1	586304.9	0.0	0.00
25YR-72HR	73.75	1052356.9	466065.3	586291.7	0.0	0.00
25YR-72HR	74.00	1052356.9	466077.9	586279.1	0.0	0.00
25YR-72HR	74.25	1052356.9	466089.9	586267.0	0.0	0.00
25YR-72HR	74.50	1052356.9	466101.6	586255.4	0.0	0.00
25YR-72HR	74.75	1052356.9	466112.7	586244.2	0.0	0.00
25YR-72HR	75.00	1052356.9	466123.5	586233.5	0.0	0.00
25YR-72HR	75.25	1052356.9	466133.7	586223.2	0.0	0.00
25YR-72HR	75.50	1052356.9	466143.6	586213.3	0.0	0.00
25YR-72HR	75.75	1052356.9	466153.0	586203.9	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	76.00	1052356.9	466162.0	586194.9	0.0	0.00
25YR-72HR	76.25	1052356.9	466170.6	586186.4	0.0	0.00
25YR-72HR	76.50	1052356.9	466178.7	586178.2	0.0	0.00
25YR-72HR	76.75	1052356.9	466186.4	586170.6	0.0	0.00
25YR-72HR	77.00	1052356.9	466192.2	586164.7	0.0	0.00
25YR-72HR	77.25	1052356.9	466195.3	586161.6	0.0	0.00
25YR-72HR	77.50	1052356.9	466198.4	586158.6	0.0	0.00
25YR-72HR	77.75	1052356.9	466201.4	586155.5	0.0	0.00
25YR-72HR	78.00	1052356.9	466204.5	586152.4	0.0	0.00
25YR-72HR	78.25	1052356.9	466207.6	586149.3	0.0	0.00
25YR-72HR	78.50	1052356.9	466210.7	586146.3	0.0	0.00
25YR-72HR	78.75	1052356.9	466213.8	586143.2	0.0	0.00
25YR-72HR	79.00	1052356.9	466216.8	586140.1	0.0	0.00
25YR-72HR	79.25	1052356.9	466219.9	586137.0	0.0	0.00
25YR-72HR	79.50	1052356.9	466223.0	586133.9	0.0	0.00
25YR-72HR	79.75	1052356.9	466226.1	586130.9	0.0	0.00
25YR-72HR	80.00	1052356.9	466229.1	586127.8	0.0	0.00
25YR-72HR	80.25	1052356.9	466232.2	586124.7	0.0	0.00
25YR-72HR	80.50	1052356.9	466235.3	586121.6	0.0	0.00
25YR-72HR	80.75	1052356.9	466238.4	586118.6	0.0	0.00
25YR-72HR	81.00	1052356.9	466241.4	586115.5	0.0	0.00
25YR-72HR	81.25	1052356.9	466244.5	586112.4	0.0	0.00
25YR-72HR	81.50	1052356.9	466247.6	586109.3	0.0	0.00
25YR-72HR	81.75	1052356.9	466250.7	586106.3	0.0	0.00
25YR-72HR	82.00	1052356.9	466253.7	586103.2	0.0	0.00
25YR-72HR	82.25	1052356.9	466256.8	586100.1	0.0	0.00
25YR-72HR	82.50	1052356.9	466259.9	586097.1	0.0	0.00
25YR-72HR	82.75	1052356.9	466263.0	586094.0	0.0	0.00
25YR-72HR	83.00	1052356.9	466266.0	586090.9	0.0	0.00
25YR-72HR	83.25	1052356.9	466269.1	586087.8	0.0	0.00
25YR-72HR	83.50	1052356.9	466272.2	586084.8	0.0	0.00
25YR-72HR	83.75	1052356.9	466275.2	586081.7	0.0	0.00
25YR-72HR	84.00	1052356.9	466278.3	586078.6	0.0	0.00
25YR-72HR	84.25	1052356.9	466281.4	586075.5	0.0	0.00
25YR-72HR	84.50	1052356.9	466284.5	586072.5	0.0	0.00
25YR-72HR	84.75	1052356.9	466287.5	586069.4	0.0	0.00
25YR-72HR	85.00	1052356.9	466290.6	586066.3	0.0	0.00
25YR-72HR	85.25	1052356.9	466293.7	586063.2	0.0	0.00
25YR-72HR	85.50	1052356.9	466296.8	586060.2	0.0	0.00
25YR-72HR	85.75	1052356.9	466299.8	586057.1	0.0	0.00
25YR-72HR	86.00	1052356.9	466302.9	586054.0	0.0	0.00
25YR-72HR	86.25	1052356.9	466306.0	586051.0	0.0	0.00
25YR-72HR	86.50	1052356.9	466309.1	586047.9	0.0	0.00
25YR-72HR	86.75	1052356.9	466312.1	586044.8	0.0	0.00
25YR-72HR	87.00	1052356.9	466315.2	586041.7	0.0	0.00
25YR-72HR	87.25	1052356.9	466318.3	586038.7	0.0	0.00
25YR-72HR	87.50	1052356.9	466321.3	586035.6	0.0	0.00
25YR-72HR	87.75	1052356.9	466324.4	586032.5	0.0	0.00
25YR-72HR	88.00	1052356.9	466327.5	586029.4	0.0	0.00
25YR-72HR	88.25	1052356.9	466330.6	586026.4	0.0	0.00
25YR-72HR	88.50	1052356.9	466333.6	586023.3	0.0	0.00
25YR-72HR	88.75	1052356.9	466336.7	586020.2	0.0	0.00
25YR-72HR	89.00	1052356.9	466339.8	586017.2	0.0	0.00
25YR-72HR	89.25	1052356.9	466342.9	586014.1	0.0	0.00
25YR-72HR	89.50	1052356.9	466345.9	586011.0	0.0	0.00
25YR-72HR	89.75	1052356.9	466349.0	586007.9	0.0	0.00
25YR-72HR	90.00	1052356.9	466352.1	586004.9	0.0	0.00
25YR-72HR	90.25	1052356.9	466355.1	586001.8	0.0	0.00
25YR-72HR	90.50	1052356.9	466358.2	585998.7	0.0	0.00
25YR-72HR	90.75	1052356.9	466361.3	585995.6	0.0	0.00
25YR-72HR	91.00	1052356.9	466364.4	585992.6	0.0	0.00
25YR-72HR	91.25	1052356.9	466367.4	585989.5	0.0	0.00
25YR-72HR	91.50	1052356.9	466370.5	585986.4	0.0	0.00
25YR-72HR	91.75	1052356.9	466373.6	585983.4	0.0	0.00
25YR-72HR	92.00	1052356.9	466376.6	585980.3	0.0	0.00
25YR-72HR	92.25	1052356.9	466379.7	585977.2	0.0	0.00
25YR-72HR	92.50	1052356.9	466382.8	585974.1	0.0	0.00
25YR-72HR	92.75	1052356.9	466385.9	585971.1	0.0	0.00
25YR-72HR	93.00	1052356.9	466388.9	585968.0	0.0	0.00
25YR-72HR	93.25	1052356.9	466392.0	585964.9	0.0	0.00
25YR-72HR	93.50	1052356.9	466395.1	585961.9	0.0	0.00
25YR-72HR	93.75	1052356.9	466398.2	585958.8	0.0	0.00
25YR-72HR	94.00	1052356.9	466401.2	585955.7	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	94.25	1052356.9	466404.3	585952.6	0.0	0.00
25YR-72HR	94.50	1052356.9	466407.4	585949.6	0.0	0.00
25YR-72HR	94.75	1052356.9	466410.4	585946.5	0.0	0.00
25YR-72HR	95.00	1052356.9	466413.5	585943.4	0.0	0.00
25YR-72HR	95.25	1052356.9	466416.6	585940.3	0.0	0.00
25YR-72HR	95.50	1052356.9	466419.7	585937.3	0.0	0.00
25YR-72HR	95.75	1052356.9	466422.7	585934.2	0.0	0.00
25YR-72HR	96.00	1052356.9	466425.8	585931.1	0.0	0.00
25YR-72HR	96.00	1052356.9	466425.8	585931.1	0.0	0.00

Basin 15

T 53S / R 40E SECTION 10 | T 53S / R 40E SECTION 03

RESTAURANT DEPOT

WALMART SUPERCENTER

0 50 200 Feet

R/W LINE

BASIN 13
25.56 AC

BASIN 15
11.32 AC

USA TRUCK SERVICE PLAZA

R/W LINE

BX13-58
7.01 AC

LA R/W LINE

LA R/W LINE

BX15-18
0.24 AC

S15-201D

S15-201E

S15-201C

F-3039

18" PIPE

S15-201B

B15-1A
1.91 AC

OUTFALL TO THE MIAMI CANAL

MIAMI CANAL (C6)

S15-201A

S15-22

S15-202B

S15FW-01

F-3037

S15FW-02

F-3026

B15-22
0.16 AC

B15-11
0.09 AC

S15-201

S15-201F

24" FD

B15-13A
0.21 AC

B15FW-1
0.07 AC

B15FW-2
0.03 AC

BX15-15A
0.11 AC

18" PIPE

NW 77TH AVE.

BEGIN BRIDGE #870975
481+20.19

480

485

490

495

500

SR 826 SB

SR 826 NB

18" PIPE

B15-11A
0.48 AC

S15-202A

N 1° 48' 01" W

S15-201G

S15-202

B15-203
0.74 AC

B15-16
0.66 AC

END BRIDGE #870975
485+91.63

B15-7
0.46 AC

B15-201
0.34 AC

B16FE-6
0.23 AC

B15-202A
0.36 AC

S15-203

B16FE-5
0.37 AC

W 20TH AVE.

24" FD

R/W LINE

24" FD

R/W LINE

T 53S / R 40E SECTION 11 MATCHLINE 476+40.00

NW SOUTH RIVER DR.

US-27/W OKEECHOBEE RD. EB

US-27/W OKEECHOBEE RD. WB

BX16-3
3.63 AC

B16FE-4
0.37 AC

B16FE-7
0.20 AC

W 39TH ST.

W 41ST ST.

LA R/W LINE

R/W LINE

B16FE-2
0.29 AC

LA R/W LINE

R/W LINE

B16FE-3
0.24 AC

24" FD

S16FE-06

BEST BUY

S16FE-07

S16FE-7A

R/W LINE

24" FD

S16FE-05

24" FD

24" FD

S16FE-02

24" FD

S16FE-04

S16FE-03

R/W LINE

WESTLAND PROMENADE

BASIN 16
13.66 AC (W 20TH AVENUE)

T 53S / R 40E SECTION 11 | T 53S / R 40E SECTION 02

T 53S / R 40E SECTION 11 MATCHLINE 504+40.00

T 53S / R 40E SECTION 02

LEGEND

DRAINAGE DIVIDE

FLOW ARROW

SXX-XXX PROPOSED STRUCTURE

XX EXISTING STRUCTURE

DO NOT USE THE INFORMATION ON THIS SHEET FOR CONSTRUCTION PURPOSES. THIS SHEET IS IN THE PLANS FOR DOCUMENTATION AND TO ASSIST CONSTRUCTION PERSONNEL WITH DRAINAGE CONCERNS.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01, 441830-1-52-01, 441831-1-52-01

DRAINAGE MAP

SHEET NO.

SUMMARY OF MAX STAGE - PROPOSED CONDITIONS -BASIN 15

NODE	STORM EVENT							WARNING
	10YR-1HR	10YR-8HR	10YR-24HR	100YR-1HR	100YR-8HR	100YR-24HR	25YR-72HR	STAGE (FT)
EX15-18	2.47	2.32	2.03	3.11	2.61	2.06	3.20	4.60
EX15-3	1.51	1.50	1.49	1.56	1.66	1.55	2.32	7.00
EX15-4	2.30	2.86	3.29	2.57	3.34	3.38	3.54	7.00
POND15-1	2.79	3.33	3.30	3.25	3.56	3.42	3.79	7.00
S15-1	22.03	21.56	21.14	22.51	21.83	21.26	22.24	24.07
S15-10	2.47	2.35	2.06	3.08	2.62	2.09	3.18	6.35
S15-11	2.44	2.35	2.09	2.99	2.62	2.11	3.12	4.92
S15-11A	2.48	2.36	2.09	3.09	2.65	2.11	3.19	4.09
S15-11B	2.44	2.35	2.08	2.99	2.62	2.11	3.12	5.50
S15-12	2.38	2.35	2.12	2.89	2.61	2.14	3.06	5.12
S15-13A	2.38	2.35	2.13	2.88	2.61	2.15	3.06	5.43
S15-15	2.31	2.34	2.13	2.73	2.57	2.15	2.95	5.10
S15-15A	2.38	2.35	2.13	2.89	2.61	2.15	3.06	5.71
S15-16	2.56	2.41	2.13	3.14	2.70	2.15	3.23	4.52
S15-17	2.47	2.38	2.13	2.94	2.64	2.15	3.10	4.03
S15-1A	1.46	1.48	1.47	1.47	1.62	1.50	2.12	7.00
S15-201	2.79	3.33	3.31	3.25	3.60	3.43	3.98	7.02
S15-201A	2.03	1.94	1.74	2.47	2.18	1.78	2.78	5.00
S15-201D	2.79	3.33	3.30	3.25	3.57	3.42	3.81	6.96
S15-201E	2.23	2.12	1.87	2.76	2.38	1.90	2.96	4.39
S15-201F	2.79	3.33	3.30	3.25	3.57	3.43	3.85	7.02
S15-201G	2.79	3.33	3.30	3.25	3.59	3.43	3.91	6.77
S15-201H	2.79	3.33	3.30	3.25	3.59	3.43	3.94	6.80
S15-202A	2.41	2.36	2.12	2.94	2.62	2.14	3.10	4.09
S15-203	2.38	2.35	2.13	2.88	2.61	2.15	3.05	4.48
S15-22	2.36	2.34	2.08	2.82	2.58	2.11	3.01	4.93
S15-3	18.60	17.94	17.41	19.51	18.31	17.56	18.96	20.47
S15-8	2.45	2.32	2.03	3.07	2.59	2.06	3.18	4.40
S15-9	2.48	2.34	2.05	3.11	2.62	2.08	3.20	3.51

Curve Number Calculations

CN CALCULATIONS FOR PROPOSED CONDITIONS - BASIN B-15

SUB-BASIN	TOTAL DRAINAGE AREA (AC)	PERVIOUS DRAINAGE AREA (AC)	PERVIOUS AREA CURVE NUMBER	IMP. DRAINAGE AREA (AC)	IMP. AREA CURVE NUMBER	COMPOSITE CURVE NUMBER
BX15-4	2.08	0.94	61	1.14	96	80
TOTAL BASIN B-15A	**2.08**	**0.94**		**1.14**		
B15-1A	1.91	1.06	61	0.85	96	77
B15-7	0.46	0.00	61	0.46	96	96
B15-201	0.34	0.00	61	0.34	96	96
B15-1	1.1	0	61	1.10	96	96
B15-3	0.44	0	61	0.44	96	96
B15-5	0.38	0	61	0.38	96	96
BX15-10	0.34	0.17	61	0.17	96	79
BX15-11	0.25	0.17	61	0.08	96	72
TOTAL BASIN B-15B	**5.22**	**1.40**		**3.82**		
B15-9	0.88	0.00	61	0.88	96	96
B15-10	0.09	0.00	61	0.09	96	96
B15-11	0.09	0.00	61	0.09	96	96
B15-11A	0.48	0.00	61	0.48	96	96
B15-202A	0.36	0.00	61	0.36	96	96
B15-203	0.74	0.00	61	0.74	96	96
B15-16	0.66	0.00	61	0.66	96	96
BX15-15A	0.11	0.00	61	0.11	96	96
B15-13A	0.21	0.00	61	0.21	96	96
BX15-18	0.24	0.02	61	0.22	96	93
B15-22	0.16	0.00	61	0.16	96	96
TOTAL BASIN B15-C	**4.02**	**0.02**		**4.00**		
TOTAL BASIN B-15	**11.32**	**2.36**		**8.96**		

Average Hydraulic Conductivity

Average Hydraulic Conductivity

Basin B-15		
Percolation Test	P-27	P-28
Average Flow to 10 ft. depth (gpm)	0.10	49.82
Depth to Water Table (ft)	1.90	3.40
Head Maintained (ft)	0.90	2.40
Borehole Diameter (ft)	0.604	0.604
Borehole Depth (ft)	10.00	10.00
Du (ft)	0.90	2.40
Average Flow (cfs)	0.0002	0.1110
Ds (ft)	8.10	6.60
Hydraulic Conductivity K (cfs/ft2-ft head)	1.48E-05	3.06E-03
Average Hydraulic Conductivity K	**1.54E-03**	

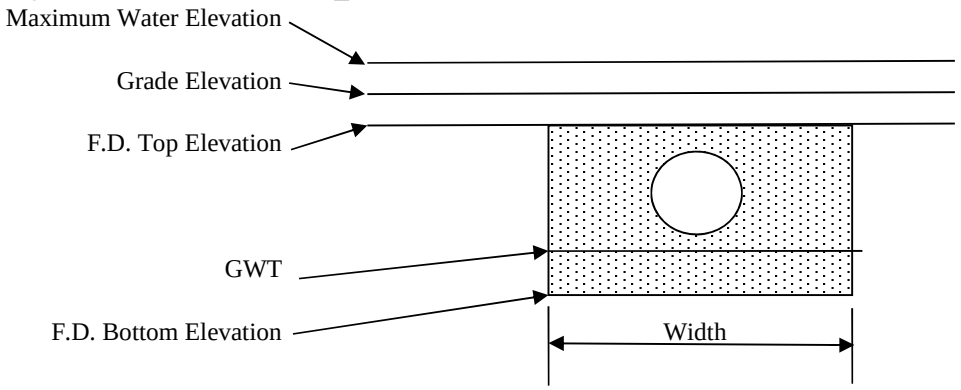
Rating Curve Calculations

Made by: _____ _____

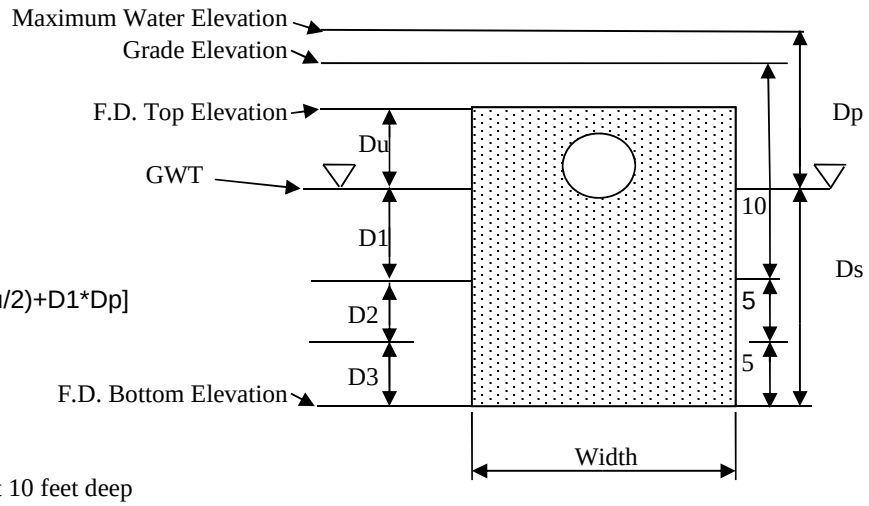
Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-15



Maximum Water Elevation =	**5.45**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**4.45**	ft.NAVD	
F.D.Top Elevation =	**3.90**	ft.NAVD	
Ground Water Table =	**1.45**	ft.NAVD	
F.D. Bottom Elevation =	**-11.54**	ft.NAVD	
Width =	**4.50**	feet.	
Pipe Diameter =	**24**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**1.54E-03**	cfs/ft^2-ft head	(Ave. P-27,P-28)
Hydraulic Conductivity K15 =	**1.54E-03**	cfs/ft^2-ft head	(Ave. P-27,P-28)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____

Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-15

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs/ft)	(cfs/ft)
1.45	0.000	0.000
2.20	0.026	0.000
3.90	0.107	0.076
5.45	0.181	0.150

Rating Curve (Q)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs)	(cfs)
1.45	0.00	0.00
2.20	0.03	0.00
3.90	0.11	0.08
5.45	0.18	0.15

Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

Rating Curve Adjusted (Q)

Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.45	1.45	0.00
1.45	2.20	0.03
1.45	3.90	0.10
1.45	5.45	0.10
2.20	2.20	0.00
2.20	3.90	0.08
2.20	5.45	0.10

French Drain Length Calcs

SUMMARY OF ADDITIONAL IMP. AREA - BASIN 15

PRE-DEVELOPMENT

SUB-BASIN	TOTAL DRAINAGE AREA (AC)	IMPERVIOUS DRAINAGE AREA (AC)	COMPOSITE CURVE NUMBER
B15-1A	2.25	1.15	79
B15-7	0.46	0.46	96
TOTAL SUB-BASIN B-15B	2.71	1.61	
Additiona Imp. Area for BASIN B-15B			0.04 ac
B15-11	0.09	0	61
B15-11A	0.48	0.48	96
B15-13	0.34	0.34	96
B15-13A	0.16	0.16	96
BX15-15A	0.09	0.09	96
B15-14	0.71	0.71	96
B15-16	0.66	0.66	92
BX15-18	0.24	0.24	86
BX15-22	0.16	0.09	79
TOTAL SUB-BASIN B-15C	2.93	2.77	
Additiona Imp. Area for BASIN B-15C			0.26 ac

Total Addtional Imp. Area for Basin B-15 (PRE) = 4.38 ac

POST-DEVELOPMENT CONDITIONS

SUB-BASIN	TOTAL DRAINAGE AREA (AC)	PERVIOUS DRAINAGE AREA (AC)	PERVIOUS AREA CURVE NUMBER	IMPERVIOUS DRAINAGE AREA (AC)	IMPERVIOUS AREA CURVE NUMBER	COMPOSITE CURVE NUMBER
B15-1A	1.91	1.06	61	0.85	96	77
B15-7	0.46	0.00	61	0.46	96	96
B15-201	0.34	0.00	61	0.34	96	96
	2.71			1.65		
B15-11	0.09	0.00	61	0.09	96	96
B15-11A	0.48	0.00	61	0.48	96	96
B15-202A	0.36	0.00	61	0.36	96	96
B15-203	0.74	0.00	61	0.74	96	96
B15-16	0.66	0.00	61	0.66	96	96
BX15-15A	0.11	0.00	61	0.11	96	96
B15-13A	0.21	0.00	61	0.21	96	96
BX15-18	0.24	0.02	61	0.22	96	93
B15-22	0.16	0.00	61	0.16	96	96
	3.05			3.03		

Total Addtional Imp. Area for Basin B-15 (POST) = 4.68 ac

Total Additional Imp. Area for Basin 15= 0.30 ac

Note: This table is for additional imp area calculations only

REQUIRED VOLUME IN PROPOSED FRENCH DRAIN-BASIN15

Additional Imp. Area 0.30 ac

Required Treatment Volume

= 2.5" of Imp. area

Required Treatment Volume = 0.06 ac-ft (A)

Required Attenation Volume

$$Q = \frac{(P - 0.2S)^2}{(P + 0.8S)}$$

Q = Runoff (in) 13.51 in

P = Rainfall 25YR-72HR (in) = 14 in

S= maximum retention after runoff begins (in) 0.42 in

$$S = \frac{1000}{CN} - 10$$

CN = 96

Total Q in ac-ft 0.34 ac-ft (B)

Q (in) X Added Imp. Area/12

Provided Volume in French Drain =

maximum of (A) or (B) 0.34 ac-ft

Factor of Safety (F.S.) = 2

Required Volume in French Drain = 0.68 ac-ft

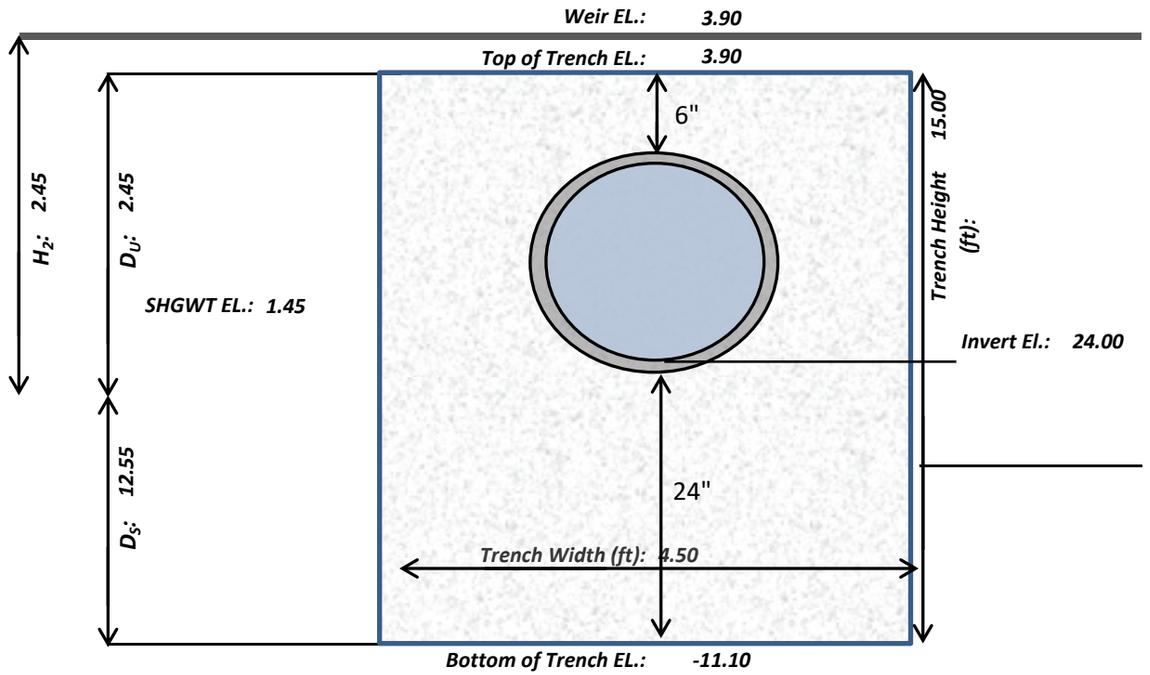
Provided in Volume in French Drain = 0.70 ac-ft

Basin 15 (SouthBound Swale)

Palmetto Expressway Improvments

FRENCH DRAIN DESIGN VOLUMES

French Drain (ICPR Link Name):	S15-22_exf
Location	
SHGWT EL. (ft-NAVD):	1.45
Pipe Size (in):	24
Length of French Drain, L (LF):	80
Pipe Thickness (in):	3.00
Pipe Invert EL. (ft-NAVD):	1.15
Top of Trench EL. (ft-NAVD):	3.90
Bottom of Trench EL. (ft-NAVD):	-11.10
Trench Height, H_T (ft):	15.00
Weir EL. (ft-NAVD):	4.45
Trench Width, W (ft):	4.50
Average Hydraulic Conductivity, K_{10} (cfs/ft^2/ft-head):	1.540E-03
Depth to Water Table, H_2 (ft):	2.45
Non-Saturated Trench Depth, D_U (ft):	2.45
Saturated Trench Depth, D_S (ft):	12.55
H_2W:	11.03
$2H_2D_U$:	12.01
D_U^2:	6.00
$2H_2D_S$:	61.50
$(1.39x10^{-4})WD_U$:	0.001532
If $D_U > D_S$ and $W < 2H_T$, Treatment Provided, V (ac-in):	9.80
If $D_S > D_U$ and/or $W > 2H_T$, Treatment Provided, V (ac-in):	8.44
$D_U > D_S$ and $W < 2H_T$ (Yes/No):	No
Treatment Volume Provided, V (Ac-ft):	**0.703**

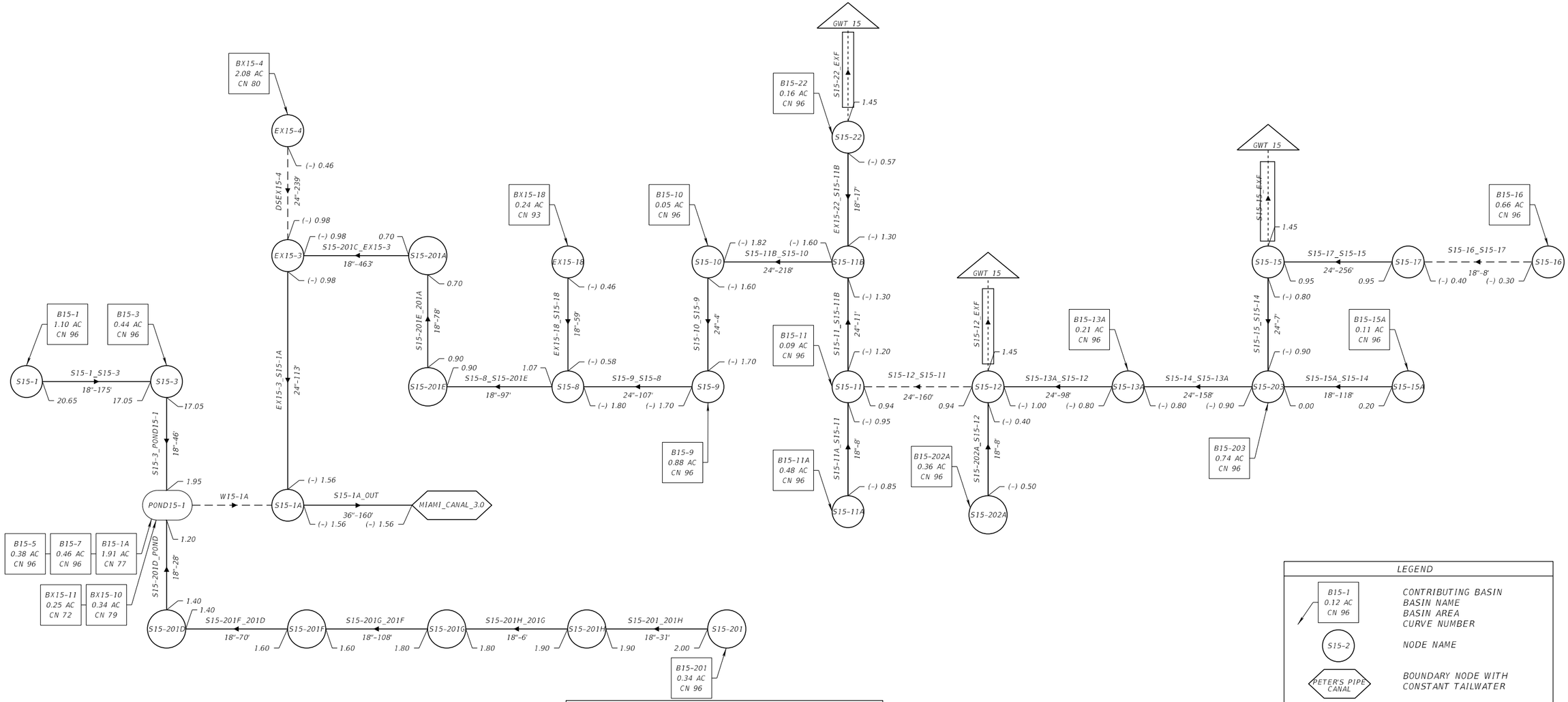


$$V = L[K_{10}(H_2W + 2H_2D_U - D_U^{\,2} + 2H_2D_S) + (1.39x10^{-4})WD_U]$$

$$V = L[K_{10}(2H_2D_U - D_U^{\,2} + 2H_2D_S) + (1.39x10^{-4})WD_U]$$

Nodal Diagram

POST-DEVELOPMENT CONDITIONS



WEIR INPUT SUMMARY							
WEIR	VERT. TYPE	HORIZ.	CIRC.	RECT.	INV.	SPAN	RISE
W15-1A	-	X	-	X	3.15'	54"	29.76"
DSEX15-4	-	X	-	X	3.25'	37"	24"

LEGEND

- B15-1 / 0.12 AC / CN 96 — CONTRIBUTING BASIN, BASIN NAME, BASIN AREA, CURVE NUMBER
- S15-2 — NODE NAME
- PETER'S PIPE CANAL — BOUNDARY NODE WITH CONSTANT TAILWATER
- GWT 23 — BOUNDARY NODE WITH VARIABLE TAILWATER
- S15-3_S15-4 / 18"-42' / 21.50 / 21.40 — PIPE LINK WITH (QUANTITY)SIZE-LENGTH INVERT ELEVATIONS
- WEX15_14 — WEIR LINK
- AREA 1_EXF — RATING CURVE LINK

PROPOSED DESIGN

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01 441830-1-52-01 441831-1-52-01

NODAL DIAGRAM BASIN 15

SHEET NO.

KTABUTEAU 12/17/2020 9:45:21 AM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\44716515201\drainage\DRDTRD102.dgn

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
EX15-18	Basin 15	100YR-1HR	0.68	3.11	4.60	0.0018	115	0.65	1.71	0.68	1.68
EX15-3	Basin 15	100YR-1HR	0.69	1.56	7.00	0.0013	136	0.69	4.60	0.69	4.60
EX15-4	Basin 15	100YR-1HR	1.33	2.57	7.00	0.0029	34165	0.67	10.74	0.00	0.00
GWT_15	Basin 15	100YR-1HR	0.00	1.45	99.00	0.0000	0	0.68	24.81	0.00	0.00
MIAMI_CANAL_3.0	Basin 15	100YR-1HR	0.00	1.45	99.00	0.0000	12	0.69	4.60	0.00	0.00
POND15-1	Basin 15	100YR-1HR	1.33	3.25	7.00	0.0012	52299	0.67	31.74	1.33	1.44
S15-1	Basin 15	100YR-1HR	0.65	22.51	24.07	-0.0019	151	0.65	8.28	0.65	8.27
S15-10	Basin 15	100YR-1HR	0.68	3.08	6.35	0.0047	124	0.19	0.95	1.38	1.49
S15-11	Basin 15	100YR-1HR	0.68	2.99	4.92	-0.0019	133	0.49	1.05	1.17	1.75
S15-11A	Basin 15	100YR-1HR	0.68	3.09	4.09	0.0018	113	0.65	3.61	0.66	3.62
S15-11B	Basin 15	100YR-1HR	0.68	2.99	5.50	0.0056	125	1.41	1.83	0.18	0.94
S15-12	Basin 15	100YR-1HR	0.68	2.89	5.12	0.0026	159	0.53	3.92	0.66	2.92
S15-13A	Basin 15	100YR-1HR	0.68	2.88	5.43	-0.0052	126	0.45	1.61	0.53	1.57
S15-15	Basin 15	100YR-1HR	0.68	2.73	5.10	0.0014	239	0.67	4.91	0.69	4.91
S15-15A	Basin 15	100YR-1HR	0.68	2.89	5.71	0.0017	117	0.65	0.83	0.69	0.82
S15-16	Basin 15	100YR-1HR	0.67	3.14	4.52	0.0018	113	0.65	4.97	0.65	4.93
S15-17	Basin 15	100YR-1HR	0.68	2.94	4.03	0.0016	169	0.65	4.93	0.67	4.91
S15-1A	Basin 15	100YR-1HR	0.69	1.47	7.00	0.0026	131	0.69	4.60	0.69	4.60
S15-201	Basin 15	100YR-1HR	1.33	3.25	7.02	0.0016	129	0.65	2.56	0.65	2.54
S15-201A	Basin 15	100YR-1HR	0.69	2.47	5.00	0.0019	133	0.67	4.61	0.69	4.60
S15-201D	Basin 15	100YR-1HR	1.33	3.25	6.96	0.0013	117	0.65	2.33	0.65	2.22
S15-201E	Basin 15	100YR-1HR	0.69	2.76	4.39	0.0019	120	0.66	4.63	0.67	4.61
S15-201F	Basin 15	100YR-1HR	1.33	3.25	7.02	0.0011	126	0.65	2.45	0.65	2.33
S15-201G	Basin 15	100YR-1HR	1.33	3.25	6.77	0.0034	137	0.65	2.51	0.65	2.45
S15-201H	Basin 15	100YR-1HR	1.33	3.25	6.80	0.0028	130	0.65	2.54	0.65	2.51
S15-202A	Basin 15	100YR-1HR	0.68	2.94	4.09	0.0017	113	0.65	2.71	0.67	2.67
S15-203	Basin 15	100YR-1HR	0.68	2.88	4.48	0.0044	126	0.24	1.36	1.38	0.89
S15-22	Basin 15	100YR-1HR	0.68	2.82	4.93	0.0014	114	0.65	1.20	0.68	1.17
S15-3	Basin 15	100YR-1HR	0.67	19.51	20.47	0.0026	222	0.65	11.58	0.67	11.55
S15-8	Basin 15	100YR-1HR	0.68	3.07	4.40	0.0017	124	0.63	4.68	0.66	4.63
S15-9	Basin 15	100YR-1HR	0.68	3.11	3.51	-0.0047	119	0.53	3.23	0.60	3.08
EX15-18	Basin 15	100YR-24HR	21.01	2.06	4.60	0.0007	115	12.00	0.32	11.82	0.34
EX15-3	Basin 15	100YR-24HR	15.11	1.55	7.00	0.0009	211	15.13	3.53	15.14	3.53
EX15-4	Basin 15	100YR-24HR	15.22	3.38	7.00	0.0003	35100	12.00	2.59	15.22	1.47
GWT_15	Basin 15	100YR-24HR	24.00	2.20	99.00	0.0001	0	11.82	3.27	0.00	0.00
MIAMI_CANAL_3.0	Basin 15	100YR-24HR	0.00	1.45	99.00	0.0000	12	12.09	8.37	0.00	0.00
POND15-1	Basin 15	100YR-24HR	12.11	3.42	7.00	0.0006	52724	12.00	6.69	12.11	6.31
S15-1	Basin 15	100YR-24HR	11.96	21.26	24.07	-0.0002	236	11.98	1.48	11.96	1.48
S15-10	Basin 15	100YR-24HR	21.02	2.09	6.35	0.0020	124	24.00	2.03	24.34	2.04
S15-11	Basin 15	100YR-24HR	21.02	2.11	4.92	0.0015	271	22.09	1.48	10.48	1.69
S15-11A	Basin 15	100YR-24HR	21.02	2.11	4.09	0.0011	113	11.98	0.65	11.82	0.66
S15-11B	Basin 15	100YR-24HR	21.02	2.11	5.50	-0.0038	125	33.05	2.33	24.00	2.03
S15-12	Basin 15	100YR-24HR	21.02	2.14	5.12	-0.0017	275	11.88	1.69	21.01	1.07
S15-13A	Basin 15	100YR-24HR	21.02	2.15	5.43	-0.0023	126	24.67	1.00	24.96	1.14
S15-15	Basin 15	100YR-24HR	21.02	2.15	5.10	0.0012	364	12.02	0.89	12.18	2.07
S15-15A	Basin 15	100YR-24HR	21.02	2.15	5.71	0.0009	117	11.98	0.15	24.96	0.65
S15-16	Basin 15	100YR-24HR	21.02	2.15	4.52	0.0008	113	11.98	0.89	11.99	0.89
S15-17	Basin 15	100YR-24HR	21.02	2.15	4.03	0.0005	364	11.99	0.89	12.02	0.89
S15-1A	Basin 15	100YR-24HR	12.09	1.50	7.00	-0.0023	131	12.09	8.37	12.09	8.37
S15-201	Basin 15	100YR-24HR	12.07	3.43	7.02	-0.0013	121	11.98	0.46	19.28	0.81
S15-201A	Basin 15	100YR-24HR	19.05	1.78	5.00	-0.0000	405	21.02	2.27	21.04	2.27

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S15-201D	Basin 15	100YR-24HR	12.10	3.42	6.96	-0.0019	117	12.00	0.45	24.69	0.49
S15-201E	Basin 15	100YR-24HR	19.04	1.90	4.39	0.0000	236	21.01	2.27	21.02	2.27
S15-201F	Basin 15	100YR-24HR	12.09	3.43	7.02	0.0019	120	19.65	0.65	12.00	0.45
S15-201G	Basin 15	100YR-24HR	12.08	3.43	6.77	-0.0029	117	12.00	0.46	19.65	0.65
S15-201H	Basin 15	100YR-24HR	12.07	3.43	6.80	0.0032	117	19.28	0.81	12.00	0.46
S15-202A	Basin 15	100YR-24HR	21.03	2.14	4.09	-0.0012	113	11.98	0.49	11.93	0.60
S15-203	Basin 15	100YR-24HR	21.02	2.15	4.48	0.0058	126	24.96	2.68	24.67	1.00
S15-22	Basin 15	100YR-24HR	21.02	2.11	4.93	0.0012	114	11.98	0.22	11.78	1.09
S15-3	Basin 15	100YR-24HR	12.00	17.56	20.47	-0.0009	255	11.98	2.08	11.98	2.08
S15-8	Basin 15	100YR-24HR	21.01	2.06	4.40	0.0008	189	21.00	2.27	21.01	2.27
S15-9	Basin 15	100YR-24HR	21.01	2.08	3.51	-0.0023	119	11.78	2.88	21.00	2.17
EX15-18	Basin 15	100YR-8HR	4.03	2.61	4.60	0.0006	115	4.00	0.96	4.00	0.95
EX15-3	Basin 15	100YR-8HR	4.21	1.66	7.00	0.0006	176	3.90	3.63	3.88	3.61
EX15-4	Basin 15	100YR-8HR	7.11	3.34	7.00	0.0007	35026	4.00	7.52	7.11	0.87
GWT_15	Basin 15	100YR-8HR	8.00	2.20	99.00	0.0002	0	4.02	12.25	0.00	0.00
MIAMI_CANAL_3.0	Basin 15	100YR-8HR	0.00	1.45	99.00	0.0000	12	4.26	14.70	0.00	0.00
POND15-1	Basin 15	100YR-8HR	4.30	3.56	7.00	0.0006	53070	4.00	19.54	4.30	11.68
S15-1	Basin 15	100YR-8HR	4.00	21.83	24.07	-0.0004	225	4.00	4.45	4.00	4.45
S15-10	Basin 15	100YR-8HR	4.03	2.62	6.35	0.0042	124	8.00	1.95	8.00	1.95
S15-11	Basin 15	100YR-8HR	4.03	2.62	4.92	0.0011	232	8.10	1.72	2.93	1.60
S15-11A	Basin 15	100YR-8HR	4.03	2.65	4.09	-0.0008	113	4.00	1.94	4.00	1.93
S15-11B	Basin 15	100YR-8HR	4.03	2.62	5.50	-0.0045	125	0.01	2.25	8.00	1.93
S15-12	Basin 15	100YR-8HR	4.03	2.61	5.12	-0.0021	237	3.24	2.32	3.94	1.94
S15-13A	Basin 15	100YR-8HR	4.03	2.61	5.43	-0.0043	126	4.77	1.81	3.24	1.25
S15-15	Basin 15	100YR-8HR	4.03	2.57	5.10	-0.0011	310	4.02	2.64	3.93	2.58
S15-15A	Basin 15	100YR-8HR	4.03	2.61	5.71	0.0014	117	4.00	0.44	0.01	0.60
S15-16	Basin 15	100YR-8HR	4.02	2.70	4.52	0.0004	113	4.00	2.67	4.00	2.66
S15-17	Basin 15	100YR-8HR	4.03	2.64	4.03	0.0003	303	4.00	2.66	4.02	2.64
S15-1A	Basin 15	100YR-8HR	4.26	1.62	7.00	0.0021	131	4.26	14.70	4.26	14.70
S15-201	Basin 15	100YR-8HR	4.18	3.60	7.02	-0.0013	114	4.00	1.37	4.00	1.35
S15-201A	Basin 15	100YR-8HR	4.07	2.18	5.00	0.0002	187	3.90	3.66	3.90	3.63
S15-201D	Basin 15	100YR-8HR	4.29	3.57	6.96	-0.0014	117	4.01	1.26	4.02	1.24
S15-201E	Basin 15	100YR-8HR	4.05	2.38	4.39	0.0003	142	3.90	3.68	3.90	3.66
S15-201F	Basin 15	100YR-8HR	4.27	3.57	7.02	0.0017	120	4.01	1.29	4.01	1.26
S15-201G	Basin 15	100YR-8HR	4.24	3.59	6.77	-0.0022	117	4.00	1.32	4.01	1.29
S15-201H	Basin 15	100YR-8HR	4.22	3.59	6.80	0.0023	114	4.00	1.35	4.00	1.32
S15-202A	Basin 15	100YR-8HR	4.03	2.62	4.09	0.0016	113	4.00	1.46	3.92	1.44
S15-203	Basin 15	100YR-8HR	4.03	2.61	4.48	-0.0062	126	0.01	1.88	5.07	1.50
S15-22	Basin 15	100YR-8HR	4.03	2.58	4.93	0.0013	114	4.00	0.65	3.03	1.07
S15-3	Basin 15	100YR-8HR	4.00	18.31	20.47	-0.0008	260	4.00	6.23	4.00	6.22
S15-8	Basin 15	100YR-8HR	4.04	2.59	4.40	0.0008	128	3.90	3.69	3.90	3.68
S15-9	Basin 15	100YR-8HR	4.03	2.62	3.51	-0.0035	119	3.25	3.98	3.88	2.75
EX15-18	Basin 15	10YR-1HR	0.68	2.47	4.60	0.0016	115	0.65	1.13	0.68	1.12
EX15-3	Basin 15	10YR-1HR	0.71	1.51	7.00	0.0017	186	0.71	3.48	0.71	3.48
EX15-4	Basin 15	10YR-1HR	1.33	2.30	7.00	0.0037	33891	0.68	6.16	0.00	0.00
GWT_15	Basin 15	10YR-1HR	0.00	1.45	99.00	0.0000	0	0.68	16.41	0.00	0.00
MIAMI_CANAL_3.0	Basin 15	10YR-1HR	0.00	1.45	99.00	0.0000	12	0.71	3.48	0.00	0.00
POND15-1	Basin 15	10YR-1HR	25.00	2.79	7.00	0.0015	50138	0.67	20.10	0.00	0.00
S15-1	Basin 15	10YR-1HR	0.65	22.03	24.07	-0.0020	198	0.65	5.63	0.65	5.62
S15-10	Basin 15	10YR-1HR	0.68	2.47	6.35	0.0092	124	0.10	1.34	1.34	2.26
S15-11	Basin 15	10YR-1HR	0.68	2.44	4.92	-0.0034	254	0.50	0.86	1.01	2.39

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S15-11A	Basin 15	10YR-1HR	0.68	2.48	4.09	0.0013	113	0.65	2.46	0.67	2.48
S15-11B	Basin 15	10YR-1HR	0.68	2.44	5.50	0.0102	125	1.34	2.69	0.10	1.34
S15-12	Basin 15	10YR-1HR	0.68	2.38	5.12	0.0015	260	0.63	1.56	0.67	2.09
S15-13A	Basin 15	10YR-1HR	0.68	2.38	5.43	0.0045	126	0.63	1.93	0.00	0.00
S15-15	Basin 15	10YR-1HR	0.68	2.31	5.10	-0.0013	347	0.68	3.33	0.70	3.34
S15-15A	Basin 15	10YR-1HR	0.68	2.38	5.71	0.0017	117	0.65	0.56	0.70	0.56
S15-16	Basin 15	10YR-1HR	0.68	2.56	4.52	-0.0016	113	0.65	3.38	0.65	3.36
S15-17	Basin 15	10YR-1HR	0.68	2.47	4.03	0.0011	337	0.65	3.36	0.68	3.33
S15-1A	Basin 15	10YR-1HR	0.71	1.46	7.00	0.0059	131	0.71	3.48	0.71	3.48
S15-201	Basin 15	10YR-1HR	25.00	2.79	7.02	0.0020	136	0.65	1.74	0.65	1.73
S15-201A	Basin 15	10YR-1HR	0.71	2.03	5.00	0.0007	317	0.68	3.50	0.71	3.48
S15-201D	Basin 15	10YR-1HR	25.00	2.79	6.96	0.0014	153	0.66	1.62	0.66	1.54
S15-201E	Basin 15	10YR-1HR	0.70	2.23	4.39	0.0009	194	0.66	3.54	0.68	3.50
S15-201F	Basin 15	10YR-1HR	25.00	2.79	7.02	0.0014	220	0.66	1.69	0.66	1.62
S15-201G	Basin 15	10YR-1HR	25.00	2.79	6.77	0.0042	191	0.66	1.72	0.66	1.69
S15-201H	Basin 15	10YR-1HR	25.00	2.79	6.80	0.0035	140	0.65	1.73	0.66	1.72
S15-202A	Basin 15	10YR-1HR	0.68	2.41	4.09	0.0010	113	0.65	1.84	0.66	1.82
S15-203	Basin 15	10YR-1HR	0.68	2.38	4.48	0.0051	126	0.09	0.00	1.34	1.31
S15-22	Basin 15	10YR-1HR	0.68	2.36	4.93	0.0026	114	0.65	0.82	1.21	1.28
S15-3	Basin 15	10YR-1HR	0.67	18.60	20.47	0.0016	236	0.65	7.87	0.67	7.86
S15-8	Basin 15	10YR-1HR	0.68	2.45	4.40	0.0033	161	0.64	3.58	0.66	3.54
S15-9	Basin 15	10YR-1HR	0.68	2.48	3.51	-0.0098	119	1.01	3.82	0.63	2.49
EX15-18	Basin 15	10YR-24HR	21.03	2.03	4.60	0.0007	115	12.00	0.21	12.01	0.21
EX15-3	Basin 15	10YR-24HR	22.04	1.49	7.00	0.0009	212	22.07	2.48	22.07	2.48
EX15-4	Basin 15	10YR-24HR	22.14	3.29	7.00	0.0002	34934	12.00	1.59	22.14	0.29
GWT_15	Basin 15	10YR-24HR	24.00	2.20	99.00	0.0001	0	11.73	1.69	0.00	0.00
MIAMI_CANAL_3.0	Basin 15	10YR-24HR	0.00	1.45	99.00	0.0000	12	15.08	4.57	0.00	0.00
POND15-1	Basin 15	10YR-24HR	15.04	3.30	7.00	0.0005	52420	12.00	4.18	15.04	2.63
S15-1	Basin 15	10YR-24HR	12.00	21.14	24.07	-0.0002	230	11.98	0.98	11.97	0.98
S15-10	Basin 15	10YR-24HR	21.03	2.06	6.35	0.0020	124	24.00	2.05	24.00	2.06
S15-11	Basin 15	10YR-24HR	22.02	2.09	4.92	0.0007	272	21.00	1.45	33.04	1.53
S15-11A	Basin 15	10YR-24HR	22.01	2.09	4.09	0.0007	113	11.98	0.43	12.00	0.42
S15-11B	Basin 15	10YR-24HR	22.02	2.08	5.50	-0.0038	125	33.04	2.33	24.00	2.05
S15-12	Basin 15	10YR-24HR	22.02	2.12	5.12	-0.0017	276	24.96	1.59	21.01	1.03
S15-13A	Basin 15	10YR-24HR	22.02	2.13	5.43	-0.0023	126	24.34	1.02	24.96	1.14
S15-15	Basin 15	10YR-24HR	22.01	2.13	5.10	0.0012	365	12.02	0.57	12.06	1.76
S15-15A	Basin 15	10YR-24HR	22.02	2.13	5.71	-0.0008	117	11.98	0.10	24.96	0.65
S15-16	Basin 15	10YR-24HR	22.02	2.13	4.52	0.0008	113	11.98	0.59	12.00	0.58
S15-17	Basin 15	10YR-24HR	22.01	2.13	4.03	0.0005	365	12.00	0.58	12.02	0.57
S15-1A	Basin 15	10YR-24HR	15.08	1.47	7.00	0.0023	131	15.08	4.57	15.08	4.57
S15-201	Basin 15	10YR-24HR	15.02	3.31	7.02	-0.0010	128	11.98	0.30	17.18	0.76
S15-201A	Basin 15	10YR-24HR	21.07	1.74	5.00	-0.0000	413	21.02	2.20	21.05	2.20
S15-201D	Basin 15	10YR-24HR	15.04	3.30	6.96	-0.0021	117	13.00	0.28	24.34	0.50
S15-201E	Basin 15	10YR-24HR	21.05	1.87	4.39	-0.0000	238	21.01	2.20	21.02	2.20
S15-201F	Basin 15	10YR-24HR	15.03	3.30	7.02	0.0019	120	24.34	0.63	13.00	0.28
S15-201G	Basin 15	10YR-24HR	15.03	3.30	6.77	-0.0029	118	12.33	0.29	24.34	0.63
S15-201H	Basin 15	10YR-24HR	15.02	3.30	6.80	0.0032	127	17.18	0.76	12.33	0.29
S15-202A	Basin 15	10YR-24HR	22.02	2.12	4.09	-0.0012	113	11.98	0.32	29.81	0.46
S15-203	Basin 15	10YR-24HR	22.02	2.13	4.48	0.0058	126	24.96	2.68	24.34	1.02
S15-22	Basin 15	10YR-24HR	22.02	2.08	4.93	0.0012	114	11.98	0.14	0.01	0.76
S15-3	Basin 15	10YR-24HR	12.00	17.41	20.47	-0.0008	244	11.98	1.37	11.98	1.37

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S15-8	Basin 15	10YR-24HR	21.03	2.03	4.40	0.0008	190	19.01	2.16	21.01	2.20
S15-9	Basin 15	10YR-24HR	21.03	2.05	3.51	-0.0023	119	22.00	2.15	22.00	2.14
EX15-18	Basin 15	10YR-8HR	4.04	2.32	4.60	0.0006	115	4.00	0.63	4.02	0.62
EX15-3	Basin 15	10YR-8HR	5.11	1.50	7.00	0.0006	209	4.06	3.13	4.06	3.13
EX15-4	Basin 15	10YR-8HR	8.33	2.86	7.00	0.0005	34457	4.00	4.55	0.00	0.00
GWT_15	Basin 15	10YR-8HR	8.00	2.20	99.00	0.0002	0	4.02	7.35	0.00	0.00
MIAMI_CANAL_3.0	Basin 15	10YR-8HR	0.00	1.45	99.00	0.0000	12	5.16	5.76	0.00	0.00
POND15-1	Basin 15	10YR-8HR	5.22	3.33	7.00	0.0008	52490	4.00	12.21	5.22	3.36
S15-1	Basin 15	10YR-8HR	4.00	21.56	24.07	-0.0003	239	4.00	2.95	4.00	2.95
S15-10	Basin 15	10YR-8HR	4.04	2.35	6.35	-0.0029	124	8.00	2.01	8.00	2.02
S15-11	Basin 15	10YR-8HR	4.04	2.35	4.92	0.0012	260	7.60	1.78	3.12	1.63
S15-11A	Basin 15	10YR-8HR	4.03	2.36	4.09	-0.0008	113	4.00	1.29	4.00	1.27
S15-11B	Basin 15	10YR-8HR	4.04	2.35	5.50	-0.0045	125	0.01	2.25	8.00	2.00
S15-12	Basin 15	10YR-8HR	4.04	2.35	5.12	-0.0021	264	4.18	2.20	4.03	1.56
S15-13A	Basin 15	10YR-8HR	4.04	2.35	5.43	0.0036	126	4.30	1.78	4.18	1.35
S15-15	Basin 15	10YR-8HR	4.04	2.34	5.10	-0.0012	348	4.02	1.74	4.23	1.96
S15-15A	Basin 15	10YR-8HR	4.04	2.35	5.71	0.0013	117	4.00	0.29	0.01	0.60
S15-16	Basin 15	10YR-8HR	4.03	2.41	4.52	0.0004	113	4.00	1.77	4.00	1.76
S15-17	Basin 15	10YR-8HR	4.04	2.38	4.03	0.0003	345	4.00	1.76	4.02	1.74
S15-1A	Basin 15	10YR-8HR	5.16	1.48	7.00	0.0021	131	5.16	5.76	5.16	5.76
S15-201	Basin 15	10YR-8HR	5.30	3.33	7.02	-0.0013	126	4.00	0.91	3.99	0.88
S15-201A	Basin 15	10YR-8HR	4.06	1.94	5.00	-0.0001	361	4.03	3.13	4.06	3.13
S15-201D	Basin 15	10YR-8HR	5.22	3.33	6.96	-0.0014	117	3.99	0.75	4.00	0.72
S15-201E	Basin 15	10YR-8HR	4.05	2.12	4.39	0.0002	215	4.02	3.14	4.03	3.13
S15-201F	Basin 15	10YR-8HR	5.23	3.33	7.02	0.0017	120	3.99	0.80	3.99	0.75
S15-201G	Basin 15	10YR-8HR	5.30	3.33	6.77	-0.0022	118	3.99	0.85	3.99	0.80
S15-201H	Basin 15	10YR-8HR	5.22	3.33	6.80	0.0021	125	3.99	0.88	3.99	0.85
S15-202A	Basin 15	10YR-8HR	4.04	2.36	4.09	0.0016	113	4.00	0.96	4.00	0.97
S15-203	Basin 15	10YR-8HR	4.04	2.35	4.48	-0.0062	126	3.05	1.92	4.49	1.50
S15-22	Basin 15	10YR-8HR	4.04	2.34	4.93	0.0013	114	4.00	0.43	3.14	1.13
S15-3	Basin 15	10YR-8HR	4.00	17.94	20.47	-0.0006	266	4.00	4.13	4.00	4.12
S15-8	Basin 15	10YR-8HR	4.04	2.32	4.40	0.0008	176	4.01	3.09	4.02	3.14
S15-9	Basin 15	10YR-8HR	4.03	2.34	3.51	-0.0029	119	4.00	3.91	4.01	2.47
EX15-18	Basin 15	25YR-72HR	60.06	3.20	4.60	0.0009	115	60.02	1.48	60.04	1.44
EX15-3	Basin 15	25YR-72HR	60.20	2.32	7.00	0.0014	136	60.35	7.06	60.35	7.09
EX15-4	Basin 15	25YR-72HR	60.43	3.54	7.00	0.0004	35418	60.02	12.26	60.43	4.98
GWT_15	Basin 15	25YR-72HR	72.00	2.20	99.00	0.0001	0	60.04	20.29	0.00	0.00
MIAMI_CANAL_3.0	Basin 15	25YR-72HR	0.00	1.45	99.00	0.0000	12	60.18	29.42	0.00	0.00
POND15-1	Basin 15	25YR-72HR	60.17	3.79	7.00	0.0005	53633	60.02	31.10	60.17	22.66
S15-1	Basin 15	25YR-72HR	60.02	22.24	24.07	0.0008	151	60.02	6.82	60.02	6.82
S15-10	Basin 15	25YR-72HR	60.05	3.18	6.35	0.0045	124	72.34	2.04	72.33	2.06
S15-11	Basin 15	25YR-72HR	60.05	3.12	4.92	-0.0047	122	65.44	1.69	59.95	2.10
S15-11A	Basin 15	25YR-72HR	60.05	3.19	4.09	0.0008	113	60.02	2.98	60.03	2.99
S15-11B	Basin 15	25YR-72HR	60.05	3.12	5.50	0.0048	125	90.17	2.35	72.35	2.04
S15-12	Basin 15	25YR-72HR	60.05	3.06	5.12	0.0040	126	59.93	3.65	60.00	2.53
S15-13A	Basin 15	25YR-72HR	60.05	3.06	5.43	-0.0059	126	59.77	1.71	59.78	1.54
S15-15	Basin 15	25YR-72HR	60.04	2.95	5.10	-0.0022	126	60.04	4.05	60.04	4.03
S15-15A	Basin 15	25YR-72HR	60.04	3.06	5.71	0.0010	117	60.02	0.68	59.85	0.70
S15-16	Basin 15	25YR-72HR	60.04	3.23	4.52	0.0008	113	60.02	4.09	60.02	4.06
S15-17	Basin 15	25YR-72HR	60.04	3.10	4.03	0.0007	126	60.02	4.06	60.04	4.05
S15-1A	Basin 15	25YR-72HR	60.18	2.12	7.00	0.0025	131	60.18	29.42	60.18	29.42

Qpost = 29.42 cfs <
Qpre = 30.54 cfs

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S15-201	Basin 15	25YR-72HR	60.07	3.98	7.02	0.0016	114	60.02	2.11	60.02	2.08
S15-201A	Basin 15	25YR-72HR	60.09	2.78	5.00	0.0009	133	59.94	4.09	59.94	4.02
S15-201D	Basin 15	25YR-72HR	60.14	3.81	6.96	0.0024	117	60.04	2.00	60.04	1.98
S15-201E	Basin 15	25YR-72HR	60.07	2.96	4.39	0.0010	120	59.95	4.15	59.94	4.09
S15-201F	Basin 15	25YR-72HR	60.10	3.85	7.02	-0.0024	120	60.03	2.02	60.04	2.00
S15-201G	Basin 15	25YR-72HR	60.08	3.91	6.77	0.0021	117	60.03	2.05	60.03	2.02
S15-201H	Basin 15	25YR-72HR	60.08	3.94	6.80	-0.0029	114	60.02	2.08	60.03	2.05
S15-202A	Basin 15	25YR-72HR	60.05	3.10	4.09	-0.0009	113	60.02	2.23	59.95	2.20
S15-203	Basin 15	25YR-72HR	60.04	3.05	4.48	0.0043	126	72.62	0.79	62.41	1.50
S15-22	Basin 15	25YR-72HR	60.05	3.01	4.93	-0.0034	114	60.02	0.99	59.95	0.99
S15-3	Basin 15	25YR-72HR	60.03	18.96	20.47	-0.0011	221	60.02	9.54	60.03	9.52
S15-8	Basin 15	25YR-72HR	60.06	3.18	4.40	-0.0010	124	59.95	4.21	59.95	4.15
S15-9	Basin 15	25YR-72HR	60.05	3.20	3.51	-0.0038	119	59.75	3.01	59.70	2.94

```
================================================================================
==== Basins ====================================================================
================================================================================

         Name: B15-1                   Node: S15-1                 Status: Onsite
        Group: Basin 15                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 1.100                 Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



--------------------------------------------------------------------------------
         Name: B15-10                  Node: S15-10                Status: Onsite
        Group: Basin 15                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.050                 Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



--------------------------------------------------------------------------------
         Name: B15-11                  Node: S15-11                Status: Onsite
        Group: Basin 15                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.090                 Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



--------------------------------------------------------------------------------
         Name: B15-11A                 Node: S15-11A               Status: Onsite
        Group: Basin 15                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.480                 Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



--------------------------------------------------------------------------------
         Name: B15-13A                 Node: S15-13A               Status: Onsite
        Group: Basin 15                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.210                 Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00



--------------------------------------------------------------------------------
         Name: B15-15A                 Node: S15-15A               Status: Onsite
        Group: Basin 15                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
```

Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.110 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B15-16 Node: S15-16 Status: Onsite
Group: Basin 15 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.660 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B15-1A Node: POND15-1 Status: Onsite
Group: Basin 15 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 1.910 Time Shift(hrs): 0.00
Curve Number: 77.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B15-201 Node: S15-201 Status: Onsite
Group: Basin 15 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.340 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B15-203 Node: S15-203 Status: Onsite
Group: Basin 15 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.740 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B15-22 Node: S15-22 Status: Onsite
Group: Basin 15 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.160 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B15-3 Node: S15-3 Status: Onsite
Group: Basin 15 Type: SCS Unit Hydrograph CN

```
        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.440                  Time Shift(hrs): 0.00
            Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: B15-5                    Node: POND15-1              Status: Onsite
        Group: Basin 15                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.380                  Time Shift(hrs): 0.00
            Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: B15-7                    Node: POND15-1              Status: Onsite
        Group: Basin 15                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.460                  Time Shift(hrs): 0.00
            Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: B15-9                    Node: S15-9                 Status: Onsite
        Group: Basin 15                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.880                  Time Shift(hrs): 0.00
            Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: BX15-10                  Node: POND15-1              Status: Onsite
        Group: Basin 15                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.340                  Time Shift(hrs): 0.00
            Curve Number: 79.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: BX15-11                  Node: POND15-1              Status: Onsite
        Group: Basin 15                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.250                  Time Shift(hrs): 0.00
            Curve Number: 72.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
---------------------------------------------------------------------------------------------
         Name: BX15-18                 Node: EX15-18               Status: Onsite
        Group: Basin 15                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                 Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
              Area(ac): 0.240                Time Shift(hrs): 0.00
          Curve Number: 93.00            Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


---------------------------------------------------------------------------------------------
         Name: BX15-4                  Node: EX15-4                Status: Onsite
        Group: Basin 15                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                 Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
              Area(ac): 2.080                Time Shift(hrs): 0.00
          Curve Number: 80.00            Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


---------------------------------------------------------------------------------------------
         Name: S15-202A                Node: S15-202A              Status: Onsite
        Group: Basin 15                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                 Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
              Area(ac): 0.360                Time Shift(hrs): 0.00
          Curve Number: 96.00            Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


=============================================================================================
==== Nodes ==================================================================================
=============================================================================================

       Name: EX15-18             Base Flow(cfs): 0.000          Init Stage(ft): 1.450
      Group: Basin 15                                           Warn Stage(ft): 4.600
       Type: Stage/Area


       Stage(ft)        Area(ac)
---------------- ----------------
           0.000           0.0004
           4.600           0.0004

---------------------------------------------------------------------------------------------
       Name: EX15-3              Base Flow(cfs): 0.000          Init Stage(ft): 1.450
      Group: Basin 15                                           Warn Stage(ft): 7.000
       Type: Stage/Area


       Stage(ft)        Area(ac)
---------------- ----------------
          -0.980           0.0004
           5.450           0.0004

---------------------------------------------------------------------------------------------
       Name: EX15-4              Base Flow(cfs): 0.000          Init Stage(ft): 1.450
      Group: Basin 15                                           Warn Stage(ft): 7.000
       Type: Stage/Area


       Stage(ft)        Area(ac)
---------------- ----------------
```

-0.460	0.0004
1.940	0.0004
1.950	0.7700
3.250	0.8000
5.000	0.8800
6.000	0.9300

Name: GWT_15 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	1.450
108.00	1.450

Name: MIAMI_CANAL_3.0 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	1.450
108.00	1.450

Name: POND15-1 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 7.000
Type: Stage/Area

Stage(ft)	Area(ac)
-1.560	0.0004
1.940	0.0004
1.950	1.0600
3.250	1.2000
5.000	1.3000
6.000	1.3600

Name: S15-1 Base Flow(cfs): 0.000 Init Stage(ft): 20.650
Group: Basin 15 Warn Stage(ft): 24.070
Type: Stage/Area

Stage(ft)	Area(ac)
18.650	0.0004
24.070	0.0004

Name: S15-10 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 6.350
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.350	0.0004

Name: S15-11 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 4.920
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.920	0.0004

Name: S15-11A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 4.090
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.090	0.0004

Name: S15-11B Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 5.500
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.500	0.0004

Name: S15-12 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 5.120
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.120	0.0004

Name: S15-13A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 5.430
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.430	0.0004

Name: S15-15 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 5.100
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.100	0.0004

Name: S15-15A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 5.710
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.710	0.0004

Name: S15-16 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 4.520
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.520	0.0004

Name: S15-17 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 4.030
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.030	0.0004

Name: S15-1A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 7.000
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
3.150	0.0004

Name: S15-201 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 7.020
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
7.020	0.0004

Name: S15-201A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 5.000
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.000	0.0004

Name: S15-201D Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 6.960
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004

6.960	0.0004

Name: S15-201E Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 4.390
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.390	0.0004

Name: S15-201F Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 7.020
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
7.020	0.0004

Name: S15-201G Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 6.770
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.770	0.0004

Name: S15-201H Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 6.800
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.800	0.0004

Name: S15-202A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 4.090
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.090	0.0004

Name: S15-203 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 4.480
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.480	0.0004

Name: S15-22 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 4.930
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.930	0.0004

Name: S15-3 Base Flow(cfs): 0.000 Init Stage(ft): 17.050
Group: Basin 15 Warn Stage(ft): 20.470
Type: Stage/Area

Stage(ft)	Area(ac)
15.050	0.0004
20.470	0.0004

Name: S15-8 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 4.400
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.400	0.0004

Name: S15-9 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 3.510
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
3.510	0.0004

==========
==== Operating Tables ====
==========

Name: E_OPT_15C Group: Basin 15
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.450	1.45	0.00
1.450	2.20	0.03
1.450	3.90	0.10
1.450	5.45	0.10
2.200	2.20	0.00
2.200	3.90	0.08
2.200	5.45	0.10

==========
==== Pipes ====
==========

Name: EX15-18_S15-8 From Node: EX15-18 Length(ft): 59.00
Group: Basin 15 To Node: S15-8 Count: 1
Friction Equation: Automatic
UPSTREAM DOWNSTREAM Solution Algorithm: Most Restrictive

Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	-0.460	-0.580	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: EX15-22_S15-11B From Node: S15-22 Length(ft): 17.00
Group: Basin 15 To Node: S15-11B Count: 1
Friction Equation: Automatic
Solution Algorithm: Most Restrictive

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	-0.570	-1.300	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: EX15-3_S15-1A From Node: EX15-3 Length(ft): 113.00
Group: Basin 15 To Node: S15-1A Count: 1
Friction Equation: Automatic
Solution Algorithm: Most Restrictive

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	1.46
Invert(ft):	-0.980	-1.560	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: P15-1A_OUT From Node: S15-1A Length(ft): 160.00
Group: Basin 15 To Node: MIAMI_CANAL_3.0 Count: 1
Friction Equation: Automatic
Solution Algorithm: Most Restrictive

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Flow:	Both
Span(in):	36.00	36.00	Entrance Loss Coef:	0.50
Rise(in):	36.00	36.00	Exit Loss Coef:	1.00
Invert(ft):	-1.560	-1.560	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn

Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-10_S15-9	From Node: S15-10	Length(ft): 4.00
Group:	Basin 15	To Node: S15-9	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 1.46
Invert(ft):	-1.600	-1.700	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-11_S15-11B	From Node: S15-11	Length(ft): 11.00
Group:	Basin 15	To Node: S15-11B	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 1.46
Invert(ft):	-1.200	-1.300	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-11A_S15-11	From Node: S15-11A	Length(ft): 8.00
Group:	Basin 15	To Node: S15-11	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.10
Invert(ft):	-0.850	-0.950	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-11B_S15-10	From Node:	S15-11B	Length(ft): 218.00
Group:	Basin 15	To Node:	S15-10	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	24.00	24.00		Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00		Exit Loss Coef: 1.46
Invert(ft):	-1.600	-1.820		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-12_S15-11	From Node:	S15-12	Length(ft): 160.00
Group:	Basin 15	To Node:	S15-11	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	24.00	24.00		Entrance Loss Coef: 1.35
Rise(in):	24.00	24.00		Exit Loss Coef: 1.46
Invert(ft):	0.940	0.940		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-13A_S15-12	From Node:	S15-13A	Length(ft): 98.00
Group:	Basin 15	To Node:	S15-12	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	24.00	24.00		Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00		Exit Loss Coef: 0.10
Invert(ft):	-0.800	-1.000		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-14_S15-13A	From Node: S15-203	Length(ft): 158.00
Group:	Basin 15	To Node: S15-13A	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 0.10
Invert(ft):	-0.900	-0.800	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-15_S15-14	From Node: S15-15	Length(ft): 7.00
Group:	Basin 15	To Node: S15-203	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 1.46
Invert(ft):	-0.800	-0.900	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-15A_S15-14	From Node: S15-15A	Length(ft): 118.00
Group:	Basin 15	To Node: S15-203	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.10
Invert(ft):	0.200	0.000	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-16_S15-17	From Node: S15-16	Length(ft): 8.00
Group:	Basin 15	To Node: S15-17	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both

Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	-0.300	-0.400	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-17_S15-15	From Node: S15-17	Length(ft):	256.00
Group:	Basin 15	To Node: S15-15	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	1.35
Rise(in):	24.00	24.00	Exit Loss Coef:	1.46
Invert(ft):	0.950	0.950	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-1_S15-3	From Node: S15-1	Length(ft):	175.00
Group:	Basin 15	To Node: S15-3	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	20.650	17.050	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-201_201H	From Node: S15-201	Length(ft):	31.00
Group:	Basin 15	To Node: S15-201H	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	0.50
Invert(ft):	2.000	1.900	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-201C_EX15-3	From Node:	S15-201A	Length(ft):	463.00
Group:	Basin 15	To Node:	EX15-3	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	1.46
Invert(ft):	0.700	-0.980		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-201D_POND	From Node:	S15-201D	Length(ft):	28.00
Group:	Basin 15	To Node:	POND15-1	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	0.50
Invert(ft):	1.400	1.200		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-201E_201A	From Node:	S15-201E	Length(ft):	78.00
Group:	Basin 15	To Node:	S15-201A	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	1.46
Invert(ft):	0.900	0.700		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-201F_201D	From Node:	S15-201F	Length(ft):	70.00
Group:	Basin 15	To Node:	S15-201D	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	0.50
Invert(ft):	1.600	1.400		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-201G_201F	From Node:	S15-201G	Length(ft):	108.00
Group:	Basin 15	To Node:	S15-201F	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	0.50
Invert(ft):	1.800	1.600		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-201H_201G	From Node:	S15-201H	Length(ft):	6.00
Group:	Basin 15	To Node:	S15-201G	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	0.50
Invert(ft):	1.900	1.800		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-202A_S15-12	From Node:	S15-202A
Group:	Basin 15	To Node:	S15-12
	UPSTREAM	DOWNSTREAM	
Geometry:	Circular	Circular	
Span(in):	18.00	18.00	
Rise(in):	18.00	18.00	
Invert(ft):	-0.400	-0.500	
Manning's N:	0.012000	0.012000	
Top Clip(in):	0.000	0.000	
Bot Clip(in):	0.000	0.000	

Length(ft):	8.00
Count:	1
Friction Equation:	Automatic
Solution Algorithm:	Most Restrictive
Flow:	Both
Entrance Loss Coef:	0.50
Exit Loss Coef:	1.46
Bend Loss Coef:	0.00
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-3_S15-1A	From Node:	S15-3
Group:	Basin 15	To Node:	POND15-1
	UPSTREAM	DOWNSTREAM	
Geometry:	Circular	Circular	
Span(in):	18.00	18.00	
Rise(in):	18.00	18.00	
Invert(ft):	17.050	1.950	
Manning's N:	0.012000	0.012000	
Top Clip(in):	0.000	0.000	
Bot Clip(in):	0.000	0.000	

Length(ft):	46.00
Count:	1
Friction Equation:	Automatic
Solution Algorithm:	Most Restrictive
Flow:	Both
Entrance Loss Coef:	0.50
Exit Loss Coef:	1.00
Bend Loss Coef:	0.00
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-8_S15-201E	From Node:	S15-8
Group:	Basin 15	To Node:	S15-201E
	UPSTREAM	DOWNSTREAM	
Geometry:	Circular	Circular	
Span(in):	18.00	18.00	
Rise(in):	18.00	18.00	
Invert(ft):	1.070	0.900	
Manning's N:	0.012000	0.012000	
Top Clip(in):	0.000	0.000	
Bot Clip(in):	0.000	0.000	

Length(ft):	97.00
Count:	1
Friction Equation:	Automatic
Solution Algorithm:	Most Restrictive
Flow:	Both
Entrance Loss Coef:	0.50
Exit Loss Coef:	1.46
Bend Loss Coef:	0.00
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S15-9_S15-8	From Node:	S15-9
Group:	Basin 15	To Node:	S15-8
	UPSTREAM	DOWNSTREAM	
Geometry:	Circular	Circular	
Span(in):	24.00	24.00	

Length(ft):	107.00
Count:	1
Friction Equation:	Automatic
Solution Algorithm:	Most Restrictive
Flow:	Both
Entrance Loss Coef:	0.50

Rise(in):	24.00	24.00	Exit Loss Coef: 1.46
Invert(ft):	-1.700	-1.800	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Drop Structures

Name: DSEX15-4 From Node: EX15-4 Length(ft): 239.00
Group: Basin 15 To Node: EX15-3 Count: 1

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Friction Equation:	Automatic
Span(in):	24.00	24.00	Solution Algorithm:	Most Restrictive
Rise(in):	24.00	24.00	Flow:	Both
Invert(ft):	-0.460	-0.980	Entrance Loss Coef:	0.500
Manning's N:	0.012000	0.012000	Exit Loss Coef:	0.100
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Solution Incs:	10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

*** Weir 1 of 1 for Drop Structure DSEX15-4 ***

TABLE

Count:	1	Bottom Clip(in):	0.000
Type:	Horizontal	Top Clip(in):	0.000
Flow:	Both	Weir Disc Coef:	3.200
Geometry:	Rectangular	Orifice Disc Coef:	0.600
Span(in):	37.00	Invert(ft):	3.250
Rise(in):	24.00	Control Elev(ft):	3.250

Weirs

Name: W15-1A From Node: POND15-1
Group: Basin 15 To Node: S15-1A
Flow: Both Count: 1
Type: Horizontal Geometry: Rectangular

Span(in): 54.00
Rise(in): 29.76
Invert(ft): 3.150
Control Elevation(ft): 3.150

TABLE

Bottom Clip(in): 0.000
Top Clip(in): 0.000
Weir Discharge Coef: 3.200
Orifice Discharge Coef: 0.600

Rating Curves

```
         Name: S15-12_EXF          From Node: S15-12                 Count: 114
        Group: Basin 15              To Node: GWT_15                  Flow: Both

              TABLE           ELEV ON(ft)     ELEV OFF(ft)
           #1: E_OPT_15C      1.450           1.450
           #2:                0.000           0.000
           #3:                0.000           0.000
           #4:                0.000           0.000



-------------------------------------------------------------------------------------------------
         Name: S15-15_EXF          From Node: S15-15                 Count: 244
        Group: Basin 15              To Node: GWT_15                  Flow: Both

              TABLE           ELEV ON(ft)     ELEV OFF(ft)
           #1: E_OPT_15C      1.450           1.450
           #2:                0.000           0.000
           #3:                0.000           0.000
           #4:                0.000           0.000



-------------------------------------------------------------------------------------------------
         Name: S15-22_EXF          From Node: S15-22                 Count: 100
        Group: Basin 15              To Node: GWT_15                  Flow: Both

              TABLE           ELEV ON(ft)     ELEV OFF(ft)
           #1: E_OPT_15C      1.450           1.450
           #2:                0.000           0.000
           #3:                0.000           0.000
           #4:                0.000           0.000



=================================================================================================
==== Hydrology Simulations ======================================================================
=================================================================================================

         Name: 100YR-1HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 1.00
          Rainfall File: Fdot-1
    Rainfall Amount(in): 5.00

Time(hrs)       Print Inc(min)
--------------- ---------------
1.000           1.00
1.330           1.00

-------------------------------------------------------------------------------------------------
         Name: 100YR-24HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Fdot-24
    Rainfall Amount(in): 13.44

Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.00
16.000          1.00
24.000          5.00
24.330          5.00

-------------------------------------------------------------------------------------------------
         Name: 100YR-8HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 8.00
```

Rainfall File: Fdot-8
Rainfall Amount(in): 9.60

Time(hrs)	Print Inc(min)
2.000	5.00
6.000	1.00
8.000	5.00
8.330	5.00

Name: 10YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 3.50

Time(hrs)	Print Inc(min)
1.000	1.00
1.330	1.00

Name: 10YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 8.88

Time(hrs)	Print Inc(min)
8.000	5.00
16.000	1.00
24.000	5.00
24.330	5.00

Name: 10YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 6.40

Time(hrs)	Print Inc(min)
2.000	5.00
6.000	1.00
8.000	5.00
8.330	5.00

Name: 25YR-72HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Sfwmd72
Rainfall Amount(in): 14.00

Time(hrs)	Print Inc(min)
48.000	15.00
56.000	5.00
64.000	1.00
72.000	5.00
96.000	5.00

==========
==== Routing Simulations ==========

==========

Name: 100YR-1HR Hydrology Sim: 100YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 25.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
1.000	1.000
25.000	15.000

Group	Run
Basin 15	Yes

Name: 100YR-24HR Hydrology Sim: 100YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 48.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 24HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
48.000	15.000

Group	Run
Basin 15	Yes

Name: 100YR-8HR Hydrology Sim: 100YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 36.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 8HR Boundary Flows:

Time(hrs)	Print Inc(min)
2.000	5.000
6.000	1.000
8.000	5.000
36.000	15.000

Group	Run
Basin 15	Yes

Name: 10YR-1HR Hydrology Sim: 10YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.01000
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 25.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
1.000	1.000
25.000	15.000

Group	Run
Basin 15	Yes

Name: 10YR-24HR Hydrology Sim: 10YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 48.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 24HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
48.000	15.000

Group	Run
Basin 15	Yes

Name: 10YR-8HR Hydrology Sim: 10YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 36.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 8HR Boundary Flows:

Time(hrs)	Print Inc(min)
2.000	5.000

6.000	1.000
8.000	5.000
36.000	15.000

Group	Run
Basin 15	Yes

Name: 25YR-72HR Hydrology Sim: 25YR-72HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 96.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 72HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
96.000	15.000

Group	Run
Basin 15	Yes

==========
==== Boundary Conditions ====
==========

Name: 8HR Node: GWT_15 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.450
1.000	1.470
2.000	1.550
3.000	1.660
4.000	1.980
5.000	2.100
6.000	2.140
7.000	2.180
8.000	2.200
12.000	1.450
36.000	1.450

Name: 24HR Node: GWT_15 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.450
1.000	1.460
2.000	1.470
3.000	1.500
4.000	1.520
5.000	1.540
6.000	1.570
7.000	1.600
8.000	1.630
9.000	1.680
10.000	1.720
11.000	1.780
12.000	1.860
13.000	1.910

14.000	1.950
15.000	2.000
16.000	2.040
17.000	2.070
18.000	2.100
19.000	2.130
20.000	2.150
21.000	2.170
22.000	2.190
23.000	2.190
24.000	2.200
36.000	1.450
48.000	1.450

Name: 72HR Node: GWT_15 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.450
24.000	1.530
36.000	1.590
48.000	1.650
49.000	1.650
50.000	1.660
51.000	1.670
52.000	1.670
53.000	1.680
54.000	1.690
55.000	1.710
56.000	1.720
57.000	1.740
57.500	1.750
58.000	1.770
58.500	1.780
59.000	1.800
59.500	1.820
60.000	2.010
60.500	2.050
61.000	2.070
61.500	2.090
62.000	2.100
62.500	2.110
63.000	2.120
64.000	2.130
65.000	2.140
66.000	2.150
68.000	2.170
70.000	2.190
72.000	2.200
96.000	1.450

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	0.00	0.0	0.0	0.0	0.0	0.00
25YR-72HR	0.08	0.0	0.9	-0.9	-0.0	0.00
25YR-72HR	0.17	0.0	0.6	-0.6	0.0	-0.00
25YR-72HR	0.25	0.0	0.3	-0.3	0.0	-0.00
25YR-72HR	0.33	0.0	-0.1	0.1	0.0	0.00
25YR-72HR	0.42	0.0	-0.7	0.7	0.0	0.00
25YR-72HR	0.50	0.0	-2.0	2.0	0.0	0.00
25YR-72HR	0.58	0.0	-2.7	2.7	0.0	0.00
25YR-72HR	0.67	0.0	-3.4	3.4	0.0	0.00
25YR-72HR	0.75	0.0	-3.9	3.9	0.0	0.00
25YR-72HR	0.83	0.0	-4.4	4.4	0.0	0.00
25YR-72HR	0.92	0.0	-4.9	4.9	0.0	0.00
25YR-72HR	1.00	0.0	-5.4	5.4	0.0	0.00
25YR-72HR	1.08	0.0	-5.9	5.9	0.0	0.00
25YR-72HR	1.17	0.0	-6.4	6.4	0.0	0.00
25YR-72HR	1.25	0.0	-6.8	6.8	0.0	0.00
25YR-72HR	1.33	0.2	-7.2	7.4	0.0	0.00
25YR-72HR	1.42	0.7	-7.5	8.2	0.0	0.00
25YR-72HR	1.50	1.6	-7.5	9.1	-0.0	-0.00
25YR-72HR	1.58	3.6	-7.0	10.6	-0.0	-0.00
25YR-72HR	1.67	7.4	-5.5	12.9	-0.0	-0.00
25YR-72HR	1.75	13.1	-2.9	16.1	-0.0	-0.00
25YR-72HR	1.83	20.9	0.8	20.1	-0.0	-0.00
25YR-72HR	1.92	31.1	5.9	25.2	-0.0	-0.00
25YR-72HR	2.00	43.6	12.3	31.3	-0.0	-0.00
25YR-72HR	2.08	58.5	20.1	38.4	-0.0	-0.00
25YR-72HR	2.17	75.7	29.2	46.5	-0.0	-0.00
25YR-72HR	2.25	95.3	39.6	55.7	-0.0	-0.00
25YR-72HR	2.33	117.3	51.4	65.8	-0.0	-0.00
25YR-72HR	2.42	141.4	64.5	76.9	-0.0	-0.00
25YR-72HR	2.50	167.7	78.8	88.9	-0.0	-0.00
25YR-72HR	2.58	196.2	94.4	101.8	-0.0	-0.00
25YR-72HR	2.67	226.7	111.1	115.6	-0.0	-0.00
25YR-72HR	2.75	259.2	129.1	130.1	-0.0	-0.00
25YR-72HR	2.83	293.7	148.1	145.5	-0.0	-0.00
25YR-72HR	2.92	330.0	168.3	161.7	-0.0	-0.00
25YR-72HR	3.00	368.2	189.6	178.6	-0.0	-0.00
25YR-72HR	3.08	408.2	212.0	196.2	-0.0	-0.00
25YR-72HR	3.17	449.9	235.3	214.5	-0.0	-0.00
25YR-72HR	3.25	493.3	259.7	233.6	-0.0	-0.00
25YR-72HR	3.33	538.3	285.1	253.2	-0.0	-0.00
25YR-72HR	3.42	584.9	311.3	273.5	-0.0	-0.00
25YR-72HR	3.50	633.0	338.6	294.5	-0.0	-0.00
25YR-72HR	3.58	682.7	366.7	316.0	-0.0	-0.00
25YR-72HR	3.67	733.8	395.6	338.1	-0.0	-0.00
25YR-72HR	3.75	786.3	425.5	360.9	-0.0	-0.00
25YR-72HR	3.83	840.2	456.1	384.1	-0.0	-0.00
25YR-72HR	3.92	895.4	487.5	407.9	-0.0	-0.00
25YR-72HR	4.00	952.0	519.7	432.2	-0.0	-0.00
25YR-72HR	4.08	1009.8	552.7	457.0	-0.0	-0.00
25YR-72HR	4.17	1068.8	586.4	482.3	-0.0	-0.00
25YR-72HR	4.25	1129.0	620.9	508.1	-0.0	-0.00
25YR-72HR	4.33	1190.4	656.0	534.4	-0.0	-0.00
25YR-72HR	4.42	1252.9	691.8	561.1	0.0	0.00
25YR-72HR	4.50	1316.5	728.2	588.3	0.0	0.00
25YR-72HR	4.58	1381.2	765.4	615.9	0.0	0.00
25YR-72HR	4.67	1447.0	803.1	643.9	0.0	0.00
25YR-72HR	4.75	1513.8	841.5	672.3	0.0	0.00
25YR-72HR	4.83	1581.5	880.4	701.1	0.0	0.00
25YR-72HR	4.92	1650.3	919.9	730.4	-0.0	-0.00
25YR-72HR	5.00	1720.0	960.0	760.0	0.0	0.00
25YR-72HR	5.08	1790.6	1000.7	789.9	-0.0	-0.00
25YR-72HR	5.17	1862.2	1041.9	820.2	0.0	0.00
25YR-72HR	5.25	1934.6	1083.6	850.9	0.0	0.00
25YR-72HR	5.33	2007.9	1125.9	882.0	0.0	0.00
25YR-72HR	5.42	2082.0	1168.7	913.3	-0.0	-0.00
25YR-72HR	5.50	2156.9	1211.9	945.0	0.0	0.00
25YR-72HR	5.58	2232.7	1255.6	977.0	0.0	0.00
25YR-72HR	5.67	2309.2	1299.8	1009.3	0.0	0.00
25YR-72HR	5.75	2386.5	1344.5	1042.0	0.0	0.00
25YR-72HR	5.83	2464.5	1389.6	1074.9	0.0	0.00
25YR-72HR	5.92	2543.3	1435.1	1108.1	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	6.00	2622.8	1481.1	1141.6	0.0	0.00
25YR-72HR	6.08	2702.9	1527.5	1175.4	0.0	0.00
25YR-72HR	6.17	2783.8	1574.3	1209.5	-0.0	-0.00
25YR-72HR	6.25	2865.4	1621.5	1243.8	-0.0	-0.00
25YR-72HR	6.33	2947.5	1669.1	1278.4	0.0	0.00
25YR-72HR	6.42	3030.4	1717.1	1313.2	0.0	0.00
25YR-72HR	6.50	3113.8	1765.5	1348.3	0.0	0.00
25YR-72HR	6.58	3197.9	1814.2	1383.7	0.0	0.00
25YR-72HR	6.67	3282.6	1863.3	1419.3	-0.0	-0.00
25YR-72HR	6.75	3367.8	1912.8	1455.1	-0.0	-0.00
25YR-72HR	6.83	3453.7	1962.6	1491.1	-0.0	-0.00
25YR-72HR	6.92	3540.1	2012.7	1527.4	-0.0	-0.00
25YR-72HR	7.00	3627.0	2063.2	1563.9	0.0	0.00
25YR-72HR	7.08	3714.5	2114.0	1600.6	0.0	0.00
25YR-72HR	7.17	3802.5	2165.1	1637.5	0.0	0.00
25YR-72HR	7.25	3891.1	2216.5	1674.6	0.0	0.00
25YR-72HR	7.33	3980.1	2268.2	1711.9	0.0	0.00
25YR-72HR	7.42	4069.7	2320.2	1749.4	0.0	0.00
25YR-72HR	7.50	4159.7	2372.6	1787.1	0.0	0.00
25YR-72HR	7.58	4250.2	2425.2	1825.0	-0.0	-0.00
25YR-72HR	7.67	4341.2	2478.1	1863.1	-0.0	-0.00
25YR-72HR	7.75	4432.6	2531.2	1901.4	-0.0	-0.00
25YR-72HR	7.83	4524.5	2584.7	1939.8	0.0	0.00
25YR-72HR	7.92	4616.9	2638.4	1978.5	0.0	0.00
25YR-72HR	8.00	4709.7	2692.4	2017.3	0.0	0.00
25YR-72HR	8.08	4802.9	2746.6	2056.3	0.0	0.00
25YR-72HR	8.10	4821.6	2757.5	2064.1	0.0	0.00
25YR-72HR	8.12	4840.3	2768.4	2071.9	0.0	0.00
25YR-72HR	8.13	4859.1	2779.3	2079.8	0.0	0.00
25YR-72HR	8.15	4877.8	2790.2	2087.6	0.0	0.00
25YR-72HR	8.17	4896.6	2801.1	2095.5	0.0	0.00
25YR-72HR	8.18	4915.4	2812.0	2103.4	0.0	0.00
25YR-72HR	8.20	4934.2	2823.0	2111.2	0.0	0.00
25YR-72HR	8.22	4953.0	2833.9	2119.1	0.0	0.00
25YR-72HR	8.23	4971.9	2844.9	2127.0	0.0	0.00
25YR-72HR	8.25	4990.8	2855.8	2134.9	0.0	0.00
25YR-72HR	8.27	5009.7	2866.8	2142.8	0.0	0.00
25YR-72HR	8.28	5028.6	2877.8	2150.8	0.0	0.00
25YR-72HR	8.30	5047.5	2888.8	2158.7	0.0	0.00
25YR-72HR	8.32	5066.5	2899.8	2166.7	0.0	0.00
25YR-72HR	8.33	5085.4	2910.8	2174.6	0.0	0.00
25YR-72HR	8.35	5104.4	2921.8	2182.6	0.0	0.00
25YR-72HR	8.37	5123.4	2932.9	2190.6	0.0	0.00
25YR-72HR	8.38	5142.5	2943.9	2198.6	0.0	0.00
25YR-72HR	8.40	5161.5	2955.0	2206.6	0.0	0.00
25YR-72HR	8.42	5180.6	2966.0	2214.6	0.0	0.00
25YR-72HR	8.43	5199.7	2977.1	2222.6	0.0	0.00
25YR-72HR	8.45	5218.8	2988.2	2230.6	0.0	0.00
25YR-72HR	8.47	5238.0	2999.3	2238.7	0.0	0.00
25YR-72HR	8.48	5257.1	3010.4	2246.8	0.0	0.00
25YR-72HR	8.50	5276.3	3021.5	2254.8	0.0	0.00
25YR-72HR	8.52	5295.5	3032.6	2262.9	0.0	0.00
25YR-72HR	8.53	5314.7	3043.7	2271.0	0.0	0.00
25YR-72HR	8.55	5334.0	3054.9	2279.1	0.0	0.00
25YR-72HR	8.57	5353.2	3066.0	2287.2	0.0	0.00
25YR-72HR	8.58	5372.5	3077.2	2295.4	0.0	0.00
25YR-72HR	8.60	5391.8	3088.3	2303.5	0.0	0.00
25YR-72HR	8.62	5411.2	3099.5	2311.7	0.0	0.00
25YR-72HR	8.63	5430.5	3110.7	2319.8	0.0	0.00
25YR-72HR	8.65	5449.9	3121.9	2328.0	0.0	0.00
25YR-72HR	8.67	5469.3	3133.1	2336.2	0.0	0.00
25YR-72HR	8.68	5488.7	3144.3	2344.4	0.0	0.00
25YR-72HR	8.70	5508.1	3155.5	2352.6	0.0	0.00
25YR-72HR	8.72	5527.6	3166.7	2360.9	0.0	0.00
25YR-72HR	8.73	5547.1	3177.9	2369.1	0.0	0.00
25YR-72HR	8.75	5566.6	3189.2	2377.4	0.0	0.00
25YR-72HR	8.77	5586.1	3200.4	2385.6	0.0	0.00
25YR-72HR	8.78	5605.6	3211.7	2393.9	0.0	0.00
25YR-72HR	8.80	5625.2	3223.0	2402.2	0.0	0.00
25YR-72HR	8.82	5644.8	3234.3	2410.5	0.0	0.00
25YR-72HR	8.83	5664.4	3245.5	2418.8	0.0	0.00
25YR-72HR	8.85	5684.0	3256.8	2427.2	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	8.87	5703.6	3268.1	2435.5	0.0	0.00
25YR-72HR	8.88	5723.3	3279.4	2443.9	0.0	0.00
25YR-72HR	8.90	5743.0	3290.8	2452.2	0.0	0.00
25YR-72HR	8.92	5762.7	3302.1	2460.6	0.0	0.00
25YR-72HR	8.93	5782.4	3313.4	2469.0	0.0	0.00
25YR-72HR	8.95	5802.2	3324.8	2477.4	0.0	0.00
25YR-72HR	8.97	5822.0	3336.1	2485.8	0.0	0.00
25YR-72HR	8.98	5841.7	3347.5	2494.2	0.0	0.00
25YR-72HR	9.00	5861.6	3358.9	2502.7	0.0	0.00
25YR-72HR	9.02	5881.4	3370.2	2511.1	0.0	0.00
25YR-72HR	9.03	5901.3	3381.6	2519.6	0.0	0.00
25YR-72HR	9.05	5921.1	3393.0	2528.1	0.0	0.00
25YR-72HR	9.07	5941.0	3404.4	2536.6	0.0	0.00
25YR-72HR	9.08	5960.9	3415.8	2545.1	0.0	0.00
25YR-72HR	9.10	5980.9	3427.3	2553.6	0.0	0.00
25YR-72HR	9.12	6000.8	3438.7	2562.1	0.0	0.00
25YR-72HR	9.13	6020.8	3450.1	2570.7	0.0	0.00
25YR-72HR	9.15	6040.8	3461.6	2579.2	0.0	0.00
25YR-72HR	9.17	6060.8	3473.0	2587.8	0.0	0.00
25YR-72HR	9.18	6080.9	3484.5	2596.4	0.0	0.00
25YR-72HR	9.20	6100.9	3496.0	2605.0	0.0	0.00
25YR-72HR	9.22	6121.0	3507.4	2613.6	0.0	0.00
25YR-72HR	9.23	6141.1	3518.9	2622.2	0.0	0.00
25YR-72HR	9.25	6161.2	3530.4	2630.8	0.0	0.00
25YR-72HR	9.27	6181.4	3541.9	2639.5	0.0	0.00
25YR-72HR	9.28	6201.5	3553.4	2648.1	0.0	0.00
25YR-72HR	9.30	6221.7	3564.9	2656.8	0.0	0.00
25YR-72HR	9.32	6241.9	3576.5	2665.5	0.0	0.00
25YR-72HR	9.33	6262.1	3588.0	2674.1	0.0	0.00
25YR-72HR	9.35	6282.4	3599.5	2682.8	0.0	0.00
25YR-72HR	9.37	6302.6	3611.1	2691.6	0.0	0.00
25YR-72HR	9.38	6322.9	3622.6	2700.3	0.0	0.00
25YR-72HR	9.40	6343.2	3634.2	2709.0	0.0	0.00
25YR-72HR	9.42	6363.5	3645.8	2717.8	0.0	0.00
25YR-72HR	9.43	6383.9	3657.3	2726.5	0.0	0.00
25YR-72HR	9.45	6404.2	3668.9	2735.3	0.0	0.00
25YR-72HR	9.47	6424.6	3680.5	2744.1	0.0	0.00
25YR-72HR	9.48	6445.0	3692.1	2752.9	0.0	0.00
25YR-72HR	9.50	6465.4	3703.7	2761.7	0.0	0.00
25YR-72HR	9.52	6485.9	3715.3	2770.5	0.0	0.00
25YR-72HR	9.53	6506.3	3727.0	2779.4	0.0	0.00
25YR-72HR	9.55	6526.8	3738.6	2788.2	0.0	0.00
25YR-72HR	9.57	6547.3	3750.2	2797.1	0.0	0.00
25YR-72HR	9.58	6567.8	3761.9	2805.9	0.0	0.00
25YR-72HR	9.60	6588.3	3773.5	2814.8	0.0	0.00
25YR-72HR	9.62	6608.9	3785.2	2823.7	0.0	0.00
25YR-72HR	9.63	6629.5	3796.9	2832.6	0.0	0.00
25YR-72HR	9.65	6650.1	3808.5	2841.6	0.0	0.00
25YR-72HR	9.67	6670.7	3820.2	2850.5	0.0	0.00
25YR-72HR	9.68	6691.3	3831.9	2859.4	0.0	0.00
25YR-72HR	9.70	6712.0	3843.6	2868.4	0.0	0.00
25YR-72HR	9.72	6732.7	3855.3	2877.4	0.0	0.00
25YR-72HR	9.73	6753.4	3867.0	2886.4	0.0	0.00
25YR-72HR	9.75	6774.1	3878.7	2895.4	0.0	0.00
25YR-72HR	9.77	6794.8	3890.4	2904.4	0.0	0.00
25YR-72HR	9.78	6815.6	3902.2	2913.4	0.0	0.00
25YR-72HR	9.80	6836.4	3913.9	2922.4	0.0	0.00
25YR-72HR	9.82	6857.2	3925.7	2931.5	0.0	0.00
25YR-72HR	9.83	6878.0	3937.4	2940.6	0.0	0.00
25YR-72HR	9.85	6898.8	3949.2	2949.7	0.0	0.00
25YR-72HR	9.87	6919.7	3960.9	2958.8	0.0	0.00
25YR-72HR	9.88	6940.6	3972.7	2967.9	0.0	0.00
25YR-72HR	9.90	6961.5	3984.5	2977.0	0.0	0.00
25YR-72HR	9.92	6982.4	3996.3	2986.2	0.0	0.00
25YR-72HR	9.93	7003.4	4008.1	2995.3	0.0	0.00
25YR-72HR	9.95	7024.4	4019.9	3004.5	0.0	0.00
25YR-72HR	9.97	7045.4	4031.7	3013.7	0.0	0.00
25YR-72HR	9.98	7066.4	4043.5	3022.9	0.0	0.00
25YR-72HR	10.00	7087.4	4055.3	3032.1	0.0	0.00
25YR-72HR	10.02	7108.5	4067.1	3041.4	0.0	0.00
25YR-72HR	10.03	7129.6	4079.0	3050.6	0.0	0.00
25YR-72HR	10.05	7150.7	4090.8	3059.9	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	10.07	7171.8	4102.7	3069.2	0.0	0.00
25YR-72HR	10.08	7193.0	4114.5	3078.5	0.0	0.00
25YR-72HR	10.10	7214.2	4126.4	3087.8	0.0	0.00
25YR-72HR	10.12	7235.4	4138.2	3097.1	0.0	0.00
25YR-72HR	10.13	7256.6	4150.1	3106.5	0.0	0.00
25YR-72HR	10.15	7277.8	4162.0	3115.8	0.0	0.00
25YR-72HR	10.17	7299.1	4173.9	3125.2	0.0	0.00
25YR-72HR	10.18	7320.4	4185.8	3134.6	0.0	0.00
25YR-72HR	10.20	7341.7	4197.7	3144.0	0.0	0.00
25YR-72HR	10.22	7363.0	4209.6	3153.4	0.0	0.00
25YR-72HR	10.23	7384.4	4221.5	3162.9	0.0	0.00
25YR-72HR	10.25	7405.7	4233.4	3172.3	0.0	0.00
25YR-72HR	10.27	7427.1	4245.3	3181.8	0.0	0.00
25YR-72HR	10.28	7448.5	4257.3	3191.3	0.0	0.00
25YR-72HR	10.30	7470.0	4269.2	3200.8	0.0	0.00
25YR-72HR	10.32	7491.4	4281.2	3210.3	0.0	0.00
25YR-72HR	10.33	7512.9	4293.1	3219.8	0.0	0.00
25YR-72HR	10.35	7534.4	4305.1	3229.4	0.0	0.00
25YR-72HR	10.37	7556.0	4317.0	3238.9	0.0	0.00
25YR-72HR	10.38	7577.5	4329.0	3248.5	0.0	0.00
25YR-72HR	10.40	7599.1	4341.0	3258.1	0.0	0.00
25YR-72HR	10.42	7620.7	4353.0	3267.7	0.0	0.00
25YR-72HR	10.43	7642.3	4365.0	3277.3	0.0	0.00
25YR-72HR	10.45	7663.9	4377.0	3287.0	0.0	0.00
25YR-72HR	10.47	7685.6	4389.0	3296.6	0.0	0.00
25YR-72HR	10.48	7707.3	4401.0	3306.3	0.0	0.00
25YR-72HR	10.50	7729.0	4413.0	3316.0	0.0	0.00
25YR-72HR	10.52	7750.7	4425.0	3325.7	0.0	0.00
25YR-72HR	10.53	7772.4	4437.0	3335.4	0.0	0.00
25YR-72HR	10.55	7794.2	4449.1	3345.1	0.0	0.00
25YR-72HR	10.57	7816.0	4461.1	3354.9	0.0	0.00
25YR-72HR	10.58	7837.8	4473.1	3364.6	0.0	0.00
25YR-72HR	10.60	7859.6	4485.2	3374.4	0.0	0.00
25YR-72HR	10.62	7881.4	4497.3	3384.2	0.0	0.00
25YR-72HR	10.63	7903.3	4509.3	3394.0	0.0	0.00
25YR-72HR	10.65	7925.2	4521.4	3403.8	0.0	0.00
25YR-72HR	10.67	7947.1	4533.5	3413.7	0.0	0.00
25YR-72HR	10.68	7969.1	4545.5	3423.5	0.0	0.00
25YR-72HR	10.70	7991.0	4557.6	3433.4	0.0	0.00
25YR-72HR	10.72	8013.0	4569.7	3443.3	0.0	0.00
25YR-72HR	10.73	8035.0	4581.8	3453.2	0.0	0.00
25YR-72HR	10.75	8057.0	4593.9	3463.1	0.0	0.00
25YR-72HR	10.77	8079.0	4606.0	3473.0	0.0	0.00
25YR-72HR	10.78	8101.1	4618.2	3482.9	0.0	0.00
25YR-72HR	10.80	8123.2	4630.3	3492.9	0.0	0.00
25YR-72HR	10.82	8145.3	4642.4	3502.9	0.0	0.00
25YR-72HR	10.83	8167.4	4654.5	3512.9	0.0	0.00
25YR-72HR	10.85	8189.5	4666.7	3522.9	0.0	0.00
25YR-72HR	10.87	8211.7	4678.8	3532.9	0.0	0.00
25YR-72HR	10.88	8233.9	4691.0	3542.9	0.0	0.00
25YR-72HR	10.90	8256.1	4703.1	3553.0	0.0	0.00
25YR-72HR	10.92	8278.3	4715.3	3563.0	0.0	0.00
25YR-72HR	10.93	8300.6	4727.5	3573.1	0.0	0.00
25YR-72HR	10.95	8322.8	4739.6	3583.2	0.0	0.00
25YR-72HR	10.97	8345.1	4751.8	3593.3	0.0	0.00
25YR-72HR	10.98	8367.4	4764.0	3603.4	0.0	0.00
25YR-72HR	11.00	8389.7	4776.2	3613.5	0.0	0.00
25YR-72HR	11.02	8412.1	4788.4	3623.7	0.0	0.00
25YR-72HR	11.03	8434.4	4800.6	3633.9	0.0	0.00
25YR-72HR	11.05	8456.8	4812.8	3644.0	0.0	0.00
25YR-72HR	11.07	8479.2	4825.0	3654.2	0.0	0.00
25YR-72HR	11.08	8501.7	4837.2	3664.4	0.0	0.00
25YR-72HR	11.10	8524.1	4849.4	3674.7	0.0	0.00
25YR-72HR	11.12	8546.6	4861.7	3684.9	0.0	0.00
25YR-72HR	11.13	8569.1	4873.9	3695.1	0.0	0.00
25YR-72HR	11.15	8591.6	4886.2	3705.4	0.0	0.00
25YR-72HR	11.17	8614.1	4898.4	3715.7	0.0	0.00
25YR-72HR	11.18	8636.6	4910.7	3726.0	0.0	0.00
25YR-72HR	11.20	8659.2	4922.9	3736.3	0.0	0.00
25YR-72HR	11.22	8681.8	4935.2	3746.6	0.0	0.00
25YR-72HR	11.23	8704.4	4947.4	3756.9	0.0	0.00
25YR-72HR	11.25	8727.0	4959.7	3767.3	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	11.27	8749.7	4972.0	3777.7	0.0	0.00
25YR-72HR	11.28	8772.3	4984.3	3788.0	0.0	0.00
25YR-72HR	11.30	8795.0	4996.6	3798.4	0.0	0.00
25YR-72HR	11.32	8817.7	5008.9	3808.8	0.0	0.00
25YR-72HR	11.33	8840.4	5021.2	3819.3	0.0	0.00
25YR-72HR	11.35	8863.2	5033.5	3829.7	0.0	0.00
25YR-72HR	11.37	8885.9	5045.8	3840.2	0.0	0.00
25YR-72HR	11.38	8908.7	5058.1	3850.6	0.0	0.00
25YR-72HR	11.40	8931.5	5070.4	3861.1	0.0	0.00
25YR-72HR	11.42	8954.3	5082.7	3871.6	0.0	0.00
25YR-72HR	11.43	8977.2	5095.1	3882.1	0.0	0.00
25YR-72HR	11.45	9000.0	5107.4	3892.6	0.0	0.00
25YR-72HR	11.47	9022.9	5119.7	3903.2	0.0	0.00
25YR-72HR	11.48	9045.8	5132.1	3913.7	0.0	0.00
25YR-72HR	11.50	9068.7	5144.4	3924.3	0.0	0.00
25YR-72HR	11.52	9091.6	5156.8	3934.8	0.0	0.00
25YR-72HR	11.53	9114.6	5169.2	3945.4	0.0	0.00
25YR-72HR	11.55	9137.6	5181.5	3956.0	0.0	0.00
25YR-72HR	11.57	9160.5	5193.9	3966.7	0.0	0.00
25YR-72HR	11.58	9183.6	5206.3	3977.3	0.0	0.00
25YR-72HR	11.60	9206.6	5218.6	3987.9	0.0	0.00
25YR-72HR	11.62	9229.6	5231.0	3998.6	0.0	0.00
25YR-72HR	11.63	9252.7	5243.4	4009.3	0.0	0.00
25YR-72HR	11.65	9275.8	5255.8	4020.0	0.0	0.00
25YR-72HR	11.67	9298.9	5268.2	4030.7	0.0	0.00
25YR-72HR	11.68	9322.0	5280.6	4041.4	0.0	0.00
25YR-72HR	11.70	9345.1	5293.0	4052.1	0.0	0.00
25YR-72HR	11.72	9368.3	5305.5	4062.8	0.0	0.00
25YR-72HR	11.73	9391.5	5317.9	4073.6	0.0	0.00
25YR-72HR	11.75	9414.7	5330.3	4084.4	0.0	0.00
25YR-72HR	11.77	9437.9	5342.7	4095.1	0.0	0.00
25YR-72HR	11.78	9461.1	5355.2	4105.9	0.0	0.00
25YR-72HR	11.80	9484.4	5367.6	4116.8	0.0	0.00
25YR-72HR	11.82	9507.6	5380.1	4127.6	0.0	0.00
25YR-72HR	11.83	9530.9	5392.5	4138.4	0.0	0.00
25YR-72HR	11.85	9554.2	5405.0	4149.3	0.0	0.00
25YR-72HR	11.87	9577.6	5417.4	4160.1	0.0	0.00
25YR-72HR	11.88	9600.9	5429.9	4171.0	0.0	0.00
25YR-72HR	11.90	9624.3	5442.4	4181.9	0.0	0.00
25YR-72HR	11.92	9647.6	5454.8	4192.8	0.0	0.00
25YR-72HR	11.93	9671.0	5467.3	4203.7	0.0	0.00
25YR-72HR	11.95	9694.4	5479.8	4214.7	0.0	0.00
25YR-72HR	11.97	9717.9	5492.3	4225.6	0.0	0.00
25YR-72HR	11.98	9741.3	5504.8	4236.6	0.0	0.00
25YR-72HR	12.00	9764.8	5517.3	4247.5	0.0	0.00
25YR-72HR	12.02	9788.3	5529.8	4258.5	0.0	0.00
25YR-72HR	12.03	9811.8	5542.3	4269.5	0.0	0.00
25YR-72HR	12.05	9835.3	5554.8	4280.5	0.0	0.00
25YR-72HR	12.07	9858.9	5567.3	4291.5	0.0	0.00
25YR-72HR	12.08	9882.4	5579.8	4302.6	0.0	0.00
25YR-72HR	12.10	9906.0	5592.4	4313.6	0.0	0.00
25YR-72HR	12.12	9929.6	5604.9	4324.7	0.0	0.00
25YR-72HR	12.13	9953.2	5617.4	4335.8	0.0	0.00
25YR-72HR	12.15	9976.8	5630.0	4346.9	0.0	0.00
25YR-72HR	12.17	10000.5	5642.5	4358.0	0.0	0.00
25YR-72HR	12.18	10024.1	5655.1	4369.1	0.0	0.00
25YR-72HR	12.20	10047.8	5667.6	4380.2	0.0	0.00
25YR-72HR	12.22	10071.5	5680.2	4391.4	0.0	0.00
25YR-72HR	12.23	10095.3	5692.7	4402.5	0.0	0.00
25YR-72HR	12.25	10119.0	5705.3	4413.7	0.0	0.00
25YR-72HR	12.27	10142.7	5717.9	4424.9	0.0	0.00
25YR-72HR	12.28	10166.5	5730.5	4436.1	0.0	0.00
25YR-72HR	12.30	10190.3	5743.0	4447.3	0.0	0.00
25YR-72HR	12.32	10214.1	5755.6	4458.5	0.0	0.00
25YR-72HR	12.33	10237.9	5768.2	4469.7	0.0	0.00
25YR-72HR	12.35	10261.8	5780.8	4481.0	0.0	0.00
25YR-72HR	12.37	10285.6	5793.4	4492.2	0.0	0.00
25YR-72HR	12.38	10309.5	5806.0	4503.5	0.0	0.00
25YR-72HR	12.40	10333.4	5818.6	4514.8	0.0	0.00
25YR-72HR	12.42	10357.3	5831.2	4526.1	0.0	0.00
25YR-72HR	12.43	10381.2	5843.8	4537.4	0.0	0.00
25YR-72HR	12.45	10405.2	5856.5	4548.7	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	12.47	10429.1	5869.1	4560.1	0.0	0.00
25YR-72HR	12.48	10453.1	5881.7	4571.4	0.0	0.00
25YR-72HR	12.50	10477.1	5894.3	4582.8	0.0	0.00
25YR-72HR	12.52	10501.1	5907.0	4594.1	0.0	0.00
25YR-72HR	12.53	10525.2	5919.6	4605.5	0.0	0.00
25YR-72HR	12.55	10549.2	5932.3	4616.9	0.0	0.00
25YR-72HR	12.57	10573.3	5944.9	4628.3	0.0	0.00
25YR-72HR	12.58	10597.3	5957.6	4639.8	0.0	0.00
25YR-72HR	12.60	10621.4	5970.2	4651.2	0.0	0.00
25YR-72HR	12.62	10645.6	5982.9	4662.7	0.0	0.00
25YR-72HR	12.63	10669.7	5995.6	4674.1	0.0	0.00
25YR-72HR	12.65	10693.8	6008.2	4685.6	0.0	0.00
25YR-72HR	12.67	10718.0	6020.9	4697.1	0.0	0.00
25YR-72HR	12.68	10742.2	6033.6	4708.6	0.0	0.00
25YR-72HR	12.70	10766.4	6046.3	4720.1	0.0	0.00
25YR-72HR	12.72	10790.6	6059.0	4731.6	0.0	0.00
25YR-72HR	12.73	10814.8	6071.7	4743.2	0.0	0.00
25YR-72HR	12.75	10839.1	6084.3	4754.7	0.0	0.00
25YR-72HR	12.77	10863.4	6097.0	4766.3	0.0	0.00
25YR-72HR	12.78	10887.6	6109.8	4777.9	0.0	0.00
25YR-72HR	12.80	10911.9	6122.5	4789.5	0.0	0.00
25YR-72HR	12.82	10936.3	6135.2	4801.1	0.0	0.00
25YR-72HR	12.83	10960.6	6147.9	4812.7	0.0	0.00
25YR-72HR	12.85	10985.0	6160.6	4824.3	0.0	0.00
25YR-72HR	12.87	11009.3	6173.3	4836.0	0.0	0.00
25YR-72HR	12.88	11033.7	6186.1	4847.6	0.0	0.00
25YR-72HR	12.90	11058.1	6198.8	4859.3	0.0	0.00
25YR-72HR	12.92	11082.5	6211.5	4871.0	0.0	0.00
25YR-72HR	12.93	11107.0	6224.3	4882.7	-0.0	-0.00
25YR-72HR	12.95	11131.4	6237.0	4894.4	0.0	0.00
25YR-72HR	12.97	11155.9	6249.8	4906.1	0.0	0.00
25YR-72HR	12.98	11180.4	6262.5	4917.9	0.0	0.00
25YR-72HR	13.00	11204.9	6275.3	4929.6	0.0	0.00
25YR-72HR	13.02	11229.4	6288.0	4941.4	0.0	0.00
25YR-72HR	13.03	11253.9	6300.8	4953.1	0.0	0.00
25YR-72HR	13.05	11278.5	6313.6	4964.9	-0.0	-0.00
25YR-72HR	13.07	11303.1	6326.3	4976.7	-0.0	-0.00
25YR-72HR	13.08	11327.6	6339.1	4988.5	-0.0	-0.00
25YR-72HR	13.10	11352.2	6351.9	5000.3	0.0	0.00
25YR-72HR	13.12	11376.9	6364.7	5012.2	-0.0	-0.00
25YR-72HR	13.13	11401.5	6377.5	5024.0	-0.0	-0.00
25YR-72HR	13.15	11426.1	6390.3	5035.9	-0.0	-0.00
25YR-72HR	13.17	11450.8	6403.1	5047.8	-0.0	-0.00
25YR-72HR	13.18	11475.5	6415.9	5059.6	-0.0	-0.00
25YR-72HR	13.20	11500.2	6428.7	5071.5	-0.0	-0.00
25YR-72HR	13.22	11524.9	6441.5	5083.4	-0.0	-0.00
25YR-72HR	13.23	11549.7	6454.3	5095.4	-0.0	-0.00
25YR-72HR	13.25	11574.4	6467.1	5107.3	-0.0	-0.00
25YR-72HR	13.27	11599.2	6479.9	5119.2	-0.0	-0.00
25YR-72HR	13.28	11623.9	6492.7	5131.2	-0.0	-0.00
25YR-72HR	13.30	11648.7	6505.6	5143.2	-0.0	-0.00
25YR-72HR	13.32	11673.6	6518.4	5155.2	-0.0	-0.00
25YR-72HR	13.33	11698.4	6531.2	5167.2	-0.0	-0.00
25YR-72HR	13.35	11723.2	6544.1	5179.2	-0.0	-0.00
25YR-72HR	13.37	11748.1	6556.9	5191.2	-0.0	-0.00
25YR-72HR	13.38	11773.0	6569.8	5203.2	-0.0	-0.00
25YR-72HR	13.40	11797.9	6582.6	5215.3	-0.0	-0.00
25YR-72HR	13.42	11822.8	6595.5	5227.3	-0.0	-0.00
25YR-72HR	13.43	11847.7	6608.3	5239.4	-0.0	-0.00
25YR-72HR	13.45	11872.6	6621.2	5251.5	-0.0	-0.00
25YR-72HR	13.47	11897.6	6634.0	5263.6	-0.0	-0.00
25YR-72HR	13.48	11922.6	6646.9	5275.7	-0.0	-0.00
25YR-72HR	13.50	11947.6	6659.8	5287.8	-0.0	-0.00
25YR-72HR	13.52	11972.6	6672.7	5299.9	-0.0	-0.00
25YR-72HR	13.53	11997.6	6685.5	5312.1	-0.0	-0.00
25YR-72HR	13.55	12022.6	6698.4	5324.2	-0.0	-0.00
25YR-72HR	13.57	12047.7	6711.3	5336.4	-0.0	-0.00
25YR-72HR	13.58	12072.8	6724.2	5348.6	-0.0	-0.00
25YR-72HR	13.60	12097.8	6737.1	5360.8	-0.0	-0.00
25YR-72HR	13.62	12122.9	6750.0	5373.0	-0.0	-0.00
25YR-72HR	13.63	12148.1	6762.9	5385.2	-0.0	-0.00
25YR-72HR	13.65	12173.2	6775.8	5397.4	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	13.67	12198.3	6788.7	5409.6	-0.0	-0.00
25YR-72HR	13.68	12223.5	6801.6	5421.9	-0.0	-0.00
25YR-72HR	13.70	12248.7	6814.5	5434.2	-0.0	-0.00
25YR-72HR	13.72	12273.9	6827.4	5446.4	-0.0	-0.00
25YR-72HR	13.73	12299.1	6840.4	5458.7	-0.0	-0.00
25YR-72HR	13.75	12324.3	6853.3	5471.0	-0.0	-0.00
25YR-72HR	13.77	12349.5	6866.2	5483.3	-0.0	-0.00
25YR-72HR	13.78	12374.8	6879.1	5495.7	-0.0	-0.00
25YR-72HR	13.80	12400.1	6892.1	5508.0	-0.0	-0.00
25YR-72HR	13.82	12425.4	6905.0	5520.3	-0.0	-0.00
25YR-72HR	13.83	12450.7	6918.0	5532.7	-0.0	-0.00
25YR-72HR	13.85	12476.0	6930.9	5545.1	-0.0	-0.00
25YR-72HR	13.87	12501.3	6943.8	5557.5	-0.0	-0.00
25YR-72HR	13.88	12526.7	6956.8	5569.9	-0.0	-0.00
25YR-72HR	13.90	12552.0	6969.8	5582.3	-0.0	-0.00
25YR-72HR	13.92	12577.4	6982.7	5594.7	-0.0	-0.00
25YR-72HR	13.93	12602.8	6995.7	5607.1	-0.0	-0.00
25YR-72HR	13.95	12628.2	7008.6	5619.6	-0.0	-0.00
25YR-72HR	13.97	12653.6	7021.6	5632.0	-0.0	-0.00
25YR-72HR	13.98	12679.1	7034.6	5644.5	-0.0	-0.00
25YR-72HR	14.00	12704.5	7047.6	5656.9	-0.0	-0.00
25YR-72HR	14.02	12730.0	7060.5	5669.4	-0.0	-0.00
25YR-72HR	14.03	12755.5	7073.5	5681.9	-0.0	-0.00
25YR-72HR	14.05	12781.0	7086.5	5694.4	-0.0	-0.00
25YR-72HR	14.07	12806.5	7099.5	5707.0	-0.0	-0.00
25YR-72HR	14.08	12832.0	7112.5	5719.5	-0.0	-0.00
25YR-72HR	14.10	12857.5	7125.5	5732.1	-0.0	-0.00
25YR-72HR	14.12	12883.1	7138.5	5744.6	-0.0	-0.00
25YR-72HR	14.13	12908.7	7151.5	5757.2	-0.0	-0.00
25YR-72HR	14.15	12934.3	7164.5	5769.8	-0.0	-0.00
25YR-72HR	14.17	12959.9	7177.5	5782.4	-0.0	-0.00
25YR-72HR	14.18	12985.5	7190.5	5795.0	-0.0	-0.00
25YR-72HR	14.20	13011.1	7203.5	5807.6	-0.0	-0.00
25YR-72HR	14.22	13036.8	7216.6	5820.2	-0.0	-0.00
25YR-72HR	14.23	13062.4	7229.6	5832.8	-0.0	-0.00
25YR-72HR	14.25	13088.1	7242.6	5845.5	-0.0	-0.00
25YR-72HR	14.27	13113.8	7255.6	5858.2	-0.0	-0.00
25YR-72HR	14.28	13139.5	7268.7	5870.8	-0.0	-0.00
25YR-72HR	14.30	13165.2	7281.7	5883.5	-0.0	-0.00
25YR-72HR	14.32	13191.0	7294.7	5896.2	-0.0	-0.00
25YR-72HR	14.33	13216.7	7307.8	5908.9	-0.0	-0.00
25YR-72HR	14.35	13242.5	7320.8	5921.6	-0.0	-0.00
25YR-72HR	14.37	13268.3	7333.9	5934.4	-0.0	-0.00
25YR-72HR	14.38	13294.1	7346.9	5947.1	-0.0	-0.00
25YR-72HR	14.40	13319.9	7360.0	5959.9	-0.0	-0.00
25YR-72HR	14.42	13345.7	7373.1	5972.6	-0.0	-0.00
25YR-72HR	14.43	13371.5	7386.1	5985.4	-0.0	-0.00
25YR-72HR	14.45	13397.4	7399.2	5998.2	-0.0	-0.00
25YR-72HR	14.47	13423.2	7412.2	6011.0	-0.0	-0.00
25YR-72HR	14.48	13449.1	7425.3	6023.8	-0.0	-0.00
25YR-72HR	14.50	13475.0	7438.4	6036.6	-0.0	-0.00
25YR-72HR	14.52	13500.9	7451.5	6049.5	-0.0	-0.00
25YR-72HR	14.53	13526.9	7464.5	6062.3	-0.0	-0.00
25YR-72HR	14.55	13552.8	7477.6	6075.2	-0.0	-0.00
25YR-72HR	14.57	13578.8	7490.7	6088.0	-0.0	-0.00
25YR-72HR	14.58	13604.7	7503.8	6100.9	-0.0	-0.00
25YR-72HR	14.60	13630.7	7516.9	6113.8	-0.0	-0.00
25YR-72HR	14.62	13656.7	7530.0	6126.7	-0.0	-0.00
25YR-72HR	14.63	13682.7	7543.1	6139.6	-0.0	-0.00
25YR-72HR	14.65	13708.7	7556.2	6152.5	-0.0	-0.00
25YR-72HR	14.67	13734.8	7569.3	6165.5	-0.0	-0.00
25YR-72HR	14.68	13760.8	7582.4	6178.4	-0.0	-0.00
25YR-72HR	14.70	13786.9	7595.5	6191.4	-0.0	-0.00
25YR-72HR	14.72	13813.0	7608.6	6204.3	-0.0	-0.00
25YR-72HR	14.73	13839.1	7621.8	6217.3	-0.0	-0.00
25YR-72HR	14.75	13865.2	7634.9	6230.3	-0.0	-0.00
25YR-72HR	14.77	13891.3	7648.0	6243.3	-0.0	-0.00
25YR-72HR	14.78	13917.4	7661.1	6256.3	-0.0	-0.00
25YR-72HR	14.80	13943.6	7674.3	6269.3	-0.0	-0.00
25YR-72HR	14.82	13969.8	7687.4	6282.4	-0.0	-0.00
25YR-72HR	14.83	13995.9	7700.5	6295.4	-0.0	-0.00
25YR-72HR	14.85	14022.1	7713.7	6308.5	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	14.87	14048.3	7726.8	6321.5	-0.0	-0.00
25YR-72HR	14.88	14074.5	7739.9	6334.6	-0.0	-0.00
25YR-72HR	14.90	14100.8	7753.1	6347.7	-0.0	-0.00
25YR-72HR	14.92	14127.0	7766.2	6360.8	-0.0	-0.00
25YR-72HR	14.93	14153.3	7779.4	6373.9	-0.0	-0.00
25YR-72HR	14.95	14179.6	7792.5	6387.0	-0.0	-0.00
25YR-72HR	14.97	14205.9	7805.7	6400.2	-0.0	-0.00
25YR-72HR	14.98	14232.2	7818.9	6413.3	-0.0	-0.00
25YR-72HR	15.00	14258.5	7832.0	6426.4	-0.0	-0.00
25YR-72HR	15.02	14284.8	7845.2	6439.6	-0.0	-0.00
25YR-72HR	15.03	14311.2	7858.4	6452.8	-0.0	-0.00
25YR-72HR	15.05	14337.5	7871.5	6466.0	-0.0	-0.00
25YR-72HR	15.07	14363.9	7884.7	6479.2	-0.0	-0.00
25YR-72HR	15.08	14390.3	7897.9	6492.4	-0.0	-0.00
25YR-72HR	15.10	14416.7	7911.1	6505.6	-0.0	-0.00
25YR-72HR	15.12	14443.1	7924.3	6518.8	-0.0	-0.00
25YR-72HR	15.13	14469.5	7937.5	6532.0	-0.0	-0.00
25YR-72HR	15.15	14496.0	7950.7	6545.3	-0.0	-0.00
25YR-72HR	15.17	14522.4	7963.9	6558.6	-0.0	-0.00
25YR-72HR	15.18	14548.9	7977.0	6571.8	-0.0	-0.00
25YR-72HR	15.20	14575.4	7990.2	6585.1	-0.0	-0.00
25YR-72HR	15.22	14601.9	8003.4	6598.4	-0.0	-0.00
25YR-72HR	15.23	14628.4	8016.7	6611.7	-0.0	-0.00
25YR-72HR	15.25	14654.9	8029.9	6625.0	-0.0	-0.00
25YR-72HR	15.27	14681.4	8043.1	6638.3	-0.0	-0.00
25YR-72HR	15.28	14708.0	8056.3	6651.7	-0.0	-0.00
25YR-72HR	15.30	14734.5	8069.5	6665.0	-0.0	-0.00
25YR-72HR	15.32	14761.1	8082.7	6678.4	-0.0	-0.00
25YR-72HR	15.33	14787.7	8095.9	6691.8	-0.0	-0.00
25YR-72HR	15.35	14814.3	8109.2	6705.1	-0.0	-0.00
25YR-72HR	15.37	14840.9	8122.4	6718.5	-0.0	-0.00
25YR-72HR	15.38	14867.5	8135.6	6731.9	-0.0	-0.00
25YR-72HR	15.40	14894.2	8148.9	6745.3	-0.0	-0.00
25YR-72HR	15.42	14920.8	8162.1	6758.7	-0.0	-0.00
25YR-72HR	15.43	14947.5	8175.3	6772.2	-0.0	-0.00
25YR-72HR	15.45	14974.2	8188.6	6785.6	-0.0	-0.00
25YR-72HR	15.47	15000.9	8201.8	6799.1	-0.0	-0.00
25YR-72HR	15.48	15027.6	8215.1	6812.5	-0.0	-0.00
25YR-72HR	15.50	15054.3	8228.3	6826.0	-0.0	-0.00
25YR-72HR	15.52	15081.0	8241.6	6839.5	-0.0	-0.00
25YR-72HR	15.53	15107.8	8254.8	6853.0	-0.0	-0.00
25YR-72HR	15.55	15134.5	8268.1	6866.5	-0.0	-0.00
25YR-72HR	15.57	15161.3	8281.3	6880.0	-0.0	-0.00
25YR-72HR	15.58	15188.1	8294.6	6893.5	-0.0	-0.00
25YR-72HR	15.60	15214.9	8307.8	6907.1	-0.0	-0.00
25YR-72HR	15.62	15241.7	8321.1	6920.6	-0.0	-0.00
25YR-72HR	15.63	15268.5	8334.4	6934.2	-0.0	-0.00
25YR-72HR	15.65	15295.4	8347.7	6947.7	-0.0	-0.00
25YR-72HR	15.67	15322.2	8360.9	6961.3	-0.0	-0.00
25YR-72HR	15.68	15349.1	8374.2	6974.9	-0.0	-0.00
25YR-72HR	15.70	15376.0	8387.5	6988.5	-0.0	-0.00
25YR-72HR	15.72	15402.9	8400.8	7002.1	-0.0	-0.00
25YR-72HR	15.73	15429.8	8414.1	7015.7	-0.0	-0.00
25YR-72HR	15.75	15456.7	8427.3	7029.3	-0.0	-0.00
25YR-72HR	15.77	15483.6	8440.6	7043.0	-0.0	-0.00
25YR-72HR	15.78	15510.5	8453.9	7056.6	-0.0	-0.00
25YR-72HR	15.80	15537.5	8467.2	7070.3	-0.0	-0.00
25YR-72HR	15.82	15564.5	8480.5	7083.9	-0.0	-0.00
25YR-72HR	15.83	15591.4	8493.8	7097.6	-0.0	-0.00
25YR-72HR	15.85	15618.4	8507.1	7111.3	-0.0	-0.00
25YR-72HR	15.87	15645.4	8520.4	7125.0	-0.0	-0.00
25YR-72HR	15.88	15672.5	8533.7	7138.7	-0.0	-0.00
25YR-72HR	15.90	15699.5	8547.1	7152.4	-0.0	-0.00
25YR-72HR	15.92	15726.5	8560.4	7166.2	-0.0	-0.00
25YR-72HR	15.93	15753.6	8573.7	7179.9	-0.0	-0.00
25YR-72HR	15.95	15780.7	8587.0	7193.7	-0.0	-0.00
25YR-72HR	15.97	15807.7	8600.3	7207.4	-0.0	-0.00
25YR-72HR	15.98	15834.8	8613.7	7221.2	-0.0	-0.00
25YR-72HR	16.00	15861.9	8627.0	7235.0	-0.0	-0.00
25YR-72HR	16.08	15997.7	8693.7	7304.0	-0.0	-0.00
25YR-72HR	16.17	16133.7	8760.4	7373.3	-0.0	-0.00
25YR-72HR	16.25	16270.0	8827.2	7442.9	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	16.33	16406.7	8894.0	7512.7	0.0	0.00
25YR-72HR	16.42	16543.6	8961.0	7582.7	0.0	0.00
25YR-72HR	16.50	16680.9	9027.9	7653.0	0.0	0.00
25YR-72HR	16.58	16818.5	9095.0	7723.5	0.0	0.00
25YR-72HR	16.67	16956.3	9162.0	7794.3	-0.0	-0.00
25YR-72HR	16.75	17094.5	9229.2	7865.3	-0.0	-0.00
25YR-72HR	16.83	17232.9	9296.4	7936.5	-0.0	-0.00
25YR-72HR	16.92	17371.7	9363.7	8008.0	-0.0	-0.00
25YR-72HR	17.00	17510.7	9431.0	8079.7	-0.0	-0.00
25YR-72HR	17.08	17650.0	9498.3	8151.7	-0.0	-0.00
25YR-72HR	17.17	17789.7	9565.8	8223.9	-0.0	-0.00
25YR-72HR	17.25	17929.5	9633.2	8296.3	-0.0	-0.00
25YR-72HR	17.33	18069.7	9700.8	8368.9	-0.0	-0.00
25YR-72HR	17.42	18210.2	9768.4	8441.8	-0.0	-0.00
25YR-72HR	17.50	18350.9	9836.0	8514.9	-0.0	-0.00
25YR-72HR	17.58	18492.0	9903.7	8588.3	-0.0	-0.00
25YR-72HR	17.67	18633.2	9971.4	8661.8	-0.0	-0.00
25YR-72HR	17.75	18774.8	10039.2	8735.6	-0.0	-0.00
25YR-72HR	17.83	18916.7	10107.0	8809.6	-0.0	-0.00
25YR-72HR	17.92	19058.8	10174.9	8883.8	-0.0	-0.00
25YR-72HR	18.00	19201.1	10242.9	8958.3	-0.0	-0.00
25YR-72HR	18.08	19343.8	10310.8	9032.9	-0.0	-0.00
25YR-72HR	18.17	19486.7	10378.9	9107.8	-0.0	-0.00
25YR-72HR	18.25	19629.9	10447.0	9182.9	-0.0	-0.00
25YR-72HR	18.33	19773.3	10515.1	9258.2	0.0	0.00
25YR-72HR	18.42	19917.0	10583.2	9333.8	0.0	0.00
25YR-72HR	18.50	20061.0	10651.5	9409.5	0.0	0.00
25YR-72HR	18.58	20205.2	10719.7	9485.5	0.0	0.00
25YR-72HR	18.67	20349.7	10788.0	9561.6	0.0	0.00
25YR-72HR	18.75	20494.4	10856.4	9638.0	0.0	0.00
25YR-72HR	18.83	20639.3	10924.8	9714.6	0.0	0.00
25YR-72HR	18.92	20784.6	10993.2	9791.4	0.0	0.00
25YR-72HR	19.00	20930.0	11061.7	9868.4	0.0	0.00
25YR-72HR	19.08	21075.8	11130.2	9945.6	0.0	0.00
25YR-72HR	19.17	21221.7	11198.8	10023.0	0.0	0.00
25YR-72HR	19.25	21367.9	11267.4	10100.6	0.0	0.00
25YR-72HR	19.33	21514.4	11336.0	10178.4	0.0	0.00
25YR-72HR	19.42	21661.1	11404.7	10256.4	0.0	0.00
25YR-72HR	19.50	21808.0	11473.4	10334.6	0.0	0.00
25YR-72HR	19.58	21955.2	11542.2	10413.0	0.0	0.00
25YR-72HR	19.67	22102.6	11611.0	10491.6	0.0	0.00
25YR-72HR	19.75	22250.2	11679.8	10570.4	0.0	0.00
25YR-72HR	19.83	22398.1	11748.7	10649.4	0.0	0.00
25YR-72HR	19.92	22546.2	11817.6	10728.6	0.0	0.00
25YR-72HR	20.00	22694.6	11886.6	10808.0	0.0	0.00
25YR-72HR	20.08	22843.2	11955.6	10887.6	0.0	0.00
25YR-72HR	20.17	22992.0	12024.6	10967.3	0.0	0.00
25YR-72HR	20.25	23141.0	12093.7	11047.3	0.0	0.00
25YR-72HR	20.33	23290.2	12162.8	11127.4	0.0	0.00
25YR-72HR	20.42	23439.7	12231.9	11207.8	0.0	0.00
25YR-72HR	20.50	23589.4	12301.1	11288.3	0.0	0.00
25YR-72HR	20.58	23739.3	12370.3	11369.0	0.0	0.00
25YR-72HR	20.67	23889.5	12439.6	11449.9	0.0	0.00
25YR-72HR	20.75	24039.9	12508.9	11531.0	0.0	0.00
25YR-72HR	20.83	24190.4	12578.2	11612.3	0.0	0.00
25YR-72HR	20.92	24341.2	12647.5	11693.7	0.0	0.00
25YR-72HR	21.00	24492.2	12716.9	11775.3	0.0	0.00
25YR-72HR	21.08	24643.5	12786.3	11857.1	0.0	0.00
25YR-72HR	21.17	24794.9	12855.8	11939.1	0.0	0.00
25YR-72HR	21.25	24946.6	12925.3	12021.3	0.0	0.00
25YR-72HR	21.33	25098.4	12994.8	12103.6	0.0	0.00
25YR-72HR	21.42	25250.5	13064.3	12186.2	0.0	0.00
25YR-72HR	21.50	25402.8	13133.9	12268.9	0.0	0.00
25YR-72HR	21.58	25555.3	13203.5	12351.7	0.0	0.00
25YR-72HR	21.67	25708.0	13273.2	12434.8	0.0	0.00
25YR-72HR	21.75	25860.9	13342.9	12518.0	0.0	0.00
25YR-72HR	21.83	26014.0	13412.6	12601.4	0.0	0.00
25YR-72HR	21.92	26167.3	13482.3	12685.0	0.0	0.00
25YR-72HR	22.00	26320.8	13552.1	12768.7	0.0	0.00
25YR-72HR	22.08	26474.5	13621.9	12852.6	0.0	0.00
25YR-72HR	22.17	26628.4	13691.7	12936.7	0.0	0.00
25YR-72HR	22.25	26782.5	13761.5	13021.0	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	22.33	26936.8	13831.4	13105.4	0.0	0.00
25YR-72HR	22.42	27091.3	13901.3	13190.0	0.0	0.00
25YR-72HR	22.50	27246.0	13971.3	13274.7	0.0	0.00
25YR-72HR	22.58	27400.9	14041.3	13359.6	0.0	0.00
25YR-72HR	22.67	27555.9	14111.2	13444.7	0.0	0.00
25YR-72HR	22.75	27711.2	14181.3	13529.9	0.0	0.00
25YR-72HR	22.83	27866.7	14251.3	13615.3	0.0	0.00
25YR-72HR	22.92	28022.3	14321.4	13700.9	0.0	0.00
25YR-72HR	23.00	28178.2	14391.5	13786.6	0.0	0.00
25YR-72HR	23.08	28334.2	14461.7	13872.5	0.0	0.00
25YR-72HR	23.17	28490.4	14531.8	13958.6	0.0	0.00
25YR-72HR	23.25	28646.8	14602.0	14044.8	0.0	0.00
25YR-72HR	23.33	28803.4	14672.2	14131.2	0.0	0.00
25YR-72HR	23.42	28960.1	14742.5	14217.7	0.0	0.00
25YR-72HR	23.50	29117.1	14812.7	14304.4	0.0	0.00
25YR-72HR	23.58	29274.2	14883.0	14391.2	0.0	0.00
25YR-72HR	23.67	29431.5	14953.3	14478.2	0.0	0.00
25YR-72HR	23.75	29589.0	15023.7	14565.4	0.0	0.00
25YR-72HR	23.83	29746.7	15094.0	14652.7	0.0	0.00
25YR-72HR	23.92	29904.6	15164.4	14740.2	0.0	0.00
25YR-72HR	24.00	30062.7	15234.9	14827.8	0.0	0.00
25YR-72HR	24.25	30603.0	15467.0	15136.0	0.0	0.00
25YR-72HR	24.50	31238.6	15743.9	15494.7	0.0	0.00
25YR-72HR	24.75	31916.9	16041.7	15875.2	0.0	0.00
25YR-72HR	25.00	32613.0	16347.9	16265.1	0.0	0.00
25YR-72HR	25.25	33315.1	16656.2	16658.8	0.0	0.00
25YR-72HR	25.50	34020.2	16965.1	17055.1	0.0	0.00
25YR-72HR	25.75	34728.2	17274.3	17453.9	0.0	0.00
25YR-72HR	26.00	35439.1	17583.9	17855.3	0.0	0.00
25YR-72HR	26.25	36152.9	17893.8	18259.1	0.0	0.00
25YR-72HR	26.50	36869.4	18204.0	18665.4	0.0	0.00
25YR-72HR	26.75	37588.7	18514.6	19074.0	0.0	0.00
25YR-72HR	27.00	38310.6	18825.5	19485.0	0.0	0.00
25YR-72HR	27.25	39035.1	19136.8	19898.3	0.0	0.00
25YR-72HR	27.50	39762.1	19448.3	20313.9	0.0	0.00
25YR-72HR	27.75	40491.7	19760.1	20731.6	0.0	0.00
25YR-72HR	28.00	41223.7	20072.1	21151.5	0.0	0.00
25YR-72HR	28.25	41958.1	20384.5	21573.6	0.0	0.00
25YR-72HR	28.50	42694.9	20697.1	21997.8	0.0	0.00
25YR-72HR	28.75	43434.0	21010.0	22424.0	0.0	0.00
25YR-72HR	29.00	44175.4	21323.1	22852.3	0.0	0.00
25YR-72HR	29.25	44919.0	21636.5	23282.4	0.0	0.00
25YR-72HR	29.50	45664.7	21950.1	23714.6	-0.0	-0.00
25YR-72HR	29.75	46412.7	22263.9	24148.8	-0.0	-0.00
25YR-72HR	30.00	47162.7	22578.0	24584.7	-0.0	-0.00
25YR-72HR	30.25	47914.8	22892.3	25022.6	-0.0	-0.00
25YR-72HR	30.50	48669.0	23206.7	25462.2	-0.0	-0.00
25YR-72HR	30.75	49425.1	23521.4	25903.8	-0.0	-0.00
25YR-72HR	31.00	50183.3	23836.2	26347.1	-0.0	-0.00
25YR-72HR	31.25	50943.3	24151.3	26792.0	-0.0	-0.00
25YR-72HR	31.50	51705.2	24466.5	27238.7	-0.0	-0.00
25YR-72HR	31.75	52469.0	24781.8	27687.2	-0.0	-0.00
25YR-72HR	32.00	53234.7	25097.3	28137.3	-0.0	-0.00
25YR-72HR	32.25	54002.1	25413.0	28589.0	-0.0	-0.00
25YR-72HR	32.50	54771.3	25729.0	29042.3	-0.0	-0.00
25YR-72HR	32.75	55542.2	26045.1	29497.1	-0.0	-0.00
25YR-72HR	33.00	56314.9	26361.3	29953.5	-0.0	-0.00
25YR-72HR	33.25	57089.2	26677.6	30411.5	-0.0	-0.00
25YR-72HR	33.50	57865.2	26994.2	30871.0	-0.0	-0.00
25YR-72HR	33.75	58642.8	27310.9	31331.9	-0.0	-0.00
25YR-72HR	34.00	59422.0	27627.7	31794.2	-0.0	-0.00
25YR-72HR	34.25	60202.7	27944.7	32258.1	-0.0	-0.00
25YR-72HR	34.50	60985.1	28261.6	32723.4	-0.0	-0.00
25YR-72HR	34.75	61768.9	28578.9	33190.0	-0.0	-0.00
25YR-72HR	35.00	62554.3	28896.3	33658.0	-0.0	-0.00
25YR-72HR	35.25	63341.1	29213.8	34127.3	-0.0	-0.00
25YR-72HR	35.50	64129.4	29531.4	34598.0	-0.0	-0.00
25YR-72HR	35.75	64919.1	29849.1	35070.0	-0.0	-0.00
25YR-72HR	36.00	65710.2	30166.9	35543.3	-0.0	-0.00
25YR-72HR	36.25	66505.2	30485.6	36019.6	-0.0	-0.00
25YR-72HR	36.50	67305.0	30805.8	36499.2	-0.0	-0.00
25YR-72HR	36.75	68107.7	31126.9	36980.8	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	37.00	68912.4	31448.2	37464.1	0.0	0.00
25YR-72HR	37.25	69718.4	31769.9	37948.5	-0.0	-0.00
25YR-72HR	37.50	70525.8	32091.7	38434.2	0.0	0.00
25YR-72HR	37.75	71334.5	32413.5	38921.0	0.0	0.00
25YR-72HR	38.00	72144.5	32735.5	39409.0	-0.0	-0.00
25YR-72HR	38.25	72955.7	33057.5	39898.1	-0.0	-0.00
25YR-72HR	38.50	73768.1	33379.7	40388.4	-0.0	-0.00
25YR-72HR	38.75	74581.8	33701.9	40879.8	-0.0	-0.00
25YR-72HR	39.00	75396.6	34024.3	41372.4	-0.0	-0.00
25YR-72HR	39.25	76212.7	34346.7	41866.0	-0.0	-0.00
25YR-72HR	39.50	77029.9	34669.2	42360.7	0.0	0.00
25YR-72HR	39.75	77848.2	34991.8	42856.4	0.0	0.00
25YR-72HR	40.00	78667.7	35314.5	43353.2	0.0	0.00
25YR-72HR	40.25	79488.3	35637.2	43851.1	0.0	0.00
25YR-72HR	40.50	80310.0	35960.1	44349.9	0.0	0.00
25YR-72HR	40.75	81132.8	36283.0	44849.8	0.0	0.00
25YR-72HR	41.00	81956.7	36606.0	45350.7	0.0	0.00
25YR-72HR	41.25	82781.6	36929.1	45852.5	0.0	0.00
25YR-72HR	41.50	83607.5	37252.2	46355.3	0.0	0.00
25YR-72HR	41.75	84434.5	37575.4	46859.1	-0.0	-0.00
25YR-72HR	42.00	85262.5	37898.7	47363.8	-0.0	-0.00
25YR-72HR	42.25	86091.5	38222.1	47869.4	-0.0	-0.00
25YR-72HR	42.50	86921.4	38545.5	48375.9	0.0	0.00
25YR-72HR	42.75	87752.4	38869.0	48883.4	0.0	0.00
25YR-72HR	43.00	88584.3	39192.5	49391.8	0.0	0.00
25YR-72HR	43.25	89417.1	39516.1	49901.0	0.0	0.00
25YR-72HR	43.50	90250.9	39839.8	50411.1	0.0	0.00
25YR-72HR	43.75	91085.6	40163.6	50922.0	0.0	0.00
25YR-72HR	44.00	91921.2	40487.4	51433.8	0.0	0.00
25YR-72HR	44.25	92757.7	40811.2	51946.5	0.0	0.00
25YR-72HR	44.50	93595.1	41135.1	52460.0	0.0	0.00
25YR-72HR	44.75	94433.4	41459.1	52974.3	0.0	0.00
25YR-72HR	45.00	95272.5	41783.1	53489.4	0.0	0.00
25YR-72HR	45.25	96112.5	42107.2	54005.2	0.0	0.00
25YR-72HR	45.50	96953.3	42431.4	54521.9	0.0	0.00
25YR-72HR	45.75	97794.9	42755.6	55039.4	0.0	0.00
25YR-72HR	46.00	98637.4	43079.8	55557.6	-0.0	-0.00
25YR-72HR	46.25	99480.7	43404.6	56076.1	-0.0	-0.00
25YR-72HR	46.50	100324.8	43729.0	56595.8	-0.0	-0.00
25YR-72HR	46.75	101169.6	44053.3	57116.3	-0.0	-0.00
25YR-72HR	47.00	102015.3	44377.8	57637.4	-0.0	-0.00
25YR-72HR	47.25	102861.7	44702.3	58159.3	-0.0	-0.00
25YR-72HR	47.50	103708.8	45026.9	58682.0	-0.0	-0.00
25YR-72HR	47.75	104556.8	45351.3	59205.5	0.0	0.00
25YR-72HR	48.00	105405.5	45675.9	59729.6	0.0	0.00
25YR-72HR	48.25	106281.2	46010.5	60270.8	0.0	0.00
25YR-72HR	48.50	107202.0	46363.7	60838.3	0.0	0.00
25YR-72HR	48.75	108140.2	46724.6	61415.7	0.0	0.00
25YR-72HR	49.00	109085.6	47088.4	61997.1	0.0	0.00
25YR-72HR	49.25	110038.3	47449.0	62589.3	0.0	0.00
25YR-72HR	49.50	111001.2	47812.3	63188.8	0.0	0.00
25YR-72HR	49.75	111968.5	48177.4	63791.1	0.0	0.00
25YR-72HR	50.00	112938.0	48543.1	64394.9	0.0	0.00
25YR-72HR	50.25	113959.9	48923.0	65036.8	0.0	0.00
25YR-72HR	50.50	115063.7	49336.2	65727.5	0.0	0.00
25YR-72HR	50.75	116198.8	49763.1	66435.7	0.0	0.00
25YR-72HR	51.00	117346.3	50195.4	67151.0	0.0	0.00
25YR-72HR	51.25	118527.1	50642.6	67884.5	0.0	0.00
25YR-72HR	51.50	119757.4	51110.6	68646.8	0.0	0.00
25YR-72HR	51.75	121007.0	51586.8	69420.2	0.0	0.00
25YR-72HR	52.00	122264.8	52066.3	70198.4	0.0	0.00
25YR-72HR	52.25	123634.7	52570.8	71063.9	0.0	0.00
25YR-72HR	52.50	125182.9	53146.1	72036.8	0.0	0.00
25YR-72HR	52.75	126798.9	53751.2	73047.6	0.0	0.00
25YR-72HR	53.00	128441.6	54368.0	74073.6	0.0	0.00
25YR-72HR	53.25	130199.7	55016.7	75183.0	0.0	0.00
25YR-72HR	53.50	132138.1	55737.4	76400.7	0.0	0.00
25YR-72HR	53.75	134145.5	56488.1	77657.4	0.0	0.00
25YR-72HR	54.00	136180.7	57250.5	78930.1	0.0	0.00
25YR-72HR	54.25	138335.7	58040.4	80295.3	0.0	0.00
25YR-72HR	54.50	140679.3	58956.7	81722.6	0.0	0.00
25YR-72HR	54.75	143095.6	60056.3	83039.3	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	55.00	145541.5	61345.0	84196.5	0.0	0.00
25YR-72HR	55.25	148108.1	62840.8	85267.3	0.0	0.00
25YR-72HR	55.50	150865.5	64576.1	86289.4	0.0	0.00
25YR-72HR	55.75	153696.9	66489.3	87207.6	0.0	0.00
25YR-72HR	56.00	156558.9	68533.8	88025.0	0.0	0.00
25YR-72HR	56.25	159563.3	70706.8	88856.4	0.0	0.00
25YR-72HR	56.50	162801.2	73071.2	89730.1	0.0	0.00
25YR-72HR	56.75	166127.9	75566.9	90561.0	0.0	0.00
25YR-72HR	57.00	169491.4	78153.2	91338.1	0.0	0.00
25YR-72HR	57.25	173036.4	80850.9	92185.5	0.0	0.00
25YR-72HR	57.50	176882.7	83752.3	93130.3	0.0	0.00
25YR-72HR	57.75	180941.6	86809.6	94131.9	0.0	0.00
25YR-72HR	58.00	185210.9	90048.6	95162.3	0.0	0.00
25YR-72HR	58.25	189682.5	93456.8	96225.7	0.0	0.00
25YR-72HR	58.50	194409.4	97071.7	97337.7	0.0	0.00
25YR-72HR	58.75	199681.4	100949.4	98732.1	0.0	0.00
25YR-72HR	59.00	205742.5	105339.7	100402.9	0.0	0.00
25YR-72HR	59.25	213114.3	110390.3	102724.0	-0.0	-0.00
25YR-72HR	59.50	222259.3	116633.7	105625.6	0.0	0.00
25YR-72HR	59.75	248541.5	128686.2	119855.3	0.0	0.00
25YR-72HR	60.00	303196.8	159200.1	143996.7	0.0	0.00
25YR-72HR	60.25	352686.1	200076.0	152610.0	-0.0	-0.00
25YR-72HR	60.50	380442.6	233093.6	147349.0	0.0	0.00
25YR-72HR	60.75	397475.8	257582.3	139893.5	-0.0	-0.00
25YR-72HR	61.00	407649.2	274426.5	133222.7	-0.0	-0.00
25YR-72HR	61.25	415487.3	286860.1	128627.1	0.0	0.00
25YR-72HR	61.50	421842.8	296459.0	125383.8	0.0	0.00
25YR-72HR	61.75	427491.6	304371.7	123119.8	-0.0	-0.00
25YR-72HR	62.00	432546.1	311082.1	121464.0	-0.0	-0.00
25YR-72HR	62.25	437044.9	316938.1	120106.8	-0.0	-0.00
25YR-72HR	62.50	440867.1	321955.8	118911.3	0.0	0.00
25YR-72HR	62.75	444357.4	326399.3	117958.2	0.0	0.00
25YR-72HR	63.00	447586.3	330384.3	117201.9	-0.0	-0.00
25YR-72HR	63.25	450736.1	334079.4	116656.7	0.0	0.00
25YR-72HR	63.50	453855.6	337579.9	116275.8	0.0	0.00
25YR-72HR	63.75	456972.6	340956.5	116016.1	0.0	0.00
25YR-72HR	64.00	460087.4	344247.3	115840.1	0.0	0.00
25YR-72HR	64.25	462849.2	347371.6	115477.6	0.0	0.00
25YR-72HR	64.50	465025.0	350108.3	114916.7	0.0	0.00
25YR-72HR	64.75	466981.2	352566.2	114415.0	-0.0	-0.00
25YR-72HR	65.00	468855.9	354835.5	114020.4	-0.0	-0.00
25YR-72HR	65.25	470721.4	356983.2	113738.3	-0.0	-0.00
25YR-72HR	65.50	472594.8	359054.5	113540.3	-0.0	-0.00
25YR-72HR	65.75	474470.7	361070.6	113400.0	-0.0	-0.00
25YR-72HR	66.00	476346.6	363046.2	113300.4	-0.0	-0.00
25YR-72HR	66.25	478223.9	364994.3	113229.6	0.0	0.00
25YR-72HR	66.50	480100.5	366920.8	113179.7	-0.0	-0.00
25YR-72HR	66.75	481977.7	368832.6	113145.1	-0.0	-0.00
25YR-72HR	67.00	483854.6	370732.9	113121.6	-0.0	-0.00
25YR-72HR	67.25	485732.1	372625.8	113106.4	-0.0	-0.00
25YR-72HR	67.50	487609.1	374512.0	113097.1	-0.0	-0.00
25YR-72HR	67.75	489486.7	376394.4	113092.3	-0.0	-0.00
25YR-72HR	68.00	491365.2	378274.7	113090.5	-0.0	-0.00
25YR-72HR	68.25	493056.8	380094.2	112962.6	-0.0	-0.00
25YR-72HR	68.50	494456.2	381744.9	112711.2	-0.0	-0.00
25YR-72HR	68.75	495746.2	383275.2	112471.0	-0.0	-0.00
25YR-72HR	69.00	496994.5	384721.0	112273.5	-0.0	-0.00
25YR-72HR	69.25	498238.0	386113.1	112124.9	0.0	0.00
25YR-72HR	69.50	499481.3	387466.6	112014.7	0.0	0.00
25YR-72HR	69.75	500724.0	388790.8	111933.2	0.0	0.00
25YR-72HR	70.00	501967.2	390094.0	111873.2	0.0	0.00
25YR-72HR	70.25	503212.0	391384.2	111827.8	0.0	0.00
25YR-72HR	70.50	504461.1	392665.5	111795.6	0.0	0.00
25YR-72HR	70.75	505710.8	393938.3	111772.5	0.0	0.00
25YR-72HR	71.00	506961.8	395205.6	111756.1	0.0	0.00
25YR-72HR	71.25	508212.0	396467.4	111744.6	0.0	0.00
25YR-72HR	71.50	509463.1	397726.5	111736.6	0.0	0.00
25YR-72HR	71.75	510713.0	398981.5	111731.5	0.0	0.00
25YR-72HR	72.00	511964.3	400236.0	111728.3	0.0	0.00
25YR-72HR	72.25	512852.9	401400.0	111452.9	0.0	0.00
25YR-72HR	72.50	513162.0	402249.4	110912.7	0.0	0.00
25YR-72HR	72.75	513255.3	402882.3	110373.0	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	73.00	513267.2	403368.7	109898.6	0.0	0.00
25YR-72HR	73.25	513267.2	403760.2	109507.0	0.0	0.00
25YR-72HR	73.50	513267.2	404084.0	109183.2	0.0	0.00
25YR-72HR	73.75	513267.2	404356.1	108911.2	0.0	0.00
25YR-72HR	74.00	513267.2	404587.4	108679.8	0.0	0.00
25YR-72HR	74.25	513267.2	404786.3	108480.9	0.0	0.00
25YR-72HR	74.50	513267.2	404959.1	108308.1	0.0	0.00
25YR-72HR	74.75	513267.2	405110.9	108156.3	0.0	0.00
25YR-72HR	75.00	513267.2	405245.2	108022.0	0.0	0.00
25YR-72HR	75.25	513267.2	405365.2	107902.1	0.0	0.00
25YR-72HR	75.50	513267.2	405473.0	107794.2	0.0	0.00
25YR-72HR	75.75	513267.2	405570.7	107696.5	0.0	0.00
25YR-72HR	76.00	513267.2	405659.8	107607.4	0.0	0.00
25YR-72HR	76.25	513267.2	405741.4	107525.9	0.0	0.00
25YR-72HR	76.50	513267.2	405816.7	107450.5	0.0	0.00
25YR-72HR	76.75	513267.2	405886.6	107380.7	0.0	0.00
25YR-72HR	77.00	513267.2	405951.6	107315.6	0.0	0.00
25YR-72HR	77.25	513267.2	406012.5	107254.7	0.0	0.00
25YR-72HR	77.50	513267.2	406069.8	107197.4	0.0	0.00
25YR-72HR	77.75	513267.2	406123.7	107143.5	0.0	0.00
25YR-72HR	78.00	513267.2	406174.9	107092.3	0.0	0.00
25YR-72HR	78.25	513267.2	406223.6	107043.7	0.0	0.00
25YR-72HR	78.50	513267.2	406269.9	106997.4	0.0	0.00
25YR-72HR	78.75	513267.2	406314.3	106953.0	0.0	0.00
25YR-72HR	79.00	513267.2	406356.9	106910.4	0.0	0.00
25YR-72HR	79.25	513267.2	406397.9	106869.4	0.0	0.00
25YR-72HR	79.50	513267.2	406437.4	106829.9	0.0	0.00
25YR-72HR	79.75	513267.2	406475.5	106791.7	0.0	0.00
25YR-72HR	80.00	513267.2	406512.4	106754.8	0.0	0.00
25YR-72HR	80.25	513267.2	406548.3	106718.9	0.0	0.00
25YR-72HR	80.50	513267.2	406583.1	106684.1	0.0	0.00
25YR-72HR	80.75	513267.2	406617.0	106650.2	0.0	0.00
25YR-72HR	81.00	513267.2	406650.1	106617.1	0.0	0.00
25YR-72HR	81.25	513267.2	406682.5	106584.8	0.0	0.00
25YR-72HR	81.50	513267.2	406714.1	106553.2	0.0	0.00
25YR-72HR	81.75	513267.2	406745.0	106522.2	0.0	0.00
25YR-72HR	82.00	513267.2	406775.4	106491.8	0.0	0.00
25YR-72HR	82.25	513267.2	406805.2	106462.0	0.0	0.00
25YR-72HR	82.50	513267.2	406834.5	106432.7	0.0	0.00
25YR-72HR	82.75	513267.2	406863.3	106404.0	0.0	0.00
25YR-72HR	83.00	513267.2	406891.6	106375.6	0.0	0.00
25YR-72HR	83.25	513267.2	406919.6	106347.7	0.0	0.00
25YR-72HR	83.50	513267.2	406947.1	106320.1	0.0	0.00
25YR-72HR	83.75	513267.2	406974.2	106293.0	0.0	0.00
25YR-72HR	84.00	513267.2	407001.1	106266.1	0.0	0.00
25YR-72HR	84.25	513267.2	407027.6	106239.7	0.0	0.00
25YR-72HR	84.50	513267.2	407053.7	106213.5	0.0	0.00
25YR-72HR	84.75	513267.2	407079.6	106187.6	0.0	0.00
25YR-72HR	85.00	513267.2	407105.3	106162.0	0.0	0.00
25YR-72HR	85.25	513267.2	407130.6	106136.6	0.0	0.00
25YR-72HR	85.50	513267.2	407155.7	106111.5	0.0	0.00
25YR-72HR	85.75	513267.2	407180.6	106086.6	0.0	0.00
25YR-72HR	86.00	513267.2	407205.3	106061.9	0.0	0.00
25YR-72HR	86.25	513267.2	407229.7	106037.5	0.0	0.00
25YR-72HR	86.50	513267.2	407254.0	106013.2	0.0	0.00
25YR-72HR	86.75	513267.2	407278.0	105989.2	0.0	0.00
25YR-72HR	87.00	513267.2	407302.0	105965.2	0.0	0.00
25YR-72HR	87.25	513267.2	407325.6	105941.6	0.0	0.00
25YR-72HR	87.50	513267.2	407349.1	105918.1	0.0	0.00
25YR-72HR	87.75	513267.2	407372.5	105894.7	0.0	0.00
25YR-72HR	88.00	513267.2	407395.9	105871.3	0.0	0.00
25YR-72HR	88.25	513267.2	407419.1	105848.1	0.0	0.00
25YR-72HR	88.50	513267.2	407442.1	105825.1	0.0	0.00
25YR-72HR	88.75	513267.2	407465.0	105802.2	0.0	0.00
25YR-72HR	89.00	513267.2	407487.7	105779.5	0.0	0.00
25YR-72HR	89.25	513267.2	407510.2	105757.0	0.0	0.00
25YR-72HR	89.50	513267.2	407532.6	105734.6	0.0	0.00
25YR-72HR	89.75	513267.2	407554.9	105712.3	0.0	0.00
25YR-72HR	90.00	513267.2	407576.7	105690.5	0.0	0.00
25YR-72HR	90.25	513267.2	407598.5	105668.7	0.0	0.00
25YR-72HR	90.50	513267.2	407620.3	105646.9	0.0	0.00
25YR-72HR	90.75	513267.2	407642.0	105625.2	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	91.00	513267.2	407663.5	105603.7	0.0	0.00
25YR-72HR	91.25	513267.2	407684.8	105582.4	0.0	0.00
25YR-72HR	91.50	513267.2	407706.1	105561.1	0.0	0.00
25YR-72HR	91.75	513267.2	407727.0	105540.2	0.0	0.00
25YR-72HR	92.00	513267.2	407748.0	105519.2	0.0	0.00
25YR-72HR	92.25	513267.2	407768.7	105498.5	0.0	0.00
25YR-72HR	92.50	513267.2	407789.3	105478.0	0.0	0.00
25YR-72HR	92.75	513267.2	407809.7	105457.5	0.0	0.00
25YR-72HR	93.00	513267.2	407830.0	105437.2	0.0	0.00
25YR-72HR	93.25	513267.2	407850.1	105417.1	0.0	0.00
25YR-72HR	93.50	513267.2	407870.0	105397.2	0.0	0.00
25YR-72HR	93.75	513267.2	407889.8	105377.4	0.0	0.00
25YR-72HR	94.00	513267.2	407909.3	105357.9	0.0	0.00
25YR-72HR	94.25	513267.2	407928.6	105338.6	0.0	0.00
25YR-72HR	94.50	513267.2	407947.7	105319.5	0.0	0.00
25YR-72HR	94.75	513267.2	407966.5	105300.7	0.0	0.00
25YR-72HR	95.00	513267.2	407985.0	105282.3	0.0	0.00
25YR-72HR	95.25	513267.2	408002.9	105264.3	0.0	0.00
25YR-72HR	95.50	513267.2	408020.2	105247.0	0.0	0.00
25YR-72HR	95.75	513267.2	408036.2	105231.0	0.0	0.00
25YR-72HR	96.00	513267.2	408050.1	105217.1	0.0	0.00
25YR-72HR	96.00	513267.2	408050.1	105217.1	0.0	0.00

Basin 16

T 53S / R 40E SECTION 10 | T 53S / R 40E SECTION 03

RESTAURANT DEPOT

WALMART SUPERCENTER

0 50 200 Feet

R/W LINE

BASIN 13
25.56 AC

BASIN 15
11.32 AC

USA TRUCK SERVICE PLAZA

R/W LINE

BX13-58
7.01 AC

LA R/W LINE

LA R/W LINE

BX15-18
0.24 AC

S15-201D

S15-201E

S15-201C

F-3039

18" PIPE

S15-201B

B15-1A
1.91 AC

OUTFALL TO THE MIAMI CANAL

MIAMI CANAL (C6)

S15-201A

S15-22

S15-202B

S15FW-01

F-3037

S15FW-02

F-3026

B15-22
0.16 AC

B15-11
0.09 AC

S15-201

S15-201F

24" FD

B15-13A
0.21 AC

B15FW-1
0.07 AC

B15FW-2
0.03 AC

BX15-15A
0.11 AC

18" PIPE

NW 77TH AVE.

BEGIN BRIDGE #870975
481+20.19

480

485

490

495

500

SR 826 SB

SR 826 NB

18" PIPE

B15-11A
0.48 AC

S15-202A

N 1° 48' 01" W

S15-201G

S15-202

B15-203
0.74 AC

B15-16
0.66 AC

END BRIDGE #870975
485+91.63

B15-7
0.46 AC

B15-201
0.34 AC

B16FE-6
0.23 AC

B15-202A
0.36 AC

S15-203

B16FE-5
0.37 AC

W 20TH AVE.

24" FD

R/W LINE

24" FD

R/W LINE

T 53S / R 40E SECTION 11 MATCHLINE 476+40.00

NW SOUTH RIVER DR.

US-27/W OKEECHOBEE RD. EB

US-27/W OKEECHOBEE RD. WB

BX16-3
3.63 AC

B16FE-4
0.37 AC

B16FE-7
0.20 AC

W 39TH ST.

W 41ST ST.

LA R/W LINE

R/W LINE

B16FE-2
0.29 AC

LA R/W LINE

R/W LINE

B16FE-3
0.24 AC

24" FD

S16FE-06

BEST BUY

S16FE-07

S16FE-7A

R/W LINE

24" FD

S16FE-05

24" FD

24" FD

S16FE-02

24" FD

S16FE-04

S16FE-03

R/W LINE

WESTLAND PROMENADE

BASIN 16
13.66 AC (W 20TH AVENUE)

T 53S / R 40E SECTION 11 | T 53S / R 40E SECTION 02

T 53S / R 40E SECTION 11 MATCHLINE 504+40.00

T 53S / R 40E SECTION 02

LEGEND

DRAINAGE DIVIDE

FLOW ARROW

SXX-XXX PROPOSED STRUCTURE

XX EXISTING STRUCTURE

DO NOT USE THE INFORMATION ON THIS SHEET FOR CONSTRUCTION PURPOSES. THIS SHEET IS IN THE PLANS FOR DOCUMENTATION AND TO ASSIST CONSTRUCTION PERSONNEL WITH DRAINAGE CONCERNS.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01, 441830-1-52-01, 441831-1-52-01

DRAINAGE MAP

SHEET NO.

SUMMARY OF MAX STAGE - PROPOSED CONDITIONS - BASIN 16

NODE	STORM EVENT							
	100YR-1HR	100YR-24HR	100YR-8HR	10YR-1HR	10YR-24HR	10YR-8HR	25YR-72HR	WARNING STAGE (FT)
EX16-2	1.69	2.11	2.94	1.58	1.71	1.86	3.55	7
POND16-1	3.11	3.31	3.52	2.65	3.11	3.16	4.1	7
S16-1	22.73	21.68	22.18	22.35	21.56	21.94	22.52	24.79
S16-10	2.68	2.12	2.93	2.15	1.85	2.04	3.67	7.06
S16-11	2.87	2.12	2.92	2.26	1.88	2.13	3.7	5.83
S16-11A	2.87	2.12	2.9	2.26	1.9	2.15	3.69	6.24
S16-12	2.88	2.11	2.87	2.27	1.93	2.18	3.66	4.94
S16-13	2.57	2.09	2.63	2.16	2	2.18	3.09	5.23
S16-14	2.73	2.1	2.73	2.22	1.99	2.18	3.33	4.95
S16-14A	2.78	2.1	2.77	2.23	1.97	2.18	3.43	6.54
S16-14B	2.78	2.1	2.77	2.24	1.97	2.18	3.44	6.28
S16-15	2.35	2.09	2.51	2.02	2.07	2.18	2.86	5.2
S16-16	2.5	2.1	2.56	2.08	2.07	2.2	2.97	4.89
S16-17	2.33	2.1	2.5	2	2.08	2.18	2.84	5.39
S16-18	2.39	2.1	2.52	2.02	2.08	2.19	2.89	5.02
S16-1A	25.2	24.51	24.86	24.97	24.43	24.7	25.08	27.52
S16-5	8.41	7.53	7.96	8.1	7.43	7.76	8.24	16.24
S16-7	8.56	7.67	8.08	8.22	7.59	7.88	8.37	13.56
S16-8	8.58	7.7	8.1	8.24	7.62	7.9	8.39	10.75
S16-9	2.5	2.11	2.93	2.05	1.83	2	3.64	8.19

Curve Number Calculations

CN CALCULATIONS FOR PROPOSED CONDITIONS - BASIN B-16

SUB-BASIN	TOTAL DRAINAGE AREA (AC)	PERVIOUS DRAINAGE AREA (AC)	PERVIOUS AREA CURVE NUMBER	IMP. DRAINAGE AREA (AC)	IMP. AREA CURVE NUMBER	COMPOSITE CURVE NUMBER
B16-1	0.39	0	61	0.39	96	96
B16-1A	0.53	0	61	0.53	96	96
B16-3	0.37	0	61	0.37	96	96
B16-5	0.38	0	61	0.38	96	96
B16-7	0.17	0	61	0.17	96	96
B16-8	0.2	0	61	0.2	96	96
BX16-2	4.15	3.59	61	0.56	96	66
BX16-3	3.63	2.44	61	1.19	96	72
BX16-5	0.33	0	61	0.33	96	96
BX16-13	0.35	0	61	0.35	96	96
TOTAL SUB-BASIN B-16A	10.5	6.03		4.47		
B16-11	0.82	0	61	0.82	96	96
B16-11A	0.03	0	61	0.03	96	96
B16-12	0.64	0.05	61	0.59	96	93
B16-14	0.55	0.05	61	0.5	96	93
B16-14B	0.07	0	61	0.07	96	96
B16-16	0.63	0.05	61	0.58	96	93
B16-18	0.42	0.1	61	0.32	96	88
TOTAL SUB-BASIN B-16B	3.16	0.25		2.91		
TOTAL BASIN 16	13.66	6.28		7.38		

Average Hydraulic Conductivity

Average Hydraulic Conductivity

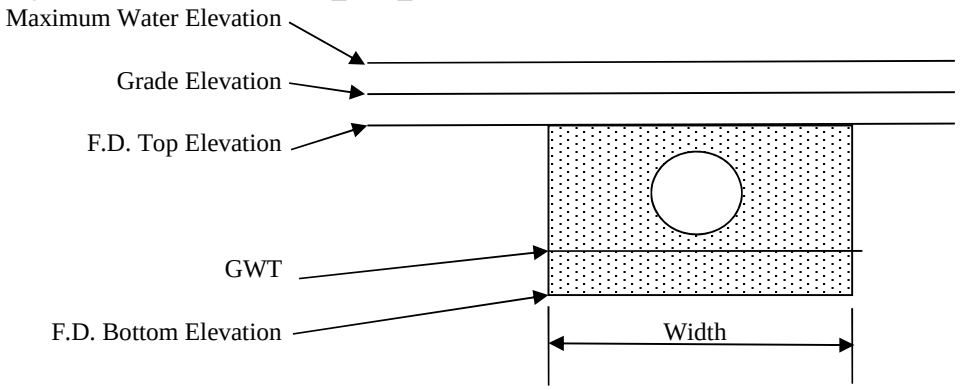
Basin B-16		
Percolation Test	P-27	P-28
Average Flow to 10 ft. depth (gpm)	0.10	49.82
Depth to Water Table (ft)	1.90	3.40
Head Maintained (ft)	0.90	2.40
Borehole Diameter (ft)	0.604	0.604
Borehole Depth (ft)	10.00	10.00
Du (ft)	0.90	2.40
Average Flow (cfs)	0.0002	0.1110
Ds (ft)	8.10	6.60
Hydraulic Conductivity K (cfs/ft2-ft head)	1.48E-05	3.06E-03
Average Hydraulic Conductivity K	**1.54E-03**	

Rating Curve Calculations

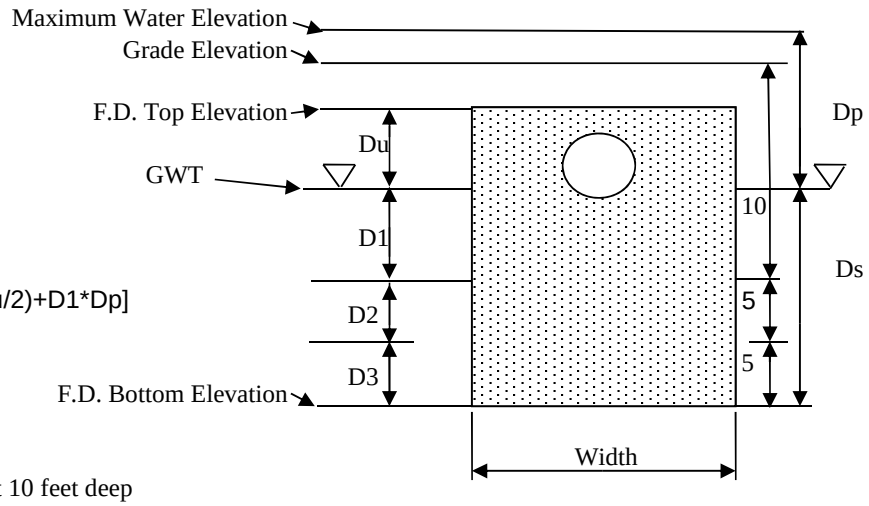
Made by: _____ _____
Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT_16



Maximum Water Elevation =	**5.45**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**4.45**	ft.NAVD	
F.D.Top Elevation =	**4.04**	ft.NAVD	
Ground Water Table =	**1.45**	ft.NAVD	
F.D. Bottom Elevation =	**-11.54**	ft.NAVD	
Width =	**4.50**	feet.	
Pipe Diameter =	**24**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**1.54E-03**	cfs/ft^2-ft head	(Ave. P-27,P-28)
Hydraulic Conductivity K15 =	**1.54E-03**	cfs/ft^2-ft head	(Ave. P-27,P-28)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____

Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT_16

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs/ft)	(cfs/ft)
1.45	0.000	0.000
2.20	0.026	0.000
3.90	0.107	0.076
5.45	0.182	0.151

Rating Curve (Q)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs)	(cfs)
1.45	0.00	0.00
2.20	0.03	0.00
3.90	0.11	0.08
5.45	0.18	0.15

Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

Rating Curve Adjusted (Q)

Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.45	1.45	0.00
1.45	2.20	0.03
1.45	3.90	0.10
1.45	5.45	0.10
2.20	2.20	0.00
2.20	3.90	0.08
2.20	5.45	0.10

Treatment Volume Calcs

COMPARISON OF PRE V/S POST IMP. AREA & CN CALCS - BASIN 16

PRE-DEVELOPMENT				POST-DEVELOPMENT CONDITIONS						
SUB-BASIN	TOTAL DRAINAGE AREA (AC)	IMPERVIOUS DRAINAGE AREA (AC)	COMPOSITE CURVE NUMBER	SUB-BASIN	TOTAL DRAINAGE AREA (AC)	PERVIOUS DRAINAGE AREA (AC)	PERVIOUS AREA CURVE NUMBER	IMPERVIOUS DRAINAGE AREA (AC)	IMPERVIOUS AREA CURVE NUMBER	COMPOSITE CURVE NUMBER
BX16-3	3.63	1.06	71	BX16-3	3.63	2.44	61	1.19	96	72

Total Additional Imp. Area for Basin 16= 0.13 ac

Note: only impacted sub-basins dues to proposed improvement are inclded in this table.

STAGE-STORAGE CALCULATIONS

BASIN B-16A			
STAGE Ft., NAVD	POND 16A (Ac)	VOLUME (Ac-Ft)	CUMULATIVE VOLUME (Ac-Ft)
1.95	1.77	0.00	0.00
2.82	1.84	1.57	1.57
5.00	2.00	4.19	5.76
6.00	2.08	2.04	7.80

2.83 ft

1.66 ac-ft

Existing

Weir Elevation=	**2.82 Ft.**
Treatment Provided=	**1.57 Ac-Ft**

Required Treatment Volume Calcs

Additional Imp. Area = 0.13 ac

Required Treatment Vol for additional imp. area
= 2.5" of Additional Imp. Area = 2.5 X 0.13 /12 = 0.03 ac-ft

Existing Conditions Provided Treatment Volume = 1.57 ac-ft

For proposed conditions requires treatment volume = 1.57 + 0.03 = 1.60 ac-ft

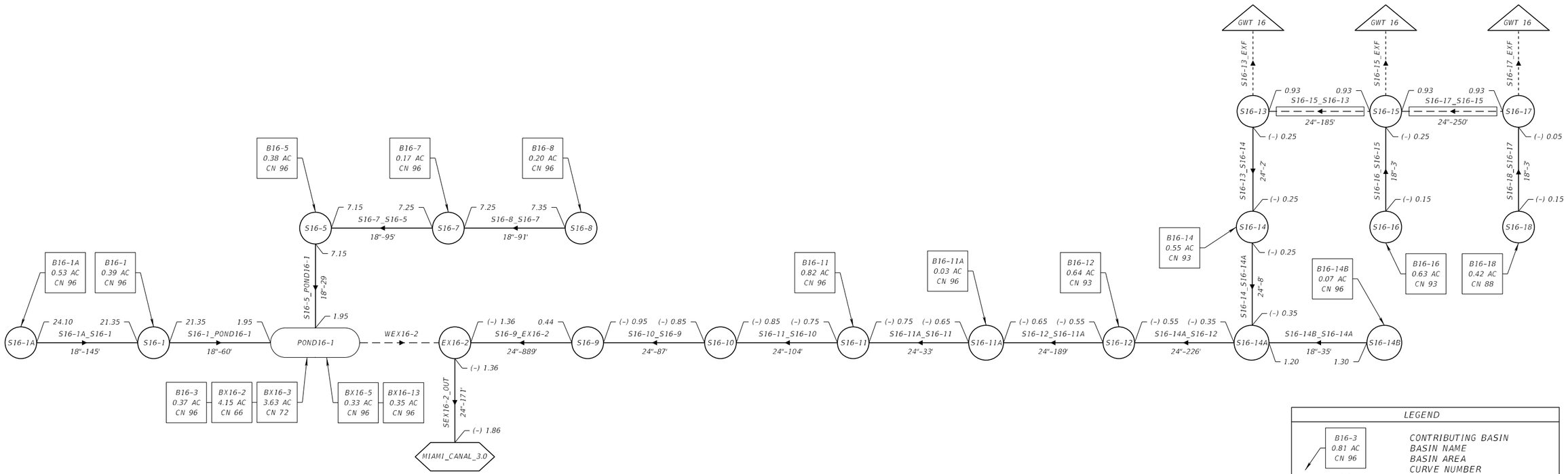
Proposed Weir El to provide 1.60 ac-ft treatment Volume = 2.83 ft

Proposed

Proposed Weir El = 2.83 ft
Treatment Provided = 1.66 ac-ft

Nodal Diagram

POST-DEVELOPMENT CONDITIONS



WEIR INPUT SUMMARY							
WEIR	VERT. TYPE	HORIZ.	CIRC.	RECT.	INV.	SPAN	RISE
WEX16-2	-	X	-	X	2.82'	37"	24"

LEGEND

- B16-3 / 0.81 AC / CN 96 — CONTRIBUTING BASIN, BASIN NAME, BASIN AREA, CURVE NUMBER
- S16-1 — NODE NAME
- OFFSITE_LAKE — BOUNDARY NODE WITH CONSTANT TAILWATER
- GWT 1-5 — BOUNDARY NODE WITH VARIABLE TAILWATER
- S16-14_S16-15 / 18"-37' / (-) 0.85 / (-) 1.95 — PIPE LINK WITH (QUANTITY)SIZE-LENGTH INVERT ELEVATIONS
- EX2-1_WEIR — WEIR LINK
- S16-12_EXF — RATING CURVE LINK
- S16-15_S16-17 / 24"x38"-126' / 0.64 / 0.64 — EXFILTRATION TRENCH LINK WITH LENGTH AND INVERT ELEVATIONS

PROPOSED DESIGN

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01 441830-1-52-01 441831-1-52-01

NODAL DIAGRAM BASIN 16

SHEET NO.

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
EX16-2	Basin 16	100YR-1HR	0.69	1.69	7.00	-0.0009	166	0.69	6.85	0.69	6.85
GWT_16	Basin 16	100YR-1HR	0.00	1.45	99.00	0.0000	0	0.69	15.30	0.00	0.00
MIAMI_CANAL_3.0	Basin 16	100YR-1HR	0.00	1.45	99.00	0.0000	9	0.69	6.85	0.00	0.00
POND16-1	Basin 16	100YR-1HR	1.33	3.11	7.00	0.0023	81105	0.68	47.81	1.33	4.73
S16-1	Basin 16	100YR-1HR	0.66	22.73	24.79	0.0016	242	0.65	6.92	0.66	6.91
S16-10	Basin 16	100YR-1HR	0.68	2.68	7.06	-0.0028	123	0.67	6.91	0.67	6.86
S16-11	Basin 16	100YR-1HR	0.68	2.87	5.83	0.0045	120	0.65	8.09	0.67	6.91
S16-11A	Basin 16	100YR-1HR	0.68	2.87	6.24	0.0054	124	0.95	1.68	0.43	2.03
S16-12	Basin 16	100YR-1HR	0.68	2.88	4.94	0.0039	134	0.37	1.82	0.95	1.56
S16-13	Basin 16	100YR-1HR	0.68	2.57	5.23	0.0015	262	0.09	0.06	0.37	1.75
S16-14	Basin 16	100YR-1HR	0.68	2.73	4.95	0.0048	114	0.37	2.25	0.35	1.41
S16-14A	Basin 16	100YR-1HR	0.68	2.78	6.54	0.0034	127	0.36	1.53	0.37	0.28
S16-14B	Basin 16	100YR-1HR	0.68	2.78	6.28	0.0017	117	0.65	0.53	0.79	0.58
S16-15	Basin 16	100YR-1HR	0.69	2.35	5.20	0.0011	501	0.63	2.95	0.70	2.89
S16-16	Basin 16	100YR-1HR	0.68	2.50	4.89	0.0013	113	0.65	4.48	0.65	4.45
S16-17	Basin 16	100YR-1HR	0.69	2.33	5.39	0.0011	341	0.67	2.66	0.70	2.65
S16-18	Basin 16	100YR-1HR	0.69	2.39	5.02	0.0012	113	0.67	2.68	0.67	2.66
S16-1A	Basin 16	100YR-1HR	0.65	25.20	27.52	0.0011	211	0.65	3.99	0.65	3.98
S16-5	Basin 16	100YR-1HR	0.67	8.41	16.24	0.0014	181	0.66	5.60	0.67	5.59
S16-7	Basin 16	100YR-1HR	0.67	8.56	13.56	0.0014	209	0.66	2.76	0.68	2.76
S16-8	Basin 16	100YR-1HR	0.67	8.58	10.75	0.0014	164	0.65	1.50	0.67	1.49
S16-9	Basin 16	100YR-1HR	0.69	2.50	8.19	0.0012	162	0.67	6.86	0.69	6.85
EX16-2	Basin 16	100YR-24HR	12.11	2.11	7.00	0.0001	319	12.10	11.24	12.11	11.23
GWT_16	Basin 16	100YR-24HR	24.00	2.20	99.00	0.0001	0	12.06	3.45	0.00	0.00
MIAMI_CANAL_3.0	Basin 16	100YR-24HR	0.00	1.45	99.00	0.0000	9	12.11	11.23	0.00	0.00
POND16-1	Basin 16	100YR-24HR	12.18	3.31	7.00	0.0009	81749	12.00	12.23	12.18	10.71
S16-1	Basin 16	100YR-24HR	11.98	21.68	24.79	-0.0018	229	11.98	1.24	11.98	1.24
S16-10	Basin 16	100YR-24HR	12.08	2.12	7.06	0.0028	123	24.00	2.99	24.00	2.99
S16-11	Basin 16	100YR-24HR	12.11	2.12	5.83	-0.0043	120	24.00	2.99	24.00	2.99
S16-11A	Basin 16	100YR-24HR	12.09	2.12	6.24	0.0031	124	24.01	2.89	24.01	2.88
S16-12	Basin 16	100YR-24HR	12.08	2.11	4.94	-0.0023	134	24.00	2.85	24.01	2.89
S16-13	Basin 16	100YR-24HR	12.09	2.09	5.23	0.0020	296	24.41	1.92	27.77	2.97
S16-14	Basin 16	100YR-24HR	12.09	2.10	4.95	0.0077	114	27.77	3.73	24.00	2.98
S16-14A	Basin 16	100YR-24HR	12.09	2.10	6.54	-0.0041	151	21.23	3.48	24.34	2.78
S16-14B	Basin 16	100YR-24HR	12.08	2.10	6.28	0.0018	139	11.98	0.09	15.94	0.57
S16-15	Basin 16	100YR-24HR	21.03	2.09	5.20	-0.0010	543	21.40	1.48	21.00	0.81
S16-16	Basin 16	100YR-24HR	21.05	2.10	4.89	-0.0042	113	12.00	0.84	12.00	0.84
S16-17	Basin 16	100YR-24HR	21.05	2.10	5.39	-0.0011	360	26.52	0.72	12.02	0.54
S16-18	Basin 16	100YR-24HR	21.03	2.10	5.02	-0.0036	113	12.00	0.55	26.52	0.72
S16-1A	Basin 16	100YR-24HR	12.00	24.51	27.52	-0.0003	205	11.98	0.72	11.96	0.71
S16-5	Basin 16	100YR-24HR	12.00	7.53	16.24	-0.0006	193	12.00	1.01	11.96	1.01
S16-7	Basin 16	100YR-24HR	12.00	7.67	13.56	-0.0002	237	12.00	0.50	12.00	0.50
S16-8	Basin 16	100YR-24HR	12.00	7.70	10.75	-0.0002	172	11.98	0.27	12.00	0.27
S16-9	Basin 16	100YR-24HR	12.09	2.11	8.19	-0.0003	621	24.00	2.99	24.01	2.99
EX16-2	Basin 16	100YR-8HR	4.33	2.94	7.00	0.0011	166	4.19	17.11	4.33	16.90
GWT_16	Basin 16	100YR-8HR	8.00	2.20	99.00	0.0002	0	4.08	9.85	0.00	0.00
MIAMI_CANAL_3.0	Basin 16	100YR-8HR	0.00	1.45	99.00	0.0000	9	4.33	16.90	0.00	0.00
POND16-1	Basin 16	100YR-8HR	4.43	3.52	7.00	0.0008	82437	4.00	34.84	4.48	18.20
S16-1	Basin 16	100YR-8HR	4.00	22.18	24.79	-0.0016	253	4.00	3.72	4.00	3.72
S16-10	Basin 16	100YR-8HR	4.26	2.93	7.06	-0.0060	123	3.63	5.08	3.62	5.06
S16-11	Basin 16	100YR-8HR	4.25	2.92	5.83	-0.0046	120	3.87	5.24	3.63	5.08

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S16-11A	Basin 16	100YR-8HR	4.23	2.90	6.24	0.0050	124	8.01	2.64	8.01	2.62
S16-12	Basin 16	100YR-8HR	4.14	2.87	4.94	0.0023	134	3.61	3.20	8.01	2.63
S16-13	Basin 16	100YR-8HR	4.11	2.63	5.23	-0.0021	249	8.41	1.69	10.29	2.97
S16-14	Basin 16	100YR-8HR	4.11	2.73	4.95	0.0077	114	10.29	3.51	7.72	2.95
S16-14A	Basin 16	100YR-8HR	4.12	2.77	6.54	-0.0059	127	7.72	3.51	8.42	2.43
S16-14B	Basin 16	100YR-8HR	4.12	2.77	6.28	-0.0022	118	4.00	0.28	4.03	1.16
S16-15	Basin 16	100YR-8HR	4.09	2.51	5.20	0.0010	462	3.67	1.97	3.65	1.90
S16-16	Basin 16	100YR-8HR	4.07	2.56	4.89	-0.0042	113	4.00	2.52	4.00	2.49
S16-17	Basin 16	100YR-8HR	4.08	2.50	5.39	-0.0012	318	4.00	1.61	4.03	1.55
S16-18	Basin 16	100YR-8HR	4.08	2.52	5.02	-0.0036	113	4.00	1.63	4.00	1.61
S16-1A	Basin 16	100YR-8HR	4.00	24.86	27.52	-0.0006	218	4.00	2.14	3.99	2.14
S16-5	Basin 16	100YR-8HR	4.00	7.96	16.24	-0.0005	204	4.00	3.03	4.00	3.03
S16-7	Basin 16	100YR-8HR	4.00	8.08	13.56	-0.0004	252	4.00	1.50	4.01	1.49
S16-8	Basin 16	100YR-8HR	4.00	8.10	10.75	-0.0004	181	4.00	0.81	4.00	0.81
S16-9	Basin 16	100YR-8HR	4.27	2.93	8.19	0.0029	162	3.62	5.06	3.60	4.96
EX16-2	Basin 16	10YR-1HR	0.70	1.58	7.00	0.0002	331	0.70	5.09	0.70	5.09
GWT_16	Basin 16	10YR-1HR	0.00	1.45	99.00	0.0000	0	0.69	9.55	0.00	0.00
MIAMI_CANAL_3.0	Basin 16	10YR-1HR	0.00	1.45	99.00	0.0000	9	0.70	5.09	0.00	0.00
POND16-1	Basin 16	10YR-1HR	25.00	2.65	7.00	0.0028	79599	0.69	27.30	0.00	0.00
S16-1	Basin 16	10YR-1HR	0.66	22.35	24.79	0.0012	254	0.65	4.70	0.66	4.69
S16-10	Basin 16	10YR-1HR	0.69	2.15	7.06	-0.0072	123	0.67	5.25	0.67	5.15
S16-11	Basin 16	10YR-1HR	0.69	2.26	5.83	0.0099	120	0.62	7.15	0.67	5.25
S16-11A	Basin 16	10YR-1HR	0.68	2.26	6.24	-0.0105	124	0.69	2.25	0.62	2.99
S16-12	Basin 16	10YR-1HR	0.69	2.27	4.94	0.0079	134	0.45	2.56	0.69	2.10
S16-13	Basin 16	10YR-1HR	0.69	2.16	5.23	-0.0040	294	1.37	0.10	0.43	3.27
S16-14	Basin 16	10YR-1HR	0.69	2.22	4.95	-0.0111	114	0.43	3.71	1.04	2.05
S16-14A	Basin 16	10YR-1HR	0.69	2.23	6.54	0.0074	149	1.01	2.40	0.45	0.82
S16-14B	Basin 16	10YR-1HR	0.69	2.24	6.28	0.0012	138	0.65	0.36	0.96	0.53
S16-15	Basin 16	10YR-1HR	0.69	2.02	5.20	0.0008	545	0.67	2.02	0.71	1.99
S16-16	Basin 16	10YR-1HR	0.69	2.08	4.89	0.0010	113	0.65	2.96	0.67	2.95
S16-17	Basin 16	10YR-1HR	0.69	2.00	5.39	0.0008	362	0.67	1.67	0.71	1.67
S16-18	Basin 16	10YR-1HR	0.69	2.02	5.02	0.0009	113	0.67	1.68	0.67	1.67
S16-1A	Basin 16	10YR-1HR	0.66	24.97	27.52	-0.0010	218	0.65	2.71	0.65	2.71
S16-5	Basin 16	10YR-1HR	0.67	8.10	16.24	0.0010	202	0.67	3.80	0.67	3.79
S16-7	Basin 16	10YR-1HR	0.68	8.22	13.56	0.0010	247	0.67	1.87	0.69	1.87
S16-8	Basin 16	10YR-1HR	0.68	8.24	10.75	0.0010	180	0.65	1.02	0.68	1.01
S16-9	Basin 16	10YR-1HR	0.70	2.05	8.19	0.0009	658	0.67	5.15	0.70	5.09
EX16-2	Basin 16	10YR-24HR	15.08	1.71	7.00	0.0001	359	15.07	7.11	15.08	7.10
GWT_16	Basin 16	10YR-24HR	24.00	2.20	99.00	0.0001	0	12.05	0.05	0.00	0.00
MIAMI_CANAL_3.0	Basin 16	10YR-24HR	0.00	1.45	99.00	0.0000	9	15.08	7.10	0.00	0.00
POND16-1	Basin 16	10YR-24HR	15.06	3.11	7.00	0.0008	81097	12.00	7.23	15.06	4.71
S16-1	Basin 16	10YR-24HR	12.00	21.56	24.79	-0.0016	218	11.98	0.82	12.00	0.82
S16-10	Basin 16	10YR-24HR	15.08	1.85	7.06	-0.0016	123	24.00	3.00	24.00	3.00
S16-11	Basin 16	10YR-24HR	19.03	1.88	5.83	0.0020	120	24.00	3.00	24.00	3.00
S16-11A	Basin 16	10YR-24HR	19.03	1.90	6.24	-0.0012	124	24.00	2.93	24.01	2.92
S16-12	Basin 16	10YR-24HR	19.03	1.93	4.94	0.0011	134	24.00	2.89	24.00	2.93
S16-13	Basin 16	10YR-24HR	21.03	2.00	5.23	0.0020	297	24.00	1.96	27.82	2.89
S16-14	Basin 16	10YR-24HR	21.02	1.99	4.95	0.0074	114	27.82	3.65	24.00	3.02
S16-14A	Basin 16	10YR-24HR	21.02	1.97	6.54	0.0039	151	18.24	3.37	24.01	2.84
S16-14B	Basin 16	10YR-24HR	21.02	1.97	6.28	0.0015	139	11.98	0.06	18.24	0.47
S16-15	Basin 16	10YR-24HR	22.01	2.07	5.20	-0.0010	544	19.08	1.46	12.02	0.84

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S16-16	Basin 16	10YR-24HR	22.02	2.07	4.89	-0.0042	113	12.00	0.55	18.60	0.82
S16-17	Basin 16	10YR-24HR	22.01	2.08	5.39	-0.0011	360	26.53	0.72	12.03	0.34
S16-18	Basin 16	10YR-24HR	22.02	2.08	5.02	-0.0036	113	12.00	0.35	26.53	0.72
S16-1A	Basin 16	10YR-24HR	11.98	24.43	27.52	-0.0002	198	11.98	0.47	11.98	0.47
S16-5	Basin 16	10YR-24HR	11.99	7.43	16.24	-0.0006	185	12.00	0.67	11.99	0.67
S16-7	Basin 16	10YR-24HR	12.00	7.59	13.56	-0.0001	227	12.00	0.33	12.00	0.33
S16-8	Basin 16	10YR-24HR	12.00	7.62	10.75	-0.0001	167	11.98	0.18	12.00	0.18
S16-9	Basin 16	10YR-24HR	15.08	1.83	8.19	-0.0002	742	24.00	3.00	24.02	3.00
EX16-2	Basin 16	10YR-8HR	5.13	1.86	7.00	0.0001	340	5.12	8.89	5.13	8.89
GWT_16	Basin 16	10YR-8HR	8.00	2.20	99.00	0.0002	0	4.02	3.53	0.00	0.00
MIAMI_CANAL_3.0	Basin 16	10YR-8HR	0.00	1.45	99.00	0.0000	9	5.13	8.89	0.00	0.00
POND16-1	Basin 16	10YR-8HR	5.19	3.16	7.00	0.0012	81284	4.01	20.31	5.19	6.24
S16-1	Basin 16	10YR-8HR	4.00	21.94	24.79	-0.0016	246	4.00	2.46	4.00	2.46
S16-10	Basin 16	10YR-8HR	4.04	2.04	7.06	0.0014	123	4.02	4.63	4.02	4.62
S16-11	Basin 16	10YR-8HR	4.04	2.13	5.83	-0.0023	120	4.01	4.64	4.02	4.63
S16-11A	Basin 16	10YR-8HR	4.04	2.15	6.24	0.0015	124	8.01	2.82	8.01	2.80
S16-12	Basin 16	10YR-8HR	4.04	2.18	4.94	0.0011	134	8.00	2.76	8.01	2.81
S16-13	Basin 16	10YR-8HR	4.04	2.18	5.23	-0.0020	292	8.00	1.84	10.34	2.82
S16-14	Basin 16	10YR-8HR	4.04	2.18	4.95	0.0070	114	9.85	3.40	6.50	2.93
S16-14A	Basin 16	10YR-8HR	4.04	2.18	6.54	-0.0041	150	6.50	3.46	8.01	2.64
S16-14B	Basin 16	10YR-8HR	4.04	2.18	6.28	0.0018	139	4.00	0.19	4.39	0.60
S16-15	Basin 16	10YR-8HR	4.04	2.18	5.20	0.0010	534	4.00	1.75	4.05	1.61
S16-16	Basin 16	10YR-8HR	4.04	2.20	4.89	-0.0042	113	4.00	1.65	4.00	1.65
S16-17	Basin 16	10YR-8HR	4.04	2.18	5.39	-0.0012	355	4.02	1.04	4.03	1.13
S16-18	Basin 16	10YR-8HR	4.04	2.19	5.02	-0.0036	113	4.00	1.04	4.02	1.04
S16-1A	Basin 16	10YR-8HR	4.00	24.70	27.52	-0.0004	215	4.00	1.42	3.99	1.42
S16-5	Basin 16	10YR-8HR	4.00	7.76	16.24	-0.0005	203	4.00	2.01	4.00	2.01
S16-7	Basin 16	10YR-8HR	4.01	7.88	13.56	-0.0002	250	4.00	0.99	4.01	0.99
S16-8	Basin 16	10YR-8HR	4.00	7.90	10.75	-0.0002	179	4.00	0.54	4.00	0.54
S16-9	Basin 16	10YR-8HR	5.08	2.00	8.19	-0.0003	682	4.02	4.62	4.05	4.61
EX16-2	Basin 16	25YR-72HR	60.15	3.55	7.00	0.0029	166	60.19	20.37	60.15	20.08
GWT_16	Basin 16	25YR-72HR	72.00	2.20	99.00	0.0003	0	60.04	16.16	0.00	0.00
MIAMI_CANAL_3.0	Basin 16	25YR-72HR	0.00	1.45	99.00	0.0000	9	60.15	20.08	0.00	0.00
POND16-1	Basin 16	25YR-72HR	60.49	4.10	7.00	0.0012	84286	60.02	58.82	60.74	22.94
S16-1	Basin 16	25YR-72HR	60.03	22.52	24.79	-0.0017	251	60.02	5.70	60.03	5.69
S16-10	Basin 16	25YR-72HR	60.07	3.67	7.06	0.0048	123	59.68	3.61	59.69	3.43
S16-11	Basin 16	25YR-72HR	60.06	3.70	5.83	-0.0049	120	59.71	5.05	59.68	3.61
S16-11A	Basin 16	25YR-72HR	60.06	3.69	6.24	0.0050	124	72.00	2.93	72.01	2.92
S16-12	Basin 16	25YR-72HR	60.06	3.66	4.94	0.0045	134	72.00	2.89	72.00	2.93
S16-13	Basin 16	25YR-72HR	60.05	3.09	5.23	-0.0021	137	72.44	1.96	86.15	2.93
S16-14	Basin 16	25YR-72HR	60.05	3.33	4.95	0.0077	114	79.79	3.61	72.43	3.01
S16-14A	Basin 16	25YR-72HR	60.05	3.43	6.54	0.0047	126	64.04	3.40	72.44	2.85
S16-14B	Basin 16	25YR-72HR	60.06	3.44	6.28	-0.0048	114	60.02	0.43	60.04	1.02
S16-15	Basin 16	25YR-72HR	60.05	2.86	5.20	0.0010	263	60.02	2.06	60.02	2.03
S16-16	Basin 16	25YR-72HR	60.04	2.97	4.89	-0.0040	113	60.02	3.89	60.02	3.87
S16-17	Basin 16	25YR-72HR	60.05	2.84	5.39	-0.0011	215	60.02	2.55	60.04	2.53
S16-18	Basin 16	25YR-72HR	60.04	2.89	5.02	-0.0036	113	60.02	2.56	60.02	2.55
S16-1A	Basin 16	25YR-72HR	60.02	25.08	27.52	-0.0011	216	60.02	3.29	60.02	3.28
S16-5	Basin 16	25YR-72HR	60.04	8.24	16.24	-0.0013	195	60.03	4.61	60.03	4.61
S16-7	Basin 16	25YR-72HR	60.04	8.37	13.56	-0.0013	235	60.03	2.28	60.05	2.27
S16-8	Basin 16	25YR-72HR	60.04	8.39	10.75	-0.0013	175	60.02	1.24	60.04	1.23

Qpost = 20.08 < Qpre = 20.09 cfs

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S16-9	Basin 16	25YR-72HR	60.07	3.64	8.19	0.0026	162	59.69	3.43	72.01	3.02

==========
==== Basins ====
==========

Name: B16-1 Node: S16-1 Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.390 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B16-11 Node: S16-11 Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.820 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B16-11A Node: S16-11A Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.030 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B16-12 Node: S16-12 Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.640 Time Shift(hrs): 0.00
Curve Number: 93.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B16-14 Node: S16-14 Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.550 Time Shift(hrs): 0.00
Curve Number: 93.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B16-14B Node: S16-14B Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00

Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.070 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B16-16 Node: S16-16 Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.630 Time Shift(hrs): 0.00
Curve Number: 93.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B16-18 Node: S16-18 Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.420 Time Shift(hrs): 0.00
Curve Number: 88.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B16-1A Node: S16-1A Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.530 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B16-3 Node: POND16-1 Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.370 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B16-5 Node: S16-5 Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.380 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B16-7 Node: S16-7 Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

```
        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.170                   Time Shift(hrs): 0.00
            Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: B16-8                    Node: S16-8                  Status: Onsite
        Group: Basin 16                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.200                   Time Shift(hrs): 0.00
            Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: BX16-13                  Node: POND16-1               Status: Onsite
        Group: Basin 16                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.350                   Time Shift(hrs): 0.00
            Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: BX16-2                   Node: POND16-1               Status: Onsite
        Group: Basin 16                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 4.150                   Time Shift(hrs): 0.00
            Curve Number: 66.00               Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: BX16-3                   Node: POND16-1               Status: Onsite
        Group: Basin 16                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 3.630                   Time Shift(hrs): 0.00
            Curve Number: 72.00               Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

```
         Name: BX16-5                   Node: POND16-1               Status: Onsite
        Group: Basin 16                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.330                   Time Shift(hrs): 0.00
            Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00
```

==========
==== Nodes ==========
==========

Name: EX16-2 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 7.000
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
1.940	0.0004

Name: GWT_16 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	1.450
108.00	1.450

Name: MIAMI_CANAL_3.0 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	1.450
108.00	1.450

Name: POND16-1 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 7.000
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
1.940	0.0004
1.950	1.7700
2.820	1.8400
5.000	2.0000
6.000	2.0800

Name: S16-1 Base Flow(cfs): 0.000 Init Stage(ft): 21.350
Group: Basin 16 Warn Stage(ft): 24.790
Type: Stage/Area

Stage(ft)	Area(ac)
19.350	0.0004
24.790	0.0004

Name: S16-10 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 7.060
Type: Stage/Area

Stage(ft)	Area(ac)

1.450	0.0004
7.060	0.0004

Name: S16-11 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 5.830
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.830	0.0004

Name: S16-11A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 6.240
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.240	0.0004

Name: S16-12 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 4.940
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.940	0.0004

Name: S16-13 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 5.230
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0005
5.230	0.0005

Name: S16-14 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 4.950
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.950	0.0004

Name: S16-14A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 6.540
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.540	0.0004

Name: S16-14B Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 6.280
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.280	0.0004

Name: S16-15 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 5.200
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.200	0.0004

Name: S16-16 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 4.890
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.890	0.0004

Name: S16-17 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 5.390
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.390	0.0004

Name: S16-18 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 5.020
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.020	0.0004

Name: S16-1A Base Flow(cfs): 0.000 Init Stage(ft): 24.100
Group: Basin 16 Warn Stage(ft): 27.520
Type: Stage/Area

Stage(ft)	Area(ac)
22.100	0.0004
27.520	0.0004

Name: S16-5 Base Flow(cfs): 0.000 Init Stage(ft): 7.150

Group: Basin 16 Warn Stage(ft): 16.240
Type: Stage/Area

Stage(ft)	Area(ac)
5.150	0.0004
16.240	0.0004

Name: S16-7 Base Flow(cfs): 0.000 Init Stage(ft): 7.250
Group: Basin 16 Warn Stage(ft): 13.560
Type: Stage/Area

Stage(ft)	Area(ac)
5.250	0.0004
13.560	0.0004

Name: S16-8 Base Flow(cfs): 0.000 Init Stage(ft): 7.350
Group: Basin 16 Warn Stage(ft): 10.750
Type: Stage/Area

Stage(ft)	Area(ac)
5.350	0.0004
10.750	0.0004

Name: S16-9 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 8.190
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
8.190	0.0004

==========
==== Operating Tables ====
==========

Name: E_OPT_16 Group: Basin 16
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.450	1.45	0.00
1.450	2.20	0.03
1.450	3.90	0.10
1.450	5.45	0.10
2.200	2.20	0.00
2.200	3.90	0.08
2.200	5.45	0.10

==========
==== Pipes ====
==========

Name: P16-2_OUT From Node: EX16-2 Length(ft): 171.00
Group: Basin 16 To Node: MIAMI_CANAL_3.0 Count: 1
Friction Equation: Automatic
UPSTREAM DOWNSTREAM Solution Algorithm: Most Restrictive
Geometry: Circular Circular Flow: Both

Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	1.00
Invert(ft):	-1.360	-1.860	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S16-10_S16-9	From Node: S16-10	Length(ft):	87.00
Group:	Basin 16	To Node: S16-9	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	0.10
Invert(ft):	-0.850	-0.950	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S16-11_S16-10	From Node: S16-11	Length(ft):	104.00
Group:	Basin 16	To Node: S16-10	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	0.10
Invert(ft):	-0.750	-0.850	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S16-11A_S16-11	From Node: S16-11A	Length(ft):	33.00
Group:	Basin 16	To Node: S16-11	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	0.10
Invert(ft):	-0.650	-0.750	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S16-12_S16-11A	From Node:	S16-12	Length(ft): 189.00
Group:	Basin 16	To Node:	S16-11A	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	24.00	24.00		Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00		Exit Loss Coef: 0.10
Invert(ft):	-0.550	-0.650		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S16-13_S16-14	From Node:	S16-13	Length(ft): 2.00
Group:	Basin 16	To Node:	S16-14	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	24.00	24.00		Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00		Exit Loss Coef: 0.10
Invert(ft):	-0.250	-0.250		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S16-14_S16-14A	From Node:	S16-14	Length(ft): 8.00
Group:	Basin 16	To Node:	S16-14A	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	24.00	24.00		Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00		Exit Loss Coef: 1.46
Invert(ft):	-0.250	-0.350		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S16-14A_S16-12	From Node: S16-14A	Length(ft): 226.00
Group:	Basin 16	To Node: S16-12	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 0.10
Invert(ft):	-0.350	-0.550	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S16-14B_S16-14A	From Node: S16-14B	Length(ft): 35.00
Group:	Basin 16	To Node: S16-14A	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.10
Invert(ft):	1.300	1.200	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S16-15_S16-13	From Node: S16-15	Length(ft): 185.00
Group:	Basin 16	To Node: S16-13	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 1.35
Rise(in):	24.00	24.00	Exit Loss Coef: 1.46
Invert(ft):	0.930	0.930	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

```
         Name: S16-16_S16-15       From Node: S16-16             Length(ft): 3.00
        Group: Basin 16              To Node: S16-15                  Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                             Flow: Both
     Span(in): 18.00          18.00                     Entrance Loss Coef: 0.50
     Rise(in): 18.00          18.00                         Exit Loss Coef: 1.46
   Invert(ft): -0.150         -0.250                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: S16-17_S16-15       From Node: S16-17             Length(ft): 250.00
        Group: Basin 16              To Node: S16-15                  Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                             Flow: Both
     Span(in): 24.00          24.00                     Entrance Loss Coef: 1.35
     Rise(in): 24.00          24.00                         Exit Loss Coef: 0.10
   Invert(ft): 0.930          0.930                         Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: S16-18_S16-17       From Node: S16-18             Length(ft): 3.00
        Group: Basin 16              To Node: S16-17                  Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                             Flow: Both
     Span(in): 18.00          18.00                     Entrance Loss Coef: 0.50
     Rise(in): 18.00          18.00                         Exit Loss Coef: 1.46
   Invert(ft): -0.150         -0.050                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: S16-1_POND16-1      From Node: S16-1              Length(ft): 60.00
        Group: Basin 16              To Node: POND16-1                Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                             Flow: Both
     Span(in): 18.00          18.00                     Entrance Loss Coef: 0.50
```

Rise(in):	18.00	18.00	Exit Loss Coef:	1.00
Invert(ft):	21.350	1.950	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S16-1A_S16-1	From Node: S16-1A	Length(ft):	145.00
Group:	Basin 16	To Node: S16-1	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	24.100	21.350	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S16-5_POND16-1	From Node: S16-5	Length(ft):	29.00
Group:	Basin 16	To Node: POND16-1	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.00
Invert(ft):	7.150	1.950	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S16-7_S16-5	From Node: S16-7	Length(ft):	95.00
Group:	Basin 16	To Node: S16-5	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	7.250	7.150	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: S16-8_S16-7	From Node: S16-8	Length(ft): 91.00	
Group: Basin 16	To Node: S16-7	Count: 1	
		Friction Equation: Automatic	
UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive	
Geometry: Circular	Circular	Flow: Both	
Span(in): 18.00	18.00	Entrance Loss Coef: 0.50	
Rise(in): 18.00	18.00	Exit Loss Coef: 0.10	
Invert(ft): 7.350	7.250	Bend Loss Coef: 0.00	
Manning's N: 0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw	
Top Clip(in): 0.000	0.000	Inlet Ctrl Spec: Use dn	
Bot Clip(in): 0.000	0.000	Stabilizer Option: None	

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: S16-9_EX16-2	From Node: S16-9	Length(ft): 889.00	
Group: Basin 16	To Node: EX16-2	Count: 1	
		Friction Equation: Automatic	
UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive	
Geometry: Circular	Circular	Flow: Both	
Span(in): 24.00	24.00	Entrance Loss Coef: 0.50	
Rise(in): 24.00	24.00	Exit Loss Coef: 1.46	
Invert(ft): 0.440	-1.360	Bend Loss Coef: 0.00	
Manning's N: 0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw	
Top Clip(in): 0.000	0.000	Inlet Ctrl Spec: Use dn	
Bot Clip(in): 0.000	0.000	Stabilizer Option: None	

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

==========
==== Weirs ==========
==========

Name: WEX16-2	From Node: POND16-1		
Group: Basin 16	To Node: EX16-2		
Flow: Both	Count: 1		
Type: Horizontal	Geometry: Rectangular		
Span(in): 37.00			
Rise(in): 24.00			
Invert(ft): 2.830			
Control Elevation(ft): 2.830			
	TABLE		
Bottom Clip(in): 0.000			
Top Clip(in): 0.000			
Weir Discharge Coef: 3.200			
Orifice Discharge Coef: 0.600			

```
================================================================================================
==== Rating Curves ============================================================================
================================================================================================

         Name: S16-13_EXF          From Node: S16-13                 Count: 85
        Group: Basin 16              To Node: GWT_16                  Flow: Both

               TABLE           ELEV ON(ft)     ELEV OFF(ft)
          #1: E_OPT_16         1.450           1.450
          #2:                  0.000           0.000
          #3:                  0.000           0.000
          #4:                  0.000           0.000


------------------------------------------------------------------------------------------------
         Name: S16-15_EXF          From Node: S16-15                 Count: 201
        Group: Basin 16              To Node: GWT_16                  Flow: Both

               TABLE           ELEV ON(ft)     ELEV OFF(ft)
          #1: E_OPT_16         1.450           1.450
          #2:                  0.000           0.000
          #3:                  0.000           0.000
          #4:                  0.000           0.000


------------------------------------------------------------------------------------------------
         Name: S16-17_EXF          From Node: S16-17                 Count: 117
        Group: Basin 16              To Node: GWT_16                  Flow: Both

               TABLE           ELEV ON(ft)     ELEV OFF(ft)
          #1: E_OPT_16         1.450           1.450
          #2:                  0.000           0.000
          #3:                  0.000           0.000
          #4:                  0.000           0.000


================================================================================================
==== Hydrology Simulations ====================================================================
================================================================================================

         Name: 100YR-1HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 1.00
          Rainfall File: Fdot-1
    Rainfall Amount(in): 5.00

Time(hrs)       Print Inc(min)
--------------- ---------------
1.000           1.00
1.330           1.00

------------------------------------------------------------------------------------------------
         Name: 100YR-24HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Fdot-24
    Rainfall Amount(in): 13.44

Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.00
16.000          1.00
24.000          5.00
24.330          5.00

------------------------------------------------------------------------------------------------
```

```
         Name: 100YR-8HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 8.00
          Rainfall File: Fdot-8
    Rainfall Amount(in): 9.60

Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           5.00
6.000           1.00
8.000           5.00
8.330           5.00

-------------------------------------------------------------------------------------------------
         Name: 10YR-1HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 1.00
          Rainfall File: Fdot-1
    Rainfall Amount(in): 3.50

Time(hrs)       Print Inc(min)
--------------- ---------------
1.000           1.00
1.330           1.00

-------------------------------------------------------------------------------------------------
         Name: 10YR-24HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Fdot-24
    Rainfall Amount(in): 8.88

Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.00
16.000          1.00
24.000          5.00
24.330          5.00

-------------------------------------------------------------------------------------------------
         Name: 10YR-8HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 8.00
          Rainfall File: Fdot-8
    Rainfall Amount(in): 6.40

Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           5.00
6.000           1.00
8.000           5.00
8.330           5.00

-------------------------------------------------------------------------------------------------
         Name: 25YR-72HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 72.00
          Rainfall File: Sfwmd72
    Rainfall Amount(in): 14.00

Time(hrs)       Print Inc(min)
--------------- ---------------
48.000          15.00
56.000          5.00
64.000          1.00
```

72.000	5.00
72.330	5.00

==========
==== Routing Simulations ==========
==========

Name: 100YR-1HR Hydrology Sim: 100YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 25.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
1.000	1.000
25.000	15.000

Group	Run
Basin 16	Yes

Name: 100YR-24HR Hydrology Sim: 100YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 48.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 24HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
48.000	15.000

Group	Run
Basin 16	Yes

Name: 100YR-8HR Hydrology Sim: 100YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 36.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 8HR Boundary Flows:

Time(hrs)	Print Inc(min)

2.000 5.000
6.000 1.000
8.000 5.000
36.000 15.000

Group Run
Basin 16 Yes

Name: 10YR-1HR Hydrology Sim: 10YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.01000
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 25.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs) Print Inc(min)
1.000 1.000
25.000 15.000

Group Run
Basin 16 Yes

Name: 10YR-24HR Hydrology Sim: 10YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 48.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 24HR Boundary Flows:

Time(hrs) Print Inc(min)
8.000 5.000
16.000 1.000
24.000 5.000
48.000 15.000

Group Run
Basin 16 Yes

Name: 10YR-8HR Hydrology Sim: 10YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 36.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 8HR Boundary Flows:

Time(hrs)	Print Inc(min)
2.000	5.000
6.000	1.000
8.000	5.000
36.000	15.000

Group	Run
Basin 16	Yes

Name: 25YR-72HR Hydrology Sim: 25YR-72HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 96.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 72HR Boundary Flows:

Time(hrs)	Print Inc(min)
48.000	15.000
56.000	5.000
64.000	1.000
72.000	5.000
96.000	5.000

Group	Run
Basin 16	Yes

==========
==== Boundary Conditions ====
==========

Name: 8HR Node: GWT_16 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.450
1.000	1.470
2.000	1.550
3.000	1.660
4.000	1.980
5.000	2.100
6.000	2.140
7.000	2.180
8.000	2.200
12.000	1.450
36.000	1.450

Name: 24HR Node: GWT_16 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.450
1.000	1.460
2.000	1.470
3.000	1.500
4.000	1.520
5.000	1.540
6.000	1.570
7.000	1.600

8.000	1.630
9.000	1.680
10.000	1.720
11.000	1.780
12.000	1.860
13.000	1.910
14.000	1.950
15.000	2.000
16.000	2.040
17.000	2.070
18.000	2.100
19.000	2.130
20.000	2.150
21.000	2.170
22.000	2.190
23.000	2.190
24.000	2.200
36.000	1.450
48.000	1.450

Name: 72HR Node: GWT_16 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.450
24.000	1.530
36.000	1.590
48.000	1.650
49.000	1.650
50.000	1.660
51.000	1.670
52.000	1.670
53.000	1.680
54.000	1.690
55.000	1.710
56.000	1.720
57.000	1.740
57.500	1.750
58.000	1.770
58.500	1.780
59.000	1.800
59.500	1.820
60.000	2.010
60.500	2.050
61.000	2.070
61.500	2.090
62.000	2.100
62.500	2.110
63.000	2.120
64.000	2.130
65.000	2.140
66.000	2.150
68.000	2.170
70.000	2.190
72.000	2.200
96.000	1.450

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	0.00	0.0	0.0	0.0	0.0	0.00
25YR-72HR	0.25	0.0	-1.6	1.6	0.0	0.00
25YR-72HR	0.50	0.0	-2.5	2.5	-0.0	-0.00
25YR-72HR	0.75	0.0	-3.3	3.3	-0.0	-0.00
25YR-72HR	1.00	0.0	-4.1	4.1	-0.0	-0.00
25YR-72HR	1.25	0.0	-4.9	4.9	-0.0	-0.00
25YR-72HR	1.50	0.9	-5.5	6.4	-0.0	-0.00
25YR-72HR	1.75	7.4	-4.6	12.0	-0.0	-0.00
25YR-72HR	2.00	24.6	-1.0	25.6	-0.0	-0.00
25YR-72HR	2.25	53.7	5.5	48.2	-0.0	-0.00
25YR-72HR	2.50	94.6	15.0	79.5	-0.0	-0.00
25YR-72HR	2.75	147.2	28.2	119.0	-0.0	-0.00
25YR-72HR	3.00	212.3	46.5	165.8	-0.0	-0.00
25YR-72HR	3.25	289.7	70.5	219.2	0.0	0.00
25YR-72HR	3.50	378.8	100.2	278.6	0.0	0.00
25YR-72HR	3.75	478.7	135.2	343.5	-0.0	-0.00
25YR-72HR	4.00	588.7	175.3	413.4	-0.0	-0.00
25YR-72HR	4.25	708.0	220.1	487.9	-0.0	-0.00
25YR-72HR	4.50	836.0	269.3	566.7	0.0	0.00
25YR-72HR	4.75	972.3	322.8	649.5	0.0	0.00
25YR-72HR	5.00	1116.5	380.6	735.8	0.0	0.00
25YR-72HR	5.25	1268.2	442.6	825.6	-0.0	-0.00
25YR-72HR	5.50	1427.0	508.5	918.5	-0.0	-0.00
25YR-72HR	5.75	1592.5	578.2	1014.3	-0.0	-0.00
25YR-72HR	6.00	1764.3	651.5	1112.8	-0.0	-0.00
25YR-72HR	6.25	1942.0	728.1	1213.9	-0.0	-0.00
25YR-72HR	6.50	2125.2	807.9	1317.3	-0.0	-0.00
25YR-72HR	6.75	2313.8	890.9	1422.9	-0.0	-0.00
25YR-72HR	7.00	2507.3	976.7	1530.6	0.0	0.00
25YR-72HR	7.25	2705.6	1065.3	1640.3	0.0	0.00
25YR-72HR	7.50	2908.3	1156.5	1751.8	0.0	0.00
25YR-72HR	7.75	3115.3	1250.3	1865.0	-0.0	-0.00
25YR-72HR	8.00	3326.4	1346.5	1979.9	-0.0	-0.00
25YR-72HR	8.25	3541.3	1445.0	2096.3	-0.0	-0.00
25YR-72HR	8.50	3759.9	1545.7	2214.1	-0.0	-0.00
25YR-72HR	8.75	3981.9	1648.5	2333.4	-0.0	-0.00
25YR-72HR	9.00	4207.3	1753.4	2453.9	-0.0	-0.00
25YR-72HR	9.25	4435.8	1860.2	2575.6	-0.0	-0.00
25YR-72HR	9.50	4667.4	1968.9	2698.5	0.0	0.00
25YR-72HR	9.75	4901.9	2079.3	2822.6	0.0	0.00
25YR-72HR	10.00	5139.2	2191.5	2947.6	0.0	0.00
25YR-72HR	10.25	5379.1	2305.4	3073.7	-0.0	-0.00
25YR-72HR	10.50	5621.5	2420.8	3200.7	0.0	0.00
25YR-72HR	10.75	5866.4	2537.8	3328.7	0.0	0.00
25YR-72HR	11.00	6113.7	2656.2	3457.5	0.0	0.00
25YR-72HR	11.25	6363.2	2776.1	3587.1	0.0	0.00
25YR-72HR	11.50	6614.8	2897.3	3717.5	0.0	0.00
25YR-72HR	11.75	6868.5	3019.9	3848.6	0.0	0.00
25YR-72HR	12.00	7124.3	3143.7	3980.5	0.0	0.00
25YR-72HR	12.25	7381.9	3268.8	4113.1	0.0	0.00
25YR-72HR	12.50	7641.4	3395.1	4246.3	0.0	0.00
25YR-72HR	12.75	7903.1	3522.5	4380.6	0.0	0.00
25YR-72HR	13.00	8167.6	3651.1	4516.5	0.0	0.00
25YR-72HR	13.25	8435.2	3780.7	4654.5	0.0	0.00
25YR-72HR	13.50	8706.0	3911.3	4794.7	0.0	0.00
25YR-72HR	13.75	8979.9	4043.0	4936.9	0.0	0.00
25YR-72HR	14.00	9256.9	4175.7	5081.3	-0.0	-0.00
25YR-72HR	14.25	9536.9	4309.2	5227.7	-0.0	-0.00
25YR-72HR	14.50	9819.8	4444.8	5375.0	-0.0	-0.00
25YR-72HR	14.75	10105.6	4580.6	5525.0	-0.0	-0.00
25YR-72HR	15.00	10394.2	4716.8	5677.4	-0.0	-0.00
25YR-72HR	15.25	10685.5	4854.0	5831.5	0.0	0.00
25YR-72HR	15.50	10979.5	4991.9	5987.6	0.0	0.00
25YR-72HR	15.75	11276.2	5130.5	6145.6	0.0	0.00
25YR-72HR	16.00	11575.4	5270.0	6305.4	0.0	0.00
25YR-72HR	16.25	11877.2	5410.2	6467.0	0.0	0.00
25YR-72HR	16.50	12181.4	5550.9	6630.5	0.0	0.00
25YR-72HR	16.75	12488.4	5692.5	6795.8	0.0	0.00
25YR-72HR	17.00	12798.6	5834.6	6964.0	0.0	0.00
25YR-72HR	17.25	13112.4	5977.4	7134.9	0.0	0.00
25YR-72HR	17.50	13429.8	6121.1	7308.7	0.0	0.00
25YR-72HR	17.75	13750.9	6265.1	7485.8	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	18.00	14075.6	6409.8	7665.8	0.0	0.00
25YR-72HR	18.25	14403.8	6555.3	7848.5	0.0	0.00
25YR-72HR	18.50	14735.5	6701.0	8034.5	0.0	0.00
25YR-72HR	18.75	15070.6	6847.6	8223.0	0.0	0.00
25YR-72HR	19.00	15409.2	6994.5	8414.7	0.0	0.00
25YR-72HR	19.25	15751.0	7142.2	8608.9	-0.0	-0.00
25YR-72HR	19.50	16096.2	7290.9	8805.2	0.0	0.00
25YR-72HR	19.75	16444.6	7439.4	9005.2	0.0	0.00
25YR-72HR	20.00	16796.2	7588.3	9207.9	0.0	0.00
25YR-72HR	20.25	17151.0	7737.7	9413.2	-0.0	-0.00
25YR-72HR	20.50	17508.8	7887.6	9621.3	-0.0	-0.00
25YR-72HR	20.75	17869.8	8037.9	9832.0	-0.0	-0.00
25YR-72HR	21.00	18233.8	8188.6	10045.2	-0.0	-0.00
25YR-72HR	21.25	18600.8	8339.8	10261.1	0.0	0.00
25YR-72HR	21.50	18970.8	8491.4	10479.4	0.0	0.00
25YR-72HR	21.75	19343.7	8643.4	10700.3	0.0	0.00
25YR-72HR	22.00	19719.5	8795.8	10923.7	0.0	0.00
25YR-72HR	22.25	20098.1	8948.6	11149.5	0.0	0.00
25YR-72HR	22.50	20479.5	9101.8	11377.8	0.0	0.00
25YR-72HR	22.75	20863.7	9255.3	11608.4	0.0	0.00
25YR-72HR	23.00	21250.7	9409.2	11841.5	0.0	0.00
25YR-72HR	23.25	21640.4	9563.5	12076.9	0.0	0.00
25YR-72HR	23.50	22032.7	9718.1	12314.6	0.0	0.00
25YR-72HR	23.75	22427.7	9873.1	12554.6	0.0	0.00
25YR-72HR	24.00	22825.5	10028.5	12797.0	0.0	0.00
25YR-72HR	24.25	23280.9	10200.8	13080.1	0.0	0.00
25YR-72HR	24.50	23818.6	10406.0	13412.5	0.0	0.00
25YR-72HR	24.75	24394.8	10626.4	13768.5	0.0	0.00
25YR-72HR	25.00	24988.6	10852.9	14135.7	0.0	0.00
25YR-72HR	25.25	25589.9	11081.2	14508.7	0.0	0.00
25YR-72HR	25.50	26196.0	11310.1	14886.0	0.0	0.00
25YR-72HR	25.75	26807.4	11539.6	15267.7	0.0	0.00
25YR-72HR	26.00	27423.3	11769.6	15653.7	0.0	0.00
25YR-72HR	26.25	28044.3	12000.3	16044.0	0.0	0.00
25YR-72HR	26.50	28670.0	12231.4	16438.6	0.0	0.00
25YR-72HR	26.75	29300.5	12463.2	16837.3	0.0	0.00
25YR-72HR	27.00	29935.3	12695.3	17240.0	0.0	0.00
25YR-72HR	27.25	30574.7	12927.9	17646.7	0.0	0.00
25YR-72HR	27.50	31218.5	13161.0	18057.4	0.0	0.00
25YR-72HR	27.75	31867.0	13394.7	18472.3	0.0	0.00
25YR-72HR	28.00	32519.5	13628.7	18890.8	0.0	0.00
25YR-72HR	28.25	33176.2	13863.2	19313.1	0.0	0.00
25YR-72HR	28.50	33837.2	14098.0	19739.1	0.0	0.00
25YR-72HR	28.75	34502.6	14333.4	20169.2	0.0	0.00
25YR-72HR	29.00	35171.7	14569.1	20602.6	0.0	0.00
25YR-72HR	29.25	35844.9	14805.2	21039.7	0.0	0.00
25YR-72HR	29.50	36522.0	15041.6	21480.4	0.0	0.00
25YR-72HR	29.75	37203.4	15278.5	21924.8	0.0	0.00
25YR-72HR	30.00	37888.2	15515.7	22372.5	0.0	0.00
25YR-72HR	30.25	38577.0	15753.3	22823.7	0.0	0.00
25YR-72HR	30.50	39269.3	15991.1	23278.2	0.0	0.00
25YR-72HR	30.75	39965.6	16229.4	23736.2	0.0	0.00
25YR-72HR	31.00	40665.3	16467.9	24197.3	0.0	0.00
25YR-72HR	31.25	41368.8	16706.9	24661.9	0.0	0.00
25YR-72HR	31.50	42075.7	16946.1	25129.6	0.0	0.00
25YR-72HR	31.75	42785.9	17185.5	25600.4	0.0	0.00
25YR-72HR	32.00	43500.1	17425.4	26074.7	0.0	0.00
25YR-72HR	32.25	44217.3	17665.4	26551.8	0.0	0.00
25YR-72HR	32.50	44937.8	17905.8	27032.0	0.0	0.00
25YR-72HR	32.75	45661.7	18146.4	27515.3	0.0	0.00
25YR-72HR	33.00	46389.3	18387.5	28001.8	0.0	0.00
25YR-72HR	33.25	47119.5	18628.6	28491.0	0.0	0.00
25YR-72HR	33.50	47853.0	18870.0	28983.0	0.0	0.00
25YR-72HR	33.75	48590.1	19111.8	29478.4	0.0	0.00
25YR-72HR	34.00	49329.6	19353.6	29976.0	0.0	0.00
25YR-72HR	34.25	50072.8	19595.8	30476.9	0.0	0.00
25YR-72HR	34.50	50818.6	19838.2	30980.4	0.0	0.00
25YR-72HR	34.75	51568.0	20081.0	31487.0	0.0	0.00
25YR-72HR	35.00	52319.5	20323.7	31995.8	0.0	0.00
25YR-72HR	35.25	53074.3	20566.8	32507.5	0.0	0.00
25YR-72HR	35.50	53832.1	20810.1	33022.0	0.0	0.00
25YR-72HR	35.75	54593.0	21053.7	33539.2	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	36.00	55356.2	21297.4	34058.8	0.0	0.00
25YR-72HR	36.25	56124.6	21541.9	34582.7	0.0	0.00
25YR-72HR	36.50	56899.4	21787.8	35111.7	0.0	0.00
25YR-72HR	36.75	57678.5	22034.4	35644.1	0.0	0.00
25YR-72HR	37.00	58460.9	22281.5	36179.5	0.0	0.00
25YR-72HR	37.25	59245.7	22528.6	36717.1	0.0	0.00
25YR-72HR	37.50	60033.6	22776.1	37257.5	0.0	0.00
25YR-72HR	37.75	60823.6	23023.6	37800.0	0.0	0.00
25YR-72HR	38.00	61616.8	23271.4	38345.4	0.0	0.00
25YR-72HR	38.25	62412.2	23519.3	38892.9	0.0	0.00
25YR-72HR	38.50	63210.3	23767.4	39443.0	0.0	0.00
25YR-72HR	38.75	64010.8	24015.6	39995.2	0.0	0.00
25YR-72HR	39.00	64814.0	24264.0	40549.9	0.0	0.00
25YR-72HR	39.25	65619.4	24512.6	41106.8	0.0	0.00
25YR-72HR	39.50	66427.5	24761.4	41666.1	0.0	0.00
25YR-72HR	39.75	67238.0	25010.3	42227.7	0.0	0.00
25YR-72HR	40.00	68050.9	25259.4	42791.5	0.0	0.00
25YR-72HR	40.25	68866.1	25508.6	43357.4	0.0	0.00
25YR-72HR	40.50	69683.8	25758.0	43925.8	-0.0	-0.00
25YR-72HR	40.75	70503.0	26007.3	44495.6	0.0	0.00
25YR-72HR	41.00	71325.1	26257.0	45068.1	0.0	0.00
25YR-72HR	41.25	72149.6	26506.8	45642.8	-0.0	-0.00
25YR-72HR	41.50	72976.3	26756.8	46219.5	0.0	0.00
25YR-72HR	41.75	73804.7	27006.8	46797.9	0.0	0.00
25YR-72HR	42.00	74635.9	27257.0	47378.8	-0.0	-0.00
25YR-72HR	42.25	75469.0	27507.4	47961.7	-0.0	-0.00
25YR-72HR	42.50	76303.9	27757.7	48546.2	-0.0	-0.00
25YR-72HR	42.75	77141.3	28008.3	49133.0	-0.0	-0.00
25YR-72HR	43.00	77980.4	28258.9	49721.5	-0.0	-0.00
25YR-72HR	43.25	78821.9	28509.7	50312.2	-0.0	-0.00
25YR-72HR	43.50	79665.7	28760.7	50905.0	-0.0	-0.00
25YR-72HR	43.75	80510.8	29011.6	51499.1	-0.0	-0.00
25YR-72HR	44.00	81358.7	29263.0	52095.7	0.0	0.00
25YR-72HR	44.25	82207.8	29514.1	52693.7	0.0	0.00
25YR-72HR	44.50	83059.5	29765.5	53293.9	0.0	0.00
25YR-72HR	44.75	83912.6	30016.9	53895.7	0.0	0.00
25YR-72HR	45.00	84767.8	30268.5	54499.3	0.0	0.00
25YR-72HR	45.25	85625.1	30520.3	55104.9	0.0	0.00
25YR-72HR	45.50	86484.3	30772.1	55712.2	0.0	0.00
25YR-72HR	45.75	87345.5	31024.0	56321.4	0.0	0.00
25YR-72HR	46.00	88208.4	31276.1	56932.3	0.0	0.00
25YR-72HR	46.25	89072.5	31528.1	57544.5	0.0	0.00
25YR-72HR	46.50	89938.8	31780.2	58158.5	0.0	0.00
25YR-72HR	46.75	90807.2	32032.6	58774.6	0.0	0.00
25YR-72HR	47.00	91676.8	32284.8	59391.9	0.0	0.00
25YR-72HR	47.25	92548.6	32537.3	60011.2	0.0	0.00
25YR-72HR	47.50	93422.5	32790.1	60632.4	0.0	0.00
25YR-72HR	47.75	94297.3	33042.6	61254.7	0.0	0.00
25YR-72HR	48.00	95174.2	33295.4	61878.8	0.0	0.00
25YR-72HR	48.25	96079.7	33556.0	62523.7	0.0	0.00
25YR-72HR	48.33	96394.5	33646.7	62747.8	0.0	0.00
25YR-72HR	48.42	96712.8	33738.5	62974.2	0.0	0.00
25YR-72HR	48.50	97033.7	33831.2	63202.4	0.0	0.00
25YR-72HR	48.58	97356.0	33924.4	63431.7	0.0	0.00
25YR-72HR	48.67	97680.3	34018.0	63662.3	0.0	0.00
25YR-72HR	48.75	98005.9	34112.1	63893.8	0.0	0.00
25YR-72HR	48.83	98332.1	34206.3	64125.8	0.0	0.00
25YR-72HR	48.92	98659.2	34300.8	64358.4	0.0	0.00
25YR-72HR	49.00	98986.9	34395.4	64591.5	0.0	0.00
25YR-72HR	49.08	99315.0	34489.1	64826.0	0.0	0.00
25YR-72HR	49.17	99644.8	34582.5	65062.3	0.0	0.00
25YR-72HR	49.25	99976.7	34676.5	65300.2	0.0	0.00
25YR-72HR	49.33	100309.4	34770.7	65538.8	0.0	0.00
25YR-72HR	49.42	100643.4	34865.2	65778.1	0.0	0.00
25YR-72HR	49.50	100978.4	34960.0	66018.3	0.0	0.00
25YR-72HR	49.58	101313.4	35054.8	66258.6	0.0	0.00
25YR-72HR	49.67	101649.1	35149.8	66499.3	0.0	0.00
25YR-72HR	49.75	101985.0	35244.7	66740.3	0.0	0.00
25YR-72HR	49.83	102321.9	35339.9	66982.0	0.0	0.00
25YR-72HR	49.92	102658.5	35435.0	67223.6	0.0	0.00
25YR-72HR	50.00	102996.0	35530.2	67465.8	0.0	0.00
25YR-72HR	50.08	103337.8	35626.0	67711.8	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	50.17	103692.6	35724.4	67968.2	0.0	0.00
25YR-72HR	50.25	104062.1	35827.1	68235.0	0.0	0.00
25YR-72HR	50.33	104441.0	35932.9	68508.1	0.0	0.00
25YR-72HR	50.42	104825.6	36040.6	68785.0	0.0	0.00
25YR-72HR	50.50	105215.9	36150.0	69065.8	0.0	0.00
25YR-72HR	50.58	105608.8	36260.3	69348.5	0.0	0.00
25YR-72HR	50.67	106004.4	36371.4	69633.0	0.0	0.00
25YR-72HR	50.75	106403.4	36483.4	69919.9	0.0	0.00
25YR-72HR	50.83	106802.5	36595.6	70206.9	0.0	0.00
25YR-72HR	50.92	107203.0	36709.4	70493.6	0.0	0.00
25YR-72HR	51.00	107605.0	36826.8	70778.2	0.0	0.00
25YR-72HR	51.08	108009.2	36949.8	71059.4	0.0	0.00
25YR-72HR	51.17	108421.4	37080.4	71341.0	0.0	0.00
25YR-72HR	51.25	108843.5	37220.0	71623.6	0.0	0.00
25YR-72HR	51.33	109270.2	37367.9	71902.4	0.0	0.00
25YR-72HR	51.42	109700.7	37524.3	72176.4	0.0	0.00
25YR-72HR	51.50	110134.8	37689.7	72445.1	0.0	0.00
25YR-72HR	51.58	110571.4	37863.9	72707.5	0.0	0.00
25YR-72HR	51.67	111008.9	38046.6	72962.3	0.0	0.00
25YR-72HR	51.75	111448.7	38238.5	73210.2	0.0	0.00
25YR-72HR	51.83	111888.9	38438.9	73449.9	0.0	0.00
25YR-72HR	51.92	112330.4	38648.5	73681.9	0.0	0.00
25YR-72HR	52.00	112772.1	38866.6	73905.5	0.0	0.00
25YR-72HR	52.08	113224.7	39094.1	74130.6	0.0	0.00
25YR-72HR	52.17	113705.3	39335.7	74369.7	0.0	0.00
25YR-72HR	52.25	114216.2	39595.3	74620.8	0.0	0.00
25YR-72HR	52.33	114748.1	39872.4	74875.6	0.0	0.00
25YR-72HR	52.42	115294.4	40165.2	75129.2	0.0	0.00
25YR-72HR	52.50	115850.1	40471.9	75378.2	0.0	0.00
25YR-72HR	52.58	116413.8	40792.2	75621.5	0.0	0.00
25YR-72HR	52.67	116984.5	41126.0	75858.5	0.0	0.00
25YR-72HR	52.75	117558.3	41471.2	76087.1	0.0	0.00
25YR-72HR	52.83	118136.2	41828.8	76307.4	0.0	0.00
25YR-72HR	52.92	118716.1	42197.5	76518.6	0.0	0.00
25YR-72HR	53.00	119298.5	42577.8	76720.8	0.0	0.00
25YR-72HR	53.08	119890.2	42968.8	76921.4	0.0	0.00
25YR-72HR	53.17	120510.6	43375.8	77134.8	0.0	0.00
25YR-72HR	53.25	121162.1	43802.3	77359.7	0.0	0.00
25YR-72HR	53.33	121835.2	44247.8	77587.4	0.0	0.00
25YR-72HR	53.42	122523.5	44710.5	77813.0	0.0	0.00
25YR-72HR	53.50	123221.5	45188.0	78033.4	0.0	0.00
25YR-72HR	53.58	123927.6	45680.0	78247.5	0.0	0.00
25YR-72HR	53.67	124640.1	46185.6	78454.5	0.0	0.00
25YR-72HR	53.75	125357.8	46704.3	78653.5	0.0	0.00
25YR-72HR	53.83	126079.1	47235.2	78843.8	0.0	0.00
25YR-72HR	53.92	126801.7	47776.9	79024.9	0.0	0.00
25YR-72HR	54.00	127526.2	48329.3	79196.8	0.0	0.00
25YR-72HR	54.08	128263.4	48893.8	79369.7	0.0	0.00
25YR-72HR	54.17	129029.5	49472.7	79556.8	0.0	0.00
25YR-72HR	54.25	129828.2	50071.3	79756.9	0.0	0.00
25YR-72HR	54.33	130650.1	50689.4	79960.7	0.0	0.00
25YR-72HR	54.42	131487.4	51324.5	80162.9	0.0	0.00
25YR-72HR	54.50	132334.8	51974.5	80360.3	0.0	0.00
25YR-72HR	54.58	133192.0	52640.0	80552.1	0.0	0.00
25YR-72HR	54.67	134056.2	53319.0	80737.1	0.0	0.00
25YR-72HR	54.75	134924.7	54010.2	80914.4	0.0	0.00
25YR-72HR	54.83	135799.1	54715.1	81083.9	0.0	0.00
25YR-72HR	54.92	136675.5	55430.8	81244.7	0.0	0.00
25YR-72HR	55.00	137552.2	56155.6	81396.6	0.0	0.00
25YR-72HR	55.08	138440.0	56892.6	81547.4	0.0	0.00
25YR-72HR	55.17	139359.6	57646.9	81712.7	0.0	0.00
25YR-72HR	55.25	140313.3	58421.2	81892.1	0.0	0.00
25YR-72HR	55.33	141290.8	59215.0	82075.8	0.0	0.00
25YR-72HR	55.42	142284.0	60025.7	82258.3	0.0	0.00
25YR-72HR	55.50	143286.3	60850.0	82436.3	0.0	0.00
25YR-72HR	55.58	144299.4	61690.2	82609.2	0.0	0.00
25YR-72HR	55.67	145318.5	62542.9	82775.6	0.0	0.00
25YR-72HR	55.75	146344.3	63409.2	82935.1	0.0	0.00
25YR-72HR	55.83	147374.5	64287.7	83086.8	0.0	0.00
25YR-72HR	55.92	148408.7	65178.1	83230.6	0.0	0.00
25YR-72HR	56.00	149443.6	66077.5	83366.0	0.0	0.00
25YR-72HR	56.02	149650.8	66258.5	83392.3	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	56.03	149859.0	66440.2	83418.8	0.0	0.00
25YR-72HR	56.05	150065.8	66620.4	83445.4	0.0	0.00
25YR-72HR	56.07	150276.3	66803.3	83473.0	0.0	0.00
25YR-72HR	56.08	150487.5	66986.0	83501.4	0.0	0.00
25YR-72HR	56.10	150700.6	67169.5	83531.2	0.0	0.00
25YR-72HR	56.12	150915.1	67353.0	83562.1	0.0	0.00
25YR-72HR	56.13	151133.4	67538.9	83594.6	-0.0	-0.00
25YR-72HR	56.15	151351.5	67723.7	83627.7	0.0	0.00
25YR-72HR	56.17	151573.1	67911.1	83662.1	-0.0	-0.00
25YR-72HR	56.18	151795.5	68098.5	83697.0	-0.0	-0.00
25YR-72HR	56.20	152019.8	68287.2	83732.7	-0.0	-0.00
25YR-72HR	56.22	152245.8	68477.0	83768.9	-0.0	-0.00
25YR-72HR	56.23	152473.5	68668.0	83805.5	0.0	0.00
25YR-72HR	56.25	152702.1	68859.7	83842.4	0.0	0.00
25YR-72HR	56.27	152930.2	69050.9	83879.2	0.0	0.00
25YR-72HR	56.28	153161.4	69244.8	83916.6	0.0	0.00
25YR-72HR	56.30	153391.5	69437.7	83953.8	0.0	0.00
25YR-72HR	56.32	153625.9	69634.3	83991.7	0.0	0.00
25YR-72HR	56.33	153857.5	69828.6	84028.9	0.0	0.00
25YR-72HR	56.35	154090.1	70023.9	84066.1	0.0	0.00
25YR-72HR	56.37	154324.2	70220.7	84103.5	0.0	0.00
25YR-72HR	56.38	154559.3	70418.4	84140.9	0.0	0.00
25YR-72HR	56.40	154796.2	70617.8	84178.4	0.0	0.00
25YR-72HR	56.42	155031.3	70815.9	84215.4	0.0	0.00
25YR-72HR	56.43	155270.1	71017.3	84252.7	0.0	0.00
25YR-72HR	56.45	155506.7	71217.2	84289.5	0.0	0.00
25YR-72HR	56.47	155743.7	71417.6	84326.1	0.0	0.00
25YR-72HR	56.48	155982.6	71620.0	84362.7	0.0	0.00
25YR-72HR	56.50	156220.4	71821.6	84398.9	0.0	0.00
25YR-72HR	56.52	156460.1	72025.1	84435.0	0.0	0.00
25YR-72HR	56.53	156700.3	72229.2	84471.0	-0.0	-0.00
25YR-72HR	56.55	156938.8	72432.3	84506.5	-0.0	-0.00
25YR-72HR	56.57	157179.7	72637.7	84542.0	-0.0	-0.00
25YR-72HR	56.58	157421.0	72843.7	84577.3	-0.0	-0.00
25YR-72HR	56.60	157662.2	73049.9	84612.3	0.0	0.00
25YR-72HR	56.62	157901.8	73255.0	84646.7	0.0	0.00
25YR-72HR	56.63	158144.3	73463.1	84681.3	0.0	0.00
25YR-72HR	56.65	158385.6	73670.2	84715.4	0.0	0.00
25YR-72HR	56.67	158627.9	73878.6	84749.2	0.0	0.00
25YR-72HR	56.68	158871.3	74088.4	84783.0	0.0	0.00
25YR-72HR	56.70	159114.9	74298.6	84816.4	0.0	0.00
25YR-72HR	56.72	159357.0	74507.8	84849.2	0.0	0.00
25YR-72HR	56.73	159599.3	74717.5	84881.8	0.0	0.00
25YR-72HR	56.75	159843.8	74929.5	84914.3	-0.0	-0.00
25YR-72HR	56.77	160087.1	75140.8	84946.3	-0.0	-0.00
25YR-72HR	56.78	160331.0	75353.0	84978.0	-0.0	-0.00
25YR-72HR	56.80	160575.3	75565.9	85009.4	-0.0	-0.00
25YR-72HR	56.82	160819.5	75779.1	85040.4	-0.0	-0.00
25YR-72HR	56.83	161064.9	75993.7	85071.3	-0.0	-0.00
25YR-72HR	56.85	161309.5	76207.9	85101.6	-0.0	-0.00
25YR-72HR	56.87	161554.1	76422.5	85131.6	-0.0	-0.00
25YR-72HR	56.88	161798.9	76637.6	85161.3	0.0	0.00
25YR-72HR	56.90	162043.8	76853.2	85190.6	-0.0	-0.00
25YR-72HR	56.92	162288.9	77069.3	85219.6	-0.0	-0.00
25YR-72HR	56.93	162534.0	77285.8	85248.2	-0.0	-0.00
25YR-72HR	56.95	162779.2	77502.7	85276.4	-0.0	-0.00
25YR-72HR	56.97	163023.0	77718.8	85304.2	0.0	0.00
25YR-72HR	56.98	163269.4	77937.5	85331.9	0.0	0.00
25YR-72HR	57.00	163513.8	78154.8	85359.0	0.0	0.00
25YR-72HR	57.02	163760.0	78373.9	85386.1	0.0	0.00
25YR-72HR	57.03	164006.3	78593.0	85413.2	-0.0	-0.00
25YR-72HR	57.05	164254.5	78813.5	85441.0	-0.0	-0.00
25YR-72HR	57.07	164503.6	79034.2	85469.4	-0.0	-0.00
25YR-72HR	57.08	164754.2	79255.0	85499.2	0.0	0.00
25YR-72HR	57.10	165005.3	79474.8	85530.5	0.0	0.00
25YR-72HR	57.12	165261.1	79697.4	85563.7	0.0	0.00
25YR-72HR	57.13	165521.2	79922.4	85598.9	0.0	0.00
25YR-72HR	57.15	165782.3	80147.1	85635.3	0.0	0.00
25YR-72HR	57.17	166045.3	80372.4	85672.9	0.0	0.00
25YR-72HR	57.18	166310.4	80598.9	85711.5	0.0	0.00
25YR-72HR	57.20	166577.5	80826.5	85751.0	0.0	0.00
25YR-72HR	57.22	166848.2	81056.6	85791.5	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	57.23	167119.9	81287.4	85832.5	0.0	0.00
25YR-72HR	57.25	167390.9	81517.3	85873.6	0.0	0.00
25YR-72HR	57.27	167665.0	81749.7	85915.3	0.0	0.00
25YR-72HR	57.28	167940.4	81983.1	85957.3	0.0	0.00
25YR-72HR	57.30	168217.6	82218.0	85999.6	0.0	0.00
25YR-72HR	57.32	168494.8	82452.8	86041.9	0.0	0.00
25YR-72HR	57.33	168775.3	82690.6	86084.7	0.0	0.00
25YR-72HR	57.35	169054.6	82927.4	86127.2	0.0	0.00
25YR-72HR	57.37	169335.3	83165.5	86169.8	0.0	0.00
25YR-72HR	57.38	169617.5	83405.0	86212.4	0.0	0.00
25YR-72HR	57.40	169898.1	83643.5	86254.6	0.0	0.00
25YR-72HR	57.42	170183.0	83885.7	86297.3	0.0	0.00
25YR-72HR	57.43	170466.8	84127.4	86339.5	0.0	0.00
25YR-72HR	57.45	170751.3	84369.8	86381.5	0.0	0.00
25YR-72HR	57.47	171036.4	84613.1	86423.3	0.0	0.00
25YR-72HR	57.48	171320.3	84855.6	86464.7	0.0	0.00
25YR-72HR	57.50	171608.4	85102.0	86506.4	0.0	0.00
25YR-72HR	57.52	171893.7	85346.0	86547.7	0.0	0.00
25YR-72HR	57.53	172183.3	85593.6	86589.7	0.0	0.00
25YR-72HR	57.55	172472.2	85840.4	86631.8	0.0	0.00
25YR-72HR	57.57	172762.5	86088.0	86674.5	0.0	0.00
25YR-72HR	57.58	173052.6	86334.9	86717.7	0.0	0.00
25YR-72HR	57.60	173348.2	86585.9	86762.3	0.0	0.00
25YR-72HR	57.62	173643.2	86835.8	86807.4	0.0	0.00
25YR-72HR	57.63	173941.4	87087.9	86853.5	0.0	0.00
25YR-72HR	57.65	174238.8	87338.9	86899.9	0.0	0.00
25YR-72HR	57.67	174541.0	87593.7	86947.3	0.0	0.00
25YR-72HR	57.68	174843.5	87848.6	86994.9	0.0	0.00
25YR-72HR	57.70	175147.4	88104.6	87042.9	0.0	0.00
25YR-72HR	57.72	175452.6	88361.7	87091.0	0.0	0.00
25YR-72HR	57.73	175759.0	88619.8	87139.2	0.0	0.00
25YR-72HR	57.75	176066.5	88879.0	87187.5	0.0	0.00
25YR-72HR	57.77	176373.7	89138.2	87235.5	0.0	0.00
25YR-72HR	57.78	176685.0	89401.1	87283.9	0.0	0.00
25YR-72HR	57.80	176994.6	89662.8	87331.8	0.0	0.00
25YR-72HR	57.82	177304.4	89924.9	87379.4	0.0	0.00
25YR-72HR	57.83	177617.4	90190.2	87427.2	0.0	0.00
25YR-72HR	57.85	177928.6	90454.2	87474.4	0.0	0.00
25YR-72HR	57.87	178242.4	90720.8	87521.6	0.0	0.00
25YR-72HR	57.88	178556.8	90988.3	87568.5	0.0	0.00
25YR-72HR	57.90	178869.8	91255.0	87614.8	0.0	0.00
25YR-72HR	57.92	179185.9	91524.8	87661.1	0.0	0.00
25YR-72HR	57.93	179499.9	91793.3	87706.7	0.0	0.00
25YR-72HR	57.95	179817.0	92064.8	87752.2	0.0	0.00
25YR-72HR	57.97	180131.9	92334.9	87797.0	0.0	0.00
25YR-72HR	57.98	180448.4	92606.9	87841.5	0.0	0.00
25YR-72HR	58.00	180766.7	92880.8	87885.9	0.0	0.00
25YR-72HR	58.02	181082.8	93153.5	87929.4	0.0	0.00
25YR-72HR	58.03	181402.3	93429.4	87972.9	0.0	0.00
25YR-72HR	58.05	181722.8	93706.3	88016.6	0.0	0.00
25YR-72HR	58.07	182040.6	93980.7	88060.0	0.0	0.00
25YR-72HR	58.08	182364.3	94259.5	88104.7	0.0	0.00
25YR-72HR	58.10	182687.4	94537.1	88150.2	0.0	0.00
25YR-72HR	58.12	183015.5	94818.2	88197.2	0.0	0.00
25YR-72HR	58.13	183343.1	95098.2	88244.9	0.0	0.00
25YR-72HR	58.15	183674.4	95380.7	88293.7	0.0	0.00
25YR-72HR	58.17	184009.0	95665.6	88343.4	0.0	0.00
25YR-72HR	58.18	184342.8	95949.5	88393.4	0.0	0.00
25YR-72HR	58.20	184680.5	96236.4	88444.1	0.0	0.00
25YR-72HR	58.22	185020.4	96525.1	88495.3	0.0	0.00
25YR-72HR	58.23	185358.9	96812.7	88546.2	0.0	0.00
25YR-72HR	58.25	185701.6	97103.9	88597.6	0.0	0.00
25YR-72HR	58.27	186042.6	97393.9	88648.7	0.0	0.00
25YR-72HR	58.28	186386.9	97686.9	88700.0	0.0	0.00
25YR-72HR	58.30	186730.2	97979.2	88751.0	0.0	0.00
25YR-72HR	58.32	187077.3	98275.1	88802.2	0.0	0.00
25YR-72HR	58.33	187422.4	98569.5	88852.9	0.0	0.00
25YR-72HR	58.35	187771.3	98867.5	88903.7	0.0	0.00
25YR-72HR	58.37	188120.2	99166.0	88954.3	0.0	0.00
25YR-72HR	58.38	188467.7	99463.6	89004.2	0.0	0.00
25YR-72HR	58.40	188818.9	99764.7	89054.2	0.0	0.00
25YR-72HR	58.42	189167.8	100064.3	89103.5	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	58.43	189520.1	100367.4	89152.8	0.0	0.00
25YR-72HR	58.45	189869.4	100668.3	89201.1	0.0	0.00
25YR-72HR	58.47	190222.9	100973.3	89249.6	0.0	0.00
25YR-72HR	58.48	190574.0	101276.7	89297.3	0.0	0.00
25YR-72HR	58.50	190928.7	101583.6	89345.0	0.0	0.00
25YR-72HR	58.52	191281.5	101888.8	89392.7	0.0	0.00
25YR-72HR	58.53	191638.3	102196.6	89441.7	0.0	0.00
25YR-72HR	58.55	191998.7	102506.1	89492.6	0.0	0.00
25YR-72HR	58.57	192360.5	102814.3	89546.1	0.0	0.00
25YR-72HR	58.58	192730.9	103126.7	89604.2	0.0	0.00
25YR-72HR	58.60	193105.0	103438.4	89666.6	0.0	0.00
25YR-72HR	58.62	193488.7	103754.4	89734.3	0.0	0.00
25YR-72HR	58.63	193878.7	104072.2	89806.5	0.0	0.00
25YR-72HR	58.65	194275.4	104392.6	89882.8	0.0	0.00
25YR-72HR	58.67	194678.5	104715.8	89962.7	0.0	0.00
25YR-72HR	58.68	195087.5	105041.8	90045.7	0.0	0.00
25YR-72HR	58.70	195501.7	105370.6	90131.1	0.0	0.00
25YR-72HR	58.72	195920.7	105702.2	90218.5	0.0	0.00
25YR-72HR	58.73	196344.1	106036.5	90307.6	0.0	0.00
25YR-72HR	58.75	196771.5	106373.5	90398.0	0.0	0.00
25YR-72HR	58.77	197203.5	106713.8	90489.6	0.0	0.00
25YR-72HR	58.78	197635.3	107053.8	90581.5	0.0	0.00
25YR-72HR	58.80	198073.9	107399.1	90674.8	0.0	0.00
25YR-72HR	58.82	198515.5	107746.8	90768.7	0.0	0.00
25YR-72HR	58.83	198959.9	108097.0	90862.9	0.0	0.00
25YR-72HR	58.85	199403.1	108446.5	90956.6	0.0	0.00
25YR-72HR	58.87	199852.5	108801.3	91051.3	0.0	0.00
25YR-72HR	58.88	200305.1	109159.0	91146.1	0.0	0.00
25YR-72HR	58.90	200755.0	109515.3	91239.7	0.0	0.00
25YR-72HR	58.92	201210.6	109876.7	91333.9	0.0	0.00
25YR-72HR	58.93	201668.0	110240.2	91427.8	0.0	0.00
25YR-72HR	58.95	202127.0	110605.8	91521.2	0.0	0.00
25YR-72HR	58.97	202583.9	110970.4	91613.4	0.0	0.00
25YR-72HR	58.98	203046.1	111340.1	91705.9	0.0	0.00
25YR-72HR	59.00	203510.0	111711.9	91798.2	0.0	0.00
25YR-72HR	59.02	203976.8	112085.6	91891.2	0.0	0.00
25YR-72HR	59.03	204444.7	112458.5	91986.2	0.0	0.00
25YR-72HR	59.05	204923.7	112837.1	92086.6	0.0	0.00
25YR-72HR	59.07	205412.7	113218.7	92194.0	0.0	0.00
25YR-72HR	59.08	205915.4	113604.1	92311.3	0.0	0.00
25YR-72HR	59.10	206429.9	113990.7	92439.2	0.0	0.00
25YR-72HR	59.12	206966.3	114386.6	92579.7	0.0	0.00
25YR-72HR	59.13	207516.6	114786.5	92730.0	0.0	0.00
25YR-72HR	59.15	208082.1	115192.5	92889.5	0.0	0.00
25YR-72HR	59.17	208661.6	115604.8	93056.8	0.0	0.00
25YR-72HR	59.18	209254.0	116023.4	93230.6	0.0	0.00
25YR-72HR	59.20	209858.2	116448.2	93410.0	0.0	0.00
25YR-72HR	59.22	210473.2	116879.3	93593.9	0.0	0.00
25YR-72HR	59.23	211097.7	117316.4	93781.3	0.0	0.00
25YR-72HR	59.25	211731.0	117759.5	93971.5	0.0	0.00
25YR-72HR	59.27	212372.7	118208.4	94164.3	0.0	0.00
25YR-72HR	59.28	213022.0	118662.9	94359.0	0.0	0.00
25YR-72HR	59.30	213678.3	119123.0	94555.3	0.0	0.00
25YR-72HR	59.32	214341.3	119588.6	94752.7	0.0	0.00
25YR-72HR	59.33	215010.4	120059.5	94950.8	0.0	0.00
25YR-72HR	59.35	215685.2	120535.7	95149.5	0.0	0.00
25YR-72HR	59.37	216365.3	121017.1	95348.2	0.0	0.00
25YR-72HR	59.38	217050.4	121503.6	95546.8	0.0	0.00
25YR-72HR	59.40	217740.1	121995.1	95745.0	0.0	0.00
25YR-72HR	59.42	218434.0	122491.5	95942.5	0.0	0.00
25YR-72HR	59.43	219131.8	122992.7	96139.1	0.0	0.00
25YR-72HR	59.45	219833.3	123498.7	96334.5	0.0	0.00
25YR-72HR	59.47	220538.3	124009.4	96528.9	0.0	0.00
25YR-72HR	59.48	221246.6	124524.7	96721.9	0.0	0.00
25YR-72HR	59.50	221964.2	125044.7	96919.5	0.0	0.00
25YR-72HR	59.52	222707.3	125568.1	97139.2	0.0	0.00
25YR-72HR	59.53	223501.3	126096.6	97404.6	0.0	0.00
25YR-72HR	59.55	224386.0	126636.5	97749.6	0.0	0.00
25YR-72HR	59.57	225417.1	127196.7	98220.3	0.0	0.00
25YR-72HR	59.58	226640.9	127786.6	98854.3	0.0	0.00
25YR-72HR	59.60	228110.8	128425.0	99685.8	0.0	0.00
25YR-72HR	59.62	229845.0	129121.5	100723.4	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	59.63	231831.0	129882.1	101948.9	0.0	0.00
25YR-72HR	59.65	234060.6	130715.1	103345.5	0.0	0.00
25YR-72HR	59.67	236524.3	131626.8	104897.5	0.0	0.00
25YR-72HR	59.68	239213.3	132624.0	106589.3	0.0	0.00
25YR-72HR	59.70	242069.7	133694.4	108375.3	0.0	0.00
25YR-72HR	59.72	245098.6	134847.6	110251.0	0.0	0.00
25YR-72HR	59.73	248301.9	136093.5	112208.4	0.0	0.00
25YR-72HR	59.75	251646.4	137428.3	114218.1	0.0	0.00
25YR-72HR	59.77	255135.0	138852.9	116282.0	0.0	0.00
25YR-72HR	59.78	258765.8	140367.7	118398.1	0.0	0.00
25YR-72HR	59.80	262503.4	141959.2	120544.2	0.0	0.00
25YR-72HR	59.82	266364.6	143636.5	122728.2	0.0	0.00
25YR-72HR	59.83	270297.5	145370.5	124927.0	0.0	0.00
25YR-72HR	59.85	274325.6	147164.0	127161.6	0.0	0.00
25YR-72HR	59.87	278422.3	149000.5	129421.7	0.0	0.00
25YR-72HR	59.88	282710.0	150932.8	131777.2	0.0	0.00
25YR-72HR	59.90	286951.2	152852.2	134099.0	0.0	0.00
25YR-72HR	59.92	291374.8	154861.3	136513.6	0.0	0.00
25YR-72HR	59.93	295776.9	156861.9	138914.9	0.0	0.00
25YR-72HR	59.95	300311.9	158920.2	141391.7	0.0	0.00
25YR-72HR	59.97	304816.4	160960.5	143855.9	0.0	0.00
25YR-72HR	59.98	309450.1	163054.3	146395.8	0.0	0.00
25YR-72HR	60.00	314176.5	165185.8	148990.7	0.0	0.00
25YR-72HR	60.02	318852.5	167300.7	151551.8	0.0	0.00
25YR-72HR	60.03	323603.6	169469.0	154134.6	0.0	0.00
25YR-72HR	60.05	328199.8	171597.6	156602.2	0.0	0.00
25YR-72HR	60.07	332706.3	173730.1	158976.2	0.0	0.00
25YR-72HR	60.08	337123.1	175889.5	161233.5	0.0	0.00
25YR-72HR	60.10	341364.7	178049.0	163315.7	0.0	0.00
25YR-72HR	60.12	345301.5	180137.5	165164.0	0.0	0.00
25YR-72HR	60.13	349085.3	182229.2	166856.0	0.0	0.00
25YR-72HR	60.15	352662.5	184288.3	168374.2	0.0	0.00
25YR-72HR	60.17	356088.0	186337.8	169750.2	0.0	0.00
25YR-72HR	60.18	359347.6	188362.5	170985.1	0.0	0.00
25YR-72HR	60.20	362451.9	190362.6	172089.3	0.0	0.00
25YR-72HR	60.22	365424.9	192345.6	173079.2	0.0	0.00
25YR-72HR	60.23	368279.3	194311.9	173967.4	0.0	0.00
25YR-72HR	60.25	371028.0	196266.4	174761.7	0.0	0.00
25YR-72HR	60.27	373672.7	198206.5	175466.2	0.0	0.00
25YR-72HR	60.28	376207.7	200122.9	176084.8	0.0	0.00
25YR-72HR	60.30	378708.8	202068.9	176639.9	0.0	0.00
25YR-72HR	60.32	381065.1	203954.2	177111.0	0.0	0.00
25YR-72HR	60.33	383345.8	205827.9	177517.9	0.0	0.00
25YR-72HR	60.35	385611.9	207738.2	177873.8	0.0	0.00
25YR-72HR	60.37	387755.3	209589.9	178165.4	0.0	0.00
25YR-72HR	60.38	389837.7	211431.5	178406.2	0.0	0.00
25YR-72HR	60.40	391914.4	213310.1	178604.2	0.0	0.00
25YR-72HR	60.42	393886.2	215132.4	178753.8	0.0	0.00
25YR-72HR	60.43	395809.8	216945.8	178864.0	0.0	0.00
25YR-72HR	60.45	397734.7	218797.1	178937.7	0.0	0.00
25YR-72HR	60.47	399565.6	220593.8	178971.9	0.0	0.00
25YR-72HR	60.48	401351.9	222382.4	178969.5	0.0	0.00
25YR-72HR	60.50	403137.4	224208.5	178928.8	0.0	0.00
25YR-72HR	60.52	404831.8	225981.0	178850.8	0.0	0.00
25YR-72HR	60.53	406478.8	227745.3	178733.5	0.0	0.00
25YR-72HR	60.55	408115.6	229546.0	178569.6	0.0	0.00
25YR-72HR	60.57	409655.7	231292.3	178363.4	0.0	0.00
25YR-72HR	60.58	411135.9	233028.4	178107.5	0.0	0.00
25YR-72HR	60.60	412560.0	234762.5	177797.5	0.0	0.00
25YR-72HR	60.62	413919.6	236484.7	177434.8	0.0	0.00
25YR-72HR	60.63	415242.6	238229.5	177013.1	0.0	0.00
25YR-72HR	60.65	416479.5	239926.9	176552.6	0.0	0.00
25YR-72HR	60.67	417660.7	241612.0	176048.7	0.0	0.00
25YR-72HR	60.68	418790.6	243285.1	175505.5	0.0	0.00
25YR-72HR	60.70	419869.3	244939.8	174929.5	0.0	0.00
25YR-72HR	60.72	420911.8	246593.7	174318.0	0.0	0.00
25YR-72HR	60.73	421929.7	248262.1	173667.6	0.0	0.00
25YR-72HR	60.75	422894.4	249891.9	173002.5	0.0	0.00
25YR-72HR	60.77	423826.9	251512.3	172314.6	0.0	0.00
25YR-72HR	60.78	424730.1	253123.8	171606.3	0.0	0.00
25YR-72HR	60.80	425606.5	254726.8	170879.7	0.0	0.00
25YR-72HR	60.82	426458.5	256321.8	170136.7	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	60.83	427301.5	257935.0	169366.5	0.0	0.00
25YR-72HR	60.85	428110.1	259514.9	168595.2	0.0	0.00
25YR-72HR	60.87	428899.6	261087.8	167811.8	0.0	0.00
25YR-72HR	60.88	429671.6	262653.9	167017.6	0.0	0.00
25YR-72HR	60.90	430428.0	264213.7	166214.4	0.0	0.00
25YR-72HR	60.92	431182.5	265792.5	165389.9	0.0	0.00
25YR-72HR	60.93	431912.0	267340.1	164572.0	0.0	0.00
25YR-72HR	60.95	432630.5	268881.9	163748.6	0.0	0.00
25YR-72HR	60.97	433339.2	270418.4	162920.9	0.0	0.00
25YR-72HR	60.98	434039.7	271949.7	162090.0	0.0	0.00
25YR-72HR	61.00	434744.6	273500.9	161243.7	0.0	0.00
25YR-72HR	61.02	435425.9	275010.1	160415.8	0.0	0.00
25YR-72HR	61.03	436105.2	276527.2	159578.1	0.0	0.00
25YR-72HR	61.05	436789.2	278070.3	158718.9	0.0	0.00
25YR-72HR	61.07	437448.9	279577.7	157871.2	0.0	0.00
25YR-72HR	61.08	438095.9	281080.0	157015.8	0.0	0.00
25YR-72HR	61.10	438728.7	282577.0	156151.7	0.0	0.00
25YR-72HR	61.12	439347.3	284068.3	155279.1	0.0	0.00
25YR-72HR	61.13	439952.1	285553.8	154398.4	0.0	0.00
25YR-72HR	61.15	440555.8	287063.5	153492.3	0.0	0.00
25YR-72HR	61.17	441135.3	288537.2	152598.1	0.0	0.00
25YR-72HR	61.18	441703.6	290005.1	151698.5	0.0	0.00
25YR-72HR	61.20	442261.7	291467.4	150794.3	0.0	0.00
25YR-72HR	61.22	442810.5	292924.1	149886.4	0.0	0.00
25YR-72HR	61.23	443351.0	294375.4	148975.7	0.0	0.00
25YR-72HR	61.25	443884.0	295821.4	148062.5	0.0	0.00
25YR-72HR	61.27	444420.4	297291.6	147128.8	0.0	0.00
25YR-72HR	61.28	444939.6	298727.4	146212.3	0.0	0.00
25YR-72HR	61.30	445453.0	300158.1	145294.9	0.0	0.00
25YR-72HR	61.32	445961.0	301584.1	144377.0	0.0	0.00
25YR-72HR	61.33	446464.0	303005.2	143458.8	0.0	0.00
25YR-72HR	61.35	446962.3	304421.6	142540.7	0.0	0.00
25YR-72HR	61.37	447456.4	305833.4	141623.0	0.0	0.00
25YR-72HR	61.38	447956.6	307269.3	140687.3	0.0	0.00
25YR-72HR	61.40	448443.2	308672.0	139771.2	0.0	0.00
25YR-72HR	61.42	448926.5	310069.4	138857.1	0.0	0.00
25YR-72HR	61.43	449406.9	311458.2	137948.6	0.0	0.00
25YR-72HR	61.45	449884.7	312837.2	137047.5	0.0	0.00
25YR-72HR	61.47	450360.0	314205.4	136154.5	0.0	0.00
25YR-72HR	61.48	450842.7	315589.9	135252.8	0.0	0.00
25YR-72HR	61.50	451313.7	316934.7	134379.1	0.0	0.00
25YR-72HR	61.52	451782.6	318267.3	133515.3	0.0	0.00
25YR-72HR	61.53	452249.0	319587.4	132661.6	0.0	0.00
25YR-72HR	61.55	452712.4	320894.3	131818.0	0.0	0.00
25YR-72HR	61.57	453171.9	322187.5	130984.4	0.0	0.00
25YR-72HR	61.58	453626.7	323466.0	130160.7	0.0	0.00
25YR-72HR	61.60	454085.3	324754.2	129331.1	0.0	0.00
25YR-72HR	61.62	454529.0	325997.9	128531.1	0.0	0.00
25YR-72HR	61.63	454967.2	327221.1	127746.1	0.0	0.00
25YR-72HR	61.65	455400.1	328423.0	126977.0	0.0	0.00
25YR-72HR	61.67	455828.0	329603.3	126224.7	0.0	0.00
25YR-72HR	61.68	456254.0	330769.0	125485.0	0.0	0.00
25YR-72HR	61.70	456675.8	331913.1	124762.7	0.0	0.00
25YR-72HR	61.72	457095.5	333040.4	124055.1	0.0	0.00
25YR-72HR	61.73	457504.9	334129.1	123375.9	0.0	0.00
25YR-72HR	61.75	457915.1	335207.9	122707.2	0.0	0.00
25YR-72HR	61.77	458324.5	336272.8	122051.7	0.0	0.00
25YR-72HR	61.78	458727.9	337310.1	121417.8	0.0	0.00
25YR-72HR	61.80	459128.9	338330.3	120798.7	0.0	0.00
25YR-72HR	61.82	459527.8	339334.1	120193.7	0.0	0.00
25YR-72HR	61.83	459924.6	340322.0	119602.5	0.0	0.00
25YR-72HR	61.85	460321.1	341298.5	119022.5	0.0	0.00
25YR-72HR	61.87	460720.7	342271.5	118449.1	0.0	0.00
25YR-72HR	61.88	461109.7	343208.0	117901.7	0.0	0.00
25YR-72HR	61.90	461500.8	344138.5	117362.2	0.0	0.00
25YR-72HR	61.92	461890.4	345054.7	116835.7	0.0	0.00
25YR-72HR	61.93	462279.4	345958.5	116321.0	0.0	0.00
25YR-72HR	61.95	462665.8	346845.3	115820.5	0.0	0.00
25YR-72HR	61.97	463054.0	347725.6	115328.4	0.0	0.00
25YR-72HR	61.98	463438.1	348586.0	114852.1	0.0	0.00
25YR-72HR	62.00	463824.4	349441.0	114383.4	0.0	0.00
25YR-72HR	62.02	464207.1	350278.4	113928.7	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	62.03	464588.5	351105.5	113483.0	0.0	0.00
25YR-72HR	62.05	464967.1	351920.6	113046.5	0.0	0.00
25YR-72HR	62.07	465341.9	352723.6	112618.3	0.0	0.00
25YR-72HR	62.08	465711.3	353514.5	112196.7	0.0	0.00
25YR-72HR	62.10	466074.3	354293.9	111780.5	0.0	0.00
25YR-72HR	62.12	466430.9	355061.7	111369.2	0.0	0.00
25YR-72HR	62.13	466781.0	355818.2	110962.8	0.0	0.00
25YR-72HR	62.15	467125.1	356563.5	110561.7	0.0	0.00
25YR-72HR	62.17	467463.6	357297.5	110166.1	0.0	0.00
25YR-72HR	62.18	467797.0	358020.7	109776.3	0.0	0.00
25YR-72HR	62.20	468125.6	358733.0	109392.6	0.0	0.00
25YR-72HR	62.22	468450.0	359434.9	109015.1	0.0	0.00
25YR-72HR	62.23	468770.6	360126.6	108644.0	0.0	0.00
25YR-72HR	62.25	469087.7	360808.4	108279.3	0.0	0.00
25YR-72HR	62.27	469401.6	361480.6	107921.0	0.0	0.00
25YR-72HR	62.28	469712.5	362143.5	107569.0	0.0	0.00
25YR-72HR	62.30	470020.6	362797.3	107223.3	0.0	0.00
25YR-72HR	62.32	470325.0	363439.5	106885.4	0.0	0.00
25YR-72HR	62.33	470628.2	364075.6	106552.6	0.0	0.00
25YR-72HR	62.35	470930.5	364705.9	106224.6	0.0	0.00
25YR-72HR	62.37	471228.9	365324.3	105904.6	0.0	0.00
25YR-72HR	62.38	471527.3	365938.6	105588.6	0.0	0.00
25YR-72HR	62.40	471822.1	366541.6	105280.5	0.0	0.00
25YR-72HR	62.42	472116.7	367139.9	104976.8	0.0	0.00
25YR-72HR	62.43	472406.9	367725.1	104681.9	0.0	0.00
25YR-72HR	62.45	472699.8	368311.2	104388.7	0.0	0.00
25YR-72HR	62.47	472989.3	368886.1	104103.2	0.0	0.00
25YR-72HR	62.48	473278.0	369455.2	103822.9	0.0	0.00
25YR-72HR	62.50	473565.8	370018.1	103547.8	0.0	0.00
25YR-72HR	62.52	473850.7	370571.2	103279.5	0.0	0.00
25YR-72HR	62.53	474135.2	371119.8	103015.3	0.0	0.00
25YR-72HR	62.55	474419.6	371665.2	102754.4	0.0	0.00
25YR-72HR	62.57	474703.3	372206.4	102496.9	0.0	0.00
25YR-72HR	62.58	474981.7	372735.7	102246.0	0.0	0.00
25YR-72HR	62.60	475256.3	373256.3	102000.0	0.0	0.00
25YR-72HR	62.62	475531.7	373777.4	101754.4	0.0	0.00
25YR-72HR	62.63	475803.5	374290.3	101513.2	0.0	0.00
25YR-72HR	62.65	476074.4	374800.3	101274.2	0.0	0.00
25YR-72HR	62.67	476342.4	375303.1	101039.3	0.0	0.00
25YR-72HR	62.68	476609.5	375802.5	100807.0	0.0	0.00
25YR-72HR	62.70	476870.6	376288.7	100581.9	0.0	0.00
25YR-72HR	62.72	477134.5	376778.0	100356.6	0.0	0.00
25YR-72HR	62.73	477393.5	377255.8	100137.8	0.0	0.00
25YR-72HR	62.75	477654.2	377734.1	99920.1	0.0	0.00
25YR-72HR	62.77	477911.3	378203.1	99708.1	0.0	0.00
25YR-72HR	62.78	478168.1	378669.0	99499.1	0.0	0.00
25YR-72HR	62.80	478424.4	379131.3	99293.1	0.0	0.00
25YR-72HR	62.82	478677.8	379585.3	99092.5	0.0	0.00
25YR-72HR	62.83	478933.9	380041.4	98892.5	0.0	0.00
25YR-72HR	62.85	479187.2	380489.5	98697.7	0.0	0.00
25YR-72HR	62.87	479437.6	380929.7	98507.9	0.0	0.00
25YR-72HR	62.88	479688.4	381367.6	98320.8	0.0	0.00
25YR-72HR	62.90	479942.7	381808.5	98134.1	0.0	0.00
25YR-72HR	62.92	480189.4	382233.5	97955.9	0.0	0.00
25YR-72HR	62.93	480440.6	382663.2	97777.4	0.0	0.00
25YR-72HR	62.95	480691.1	383088.5	97602.6	0.0	0.00
25YR-72HR	62.97	480936.7	383502.7	97434.0	0.0	0.00
25YR-72HR	62.98	481185.9	383920.1	97265.9	0.0	0.00
25YR-72HR	63.00	481438.2	384339.4	97098.8	0.0	0.00
25YR-72HR	63.02	481682.8	384743.3	96939.5	0.0	0.00
25YR-72HR	63.03	481932.1	385152.2	96779.9	0.0	0.00
25YR-72HR	63.05	482178.6	385553.8	96624.8	0.0	0.00
25YR-72HR	63.07	482424.9	385952.3	96472.6	0.0	0.00
25YR-72HR	63.08	482670.8	386347.7	96323.1	0.0	0.00
25YR-72HR	63.10	482917.8	386742.0	96175.7	0.0	0.00
25YR-72HR	63.12	483165.5	387135.0	96030.4	0.0	0.00
25YR-72HR	63.13	483410.4	387521.1	95889.3	0.0	0.00
25YR-72HR	63.15	483655.2	387904.5	95750.7	0.0	0.00
25YR-72HR	63.17	483902.4	388289.2	95613.3	0.0	0.00
25YR-72HR	63.18	484144.9	388664.1	95480.8	0.0	0.00
25YR-72HR	63.20	484391.2	389042.6	95348.6	0.0	0.00
25YR-72HR	63.22	484637.3	389418.4	95219.0	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	63.23	484880.5	389787.4	95093.2	0.0	0.00
25YR-72HR	63.25	485128.1	390160.7	94967.4	0.0	0.00
25YR-72HR	63.27	485371.8	390525.9	94845.9	0.0	0.00
25YR-72HR	63.28	485612.8	390885.0	94727.8	0.0	0.00
25YR-72HR	63.30	485861.3	391252.9	94608.4	0.0	0.00
25YR-72HR	63.32	486104.6	391611.0	94493.6	0.0	0.00
25YR-72HR	63.33	486345.5	391963.4	94382.1	0.0	0.00
25YR-72HR	63.35	486592.6	392322.9	94269.7	0.0	0.00
25YR-72HR	63.37	486834.3	392672.4	94161.9	0.0	0.00
25YR-72HR	63.38	487079.8	393025.4	94054.4	0.0	0.00
25YR-72HR	63.40	487321.4	393370.8	93950.6	0.0	0.00
25YR-72HR	63.42	487568.1	393721.5	93846.6	0.0	0.00
25YR-72HR	63.43	487808.5	394061.5	93747.0	0.0	0.00
25YR-72HR	63.45	488052.7	394404.8	93647.9	0.0	0.00
25YR-72HR	63.47	488299.3	394749.7	93549.6	0.0	0.00
25YR-72HR	63.48	488539.7	395084.1	93455.6	0.0	0.00
25YR-72HR	63.50	488783.8	395421.9	93361.9	0.0	0.00
25YR-72HR	63.52	489030.4	395761.3	93269.1	0.0	0.00
25YR-72HR	63.53	489273.2	396093.8	93179.4	0.0	0.00
25YR-72HR	63.55	489516.1	396424.7	93091.4	0.0	0.00
25YR-72HR	63.57	489758.9	396753.9	93005.0	0.0	0.00
25YR-72HR	63.58	490001.8	397081.5	92920.3	0.0	0.00
25YR-72HR	63.60	490244.7	397407.6	92837.1	0.0	0.00
25YR-72HR	63.62	490492.5	397738.7	92753.8	0.0	0.00
25YR-72HR	63.63	490735.4	398061.6	92673.7	0.0	0.00
25YR-72HR	63.65	490978.2	398383.1	92595.2	0.0	0.00
25YR-72HR	63.67	491219.9	398701.5	92518.4	0.0	0.00
25YR-72HR	63.68	491466.5	399024.9	92441.5	0.0	0.00
25YR-72HR	63.70	491708.1	399340.5	92367.6	0.0	0.00
25YR-72HR	63.72	491953.5	399659.5	92294.0	0.0	0.00
25YR-72HR	63.73	492197.6	399975.6	92222.0	0.0	0.00
25YR-72HR	63.75	492441.7	400290.4	92151.4	0.0	0.00
25YR-72HR	63.77	492680.9	400597.4	92083.5	0.0	0.00
25YR-72HR	63.78	492927.5	400912.8	92014.7	0.0	0.00
25YR-72HR	63.80	493170.5	401222.2	91948.3	0.0	0.00
25YR-72HR	63.82	493415.8	401533.5	91882.4	0.0	0.00
25YR-72HR	63.83	493657.5	401839.0	91818.6	0.0	0.00
25YR-72HR	63.85	493899.2	402143.3	91756.0	0.0	0.00
25YR-72HR	63.87	494147.1	402454.2	91692.9	0.0	0.00
25YR-72HR	63.88	494388.8	402756.2	91632.6	0.0	0.00
25YR-72HR	63.90	494630.5	403057.1	91573.4	0.0	0.00
25YR-72HR	63.92	494878.4	403364.6	91513.8	0.0	0.00
25YR-72HR	63.93	495120.1	403663.4	91456.7	0.0	0.00
25YR-72HR	63.95	495361.9	403961.2	91400.7	0.0	0.00
25YR-72HR	63.97	495609.8	404265.5	91344.3	0.0	0.00
25YR-72HR	63.98	495851.5	404561.2	91290.3	0.0	0.00
25YR-72HR	64.00	496093.3	404856.0	91237.3	0.0	0.00
25YR-72HR	64.02	496339.7	405157.3	91182.4	0.0	0.00
25YR-72HR	64.10	497506.1	406614.1	90892.0	0.0	0.00
25YR-72HR	64.18	498566.9	408034.1	90532.8	0.0	0.00
25YR-72HR	64.27	499516.8	409387.4	90129.4	0.0	0.00
25YR-72HR	64.35	500401.0	410691.5	89709.5	0.0	0.00
25YR-72HR	64.43	501243.0	411953.6	89289.4	0.0	0.00
25YR-72HR	64.52	502045.7	413161.9	88883.8	0.0	0.00
25YR-72HR	64.60	502827.4	414336.2	88491.2	0.0	0.00
25YR-72HR	64.68	503585.4	415467.5	88117.9	0.0	0.00
25YR-72HR	64.77	504333.0	416570.5	87762.5	0.0	0.00
25YR-72HR	64.85	505071.6	417642.4	87429.1	0.0	0.00
25YR-72HR	64.93	505801.0	418681.1	87119.9	0.0	0.00
25YR-72HR	65.02	506531.8	419700.0	86831.8	0.0	0.00
25YR-72HR	65.10	507259.0	420691.3	86567.7	0.0	0.00
25YR-72HR	65.18	507991.2	421667.5	86323.7	0.0	0.00
25YR-72HR	65.27	508724.6	422625.3	86099.3	0.0	0.00
25YR-72HR	65.35	509455.2	423561.6	85893.6	0.0	0.00
25YR-72HR	65.43	510190.1	424487.3	85702.7	0.0	0.00
25YR-72HR	65.52	510921.7	425394.3	85527.4	0.0	0.00
25YR-72HR	65.60	511657.3	426292.8	85364.5	0.0	0.00
25YR-72HR	65.68	512393.3	427179.3	85214.0	0.0	0.00
25YR-72HR	65.77	513125.7	428050.3	85075.4	0.0	0.00
25YR-72HR	65.85	513862.0	428915.6	84946.5	0.0	0.00
25YR-72HR	65.93	514594.8	429767.1	84827.7	0.0	0.00
25YR-72HR	66.02	515332.2	430615.3	84716.9	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	66.10	516065.1	431450.2	84614.9	0.0	0.00
25YR-72HR	66.18	516801.7	432281.8	84519.9	0.0	0.00
25YR-72HR	66.27	517538.4	433106.6	84431.8	0.0	0.00
25YR-72HR	66.35	518271.4	433920.8	84350.6	0.0	0.00
25YR-72HR	66.43	519008.2	434733.3	84274.9	0.0	0.00
25YR-72HR	66.52	519741.3	435536.3	84205.0	0.0	0.00
25YR-72HR	66.60	520478.1	436338.2	84139.9	0.0	0.00
25YR-72HR	66.68	521215.1	437135.5	84079.6	0.0	0.00
25YR-72HR	66.77	521948.3	437924.4	84023.9	0.0	0.00
25YR-72HR	66.85	522685.4	438713.3	83972.1	0.0	0.00
25YR-72HR	66.93	523422.5	439498.4	83924.1	0.0	0.00
25YR-72HR	67.02	524155.9	440276.1	83879.8	0.0	0.00
25YR-72HR	67.10	524893.1	441054.6	83838.6	0.0	0.00
25YR-72HR	67.18	525626.7	441826.1	83800.6	0.0	0.00
25YR-72HR	67.27	526364.0	442598.8	83765.2	0.0	0.00
25YR-72HR	67.35	527101.4	443368.9	83732.5	0.0	0.00
25YR-72HR	67.43	527835.2	444132.8	83702.4	0.0	0.00
25YR-72HR	67.52	528572.7	444898.3	83674.4	0.0	0.00
25YR-72HR	67.60	529306.5	445657.9	83648.6	0.0	0.00
25YR-72HR	67.68	530045.1	446420.4	83624.7	0.0	0.00
25YR-72HR	67.77	530779.1	447176.3	83602.7	0.0	0.00
25YR-72HR	67.85	531516.8	447934.5	83582.4	0.0	0.00
25YR-72HR	67.93	532254.6	448691.1	83563.6	0.0	0.00
25YR-72HR	68.02	532987.7	449442.4	83545.3	0.0	0.00
25YR-72HR	68.10	533698.4	450192.7	83505.6	0.0	0.00
25YR-72HR	68.18	534348.0	450925.6	83422.3	0.0	0.00
25YR-72HR	68.27	534949.0	451643.0	83306.0	0.0	0.00
25YR-72HR	68.35	535515.5	452342.2	83173.3	0.0	0.00
25YR-72HR	68.43	536056.0	453022.1	83033.9	0.0	0.00
25YR-72HR	68.52	536582.9	453691.2	82891.7	0.0	0.00
25YR-72HR	68.60	537094.5	454343.9	82750.6	0.0	0.00
25YR-72HR	68.68	537598.8	454987.6	82611.2	0.0	0.00
25YR-72HR	68.77	538096.0	455620.0	82476.0	0.0	0.00
25YR-72HR	68.85	538586.2	456238.9	82347.3	0.0	0.00
25YR-72HR	68.93	539076.2	456851.5	82224.7	0.0	0.00
25YR-72HR	69.02	539562.6	457452.6	82110.1	0.0	0.00
25YR-72HR	69.10	540051.3	458049.0	82002.3	0.0	0.00
25YR-72HR	69.18	540540.0	458638.3	81901.7	0.0	0.00
25YR-72HR	69.27	541026.2	459218.1	81808.1	0.0	0.00
25YR-72HR	69.35	541515.6	459795.5	81720.1	0.0	0.00
25YR-72HR	69.43	542001.9	460363.5	81638.4	0.0	0.00
25YR-72HR	69.52	542490.7	460929.2	81561.5	0.0	0.00
25YR-72HR	69.60	542977.0	461487.0	81490.0	0.0	0.00
25YR-72HR	69.68	543465.8	462043.1	81422.7	0.0	0.00
25YR-72HR	69.77	543954.7	462594.8	81359.9	0.0	0.00
25YR-72HR	69.85	544441.1	463139.8	81301.3	0.0	0.00
25YR-72HR	69.93	544930.0	463683.7	81246.3	0.0	0.00
25YR-72HR	70.02	545419.0	464224.2	81194.8	0.0	0.00
25YR-72HR	70.10	545905.8	464759.3	81146.5	0.0	0.00
25YR-72HR	70.18	546395.7	465294.4	81101.3	0.0	0.00
25YR-72HR	70.27	546883.7	465824.1	81059.6	0.0	0.00
25YR-72HR	70.35	547374.7	466354.1	81020.6	0.0	0.00
25YR-72HR	70.43	547865.9	466881.6	80984.3	0.0	0.00
25YR-72HR	70.52	548354.8	467404.3	80950.5	0.0	0.00
25YR-72HR	70.60	548846.4	467927.5	80918.9	0.0	0.00
25YR-72HR	70.68	549335.7	468446.2	80889.5	0.0	0.00
25YR-72HR	70.77	549827.5	468965.6	80861.9	0.0	0.00
25YR-72HR	70.85	550319.4	469483.4	80836.0	0.0	0.00
25YR-72HR	70.93	550808.9	469996.9	80812.0	0.0	0.00
25YR-72HR	71.02	551301.5	470512.1	80789.4	0.0	0.00
25YR-72HR	71.10	551791.0	471022.7	80768.3	0.0	0.00
25YR-72HR	71.18	552283.1	471534.5	80748.5	0.0	0.00
25YR-72HR	71.27	552772.7	472042.6	80730.1	0.0	0.00
25YR-72HR	71.35	553264.8	472552.0	80712.8	0.0	0.00
25YR-72HR	71.43	553756.9	473060.3	80696.6	0.0	0.00
25YR-72HR	71.52	554246.6	473565.0	80681.6	0.0	0.00
25YR-72HR	71.60	554738.7	474071.3	80667.4	0.0	0.00
25YR-72HR	71.68	555228.4	474574.2	80654.3	0.0	0.00
25YR-72HR	71.77	555720.7	475078.7	80641.9	0.0	0.00
25YR-72HR	71.85	556212.9	475582.5	80630.4	0.0	0.00
25YR-72HR	71.93	556702.7	476083.0	80619.7	0.0	0.00
25YR-72HR	72.02	557193.2	476585.5	80607.7	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	72.10	557631.3	477083.0	80548.3	0.0	0.00
25YR-72HR	72.18	557958.0	477560.2	80397.9	0.0	0.00
25YR-72HR	72.27	558181.3	478001.9	80179.4	0.0	0.00
25YR-72HR	72.35	558309.0	478407.9	79901.1	0.0	0.00
25YR-72HR	72.43	558309.0	478766.2	79542.9	0.0	0.00
25YR-72HR	72.52	558309.0	479095.3	79213.7	0.0	0.00
25YR-72HR	72.60	558309.0	479403.7	78905.4	0.0	0.00
25YR-72HR	72.68	558309.0	479697.2	78611.9	0.0	0.00
25YR-72HR	72.77	558309.0	479973.4	78335.6	0.0	0.00
25YR-72HR	72.85	558309.0	480236.6	78072.4	0.0	0.00
25YR-72HR	72.93	558309.0	480485.1	77823.9	0.0	0.00
25YR-72HR	73.02	558309.0	480722.4	77586.6	0.0	0.00
25YR-72HR	73.10	558309.0	480948.0	77361.0	0.0	0.00
25YR-72HR	73.18	558309.0	481161.6	77147.5	0.0	0.00
25YR-72HR	73.27	558309.0	481366.0	76943.0	0.0	0.00
25YR-72HR	73.35	558309.0	481560.0	76749.0	0.0	0.00
25YR-72HR	73.43	558309.0	481746.0	76563.1	0.0	0.00
25YR-72HR	73.52	558309.0	481923.5	76385.5	0.0	0.00
25YR-72HR	73.60	558309.0	482092.3	76216.7	0.0	0.00
25YR-72HR	73.68	558309.0	482254.6	76054.4	0.0	0.00
25YR-72HR	73.77	558309.0	482409.1	75899.9	0.0	0.00
25YR-72HR	73.85	558309.0	482557.9	75751.1	0.0	0.00
25YR-72HR	73.93	558309.0	482700.4	75608.6	0.0	0.00
25YR-72HR	74.02	558309.0	482836.4	75472.6	0.0	0.00
25YR-72HR	74.10	558309.0	482967.6	75341.4	0.0	0.00
25YR-72HR	74.18	558309.0	483093.0	75216.0	0.0	0.00
25YR-72HR	74.27	558309.0	483214.1	75095.0	0.0	0.00
25YR-72HR	74.35	558309.0	483330.6	74978.4	0.0	0.00
25YR-72HR	74.43	558309.0	483442.0	74867.0	0.0	0.00
25YR-72HR	74.52	558309.0	483549.9	74759.2	0.0	0.00
25YR-72HR	74.60	558309.0	483653.2	74655.8	0.0	0.00
25YR-72HR	74.68	558309.0	483753.3	74555.7	0.0	0.00
25YR-72HR	74.77	558309.0	483849.4	74459.7	0.0	0.00
25YR-72HR	74.85	558309.0	483942.5	74366.5	0.0	0.00
25YR-72HR	74.93	558309.0	484032.4	74276.6	0.0	0.00
25YR-72HR	75.02	558309.0	484118.8	74190.2	0.0	0.00
25YR-72HR	75.10	558309.0	484202.7	74106.3	0.0	0.00
25YR-72HR	75.18	558309.0	484283.5	74025.6	0.0	0.00
25YR-72HR	75.27	558309.0	484361.9	73947.1	0.0	0.00
25YR-72HR	75.35	558309.0	484437.9	73871.1	0.0	0.00
25YR-72HR	75.43	558309.0	484511.0	73798.0	0.0	0.00
25YR-72HR	75.52	558309.0	484582.3	73726.8	0.0	0.00
25YR-72HR	75.60	558309.0	484651.3	73657.8	0.0	0.00
25YR-72HR	75.68	558309.0	484717.8	73591.2	0.0	0.00
25YR-72HR	75.77	558309.0	484782.7	73526.3	0.0	0.00
25YR-72HR	75.85	558309.0	484845.4	73463.7	0.0	0.00
25YR-72HR	75.93	558309.0	484906.5	73402.6	0.0	0.00
25YR-72HR	76.02	558309.0	484965.9	73343.1	0.0	0.00
25YR-72HR	76.10	558309.0	485023.2	73285.8	0.0	0.00
25YR-72HR	76.18	558309.0	485079.3	73229.8	0.0	0.00
25YR-72HR	76.27	558309.0	485133.5	73175.6	0.0	0.00
25YR-72HR	76.35	558309.0	485186.4	73122.6	0.0	0.00
25YR-72HR	76.43	558309.0	485237.7	73071.3	0.0	0.00
25YR-72HR	76.52	558309.0	485287.9	73021.1	0.0	0.00
25YR-72HR	76.60	558309.0	485336.7	72972.3	0.0	0.00
25YR-72HR	76.68	558309.0	485384.2	72924.8	0.0	0.00
25YR-72HR	76.77	558309.0	485430.3	72878.7	0.0	0.00
25YR-72HR	76.85	558309.0	485475.3	72833.7	0.0	0.00
25YR-72HR	76.93	558309.0	485519.3	72789.8	0.0	0.00
25YR-72HR	77.02	558309.0	485562.1	72746.9	0.0	0.00
25YR-72HR	77.10	558309.0	485604.0	72705.0	0.0	0.00
25YR-72HR	77.18	558309.0	485644.9	72664.1	0.0	0.00
25YR-72HR	77.27	558309.0	485684.7	72624.3	0.0	0.00
25YR-72HR	77.35	558309.0	485723.6	72585.4	0.0	0.00
25YR-72HR	77.43	558309.0	485761.6	72547.4	0.0	0.00
25YR-72HR	77.52	558309.0	485798.7	72510.4	0.0	0.00
25YR-72HR	77.60	558309.0	485835.1	72474.0	0.0	0.00
25YR-72HR	77.68	558309.0	485870.5	72438.5	0.0	0.00
25YR-72HR	77.77	558309.0	485905.2	72403.9	0.0	0.00
25YR-72HR	77.85	558309.0	485939.1	72369.9	0.0	0.00
25YR-72HR	77.93	558309.0	485972.4	72336.6	0.0	0.00
25YR-72HR	78.02	558309.0	486004.9	72304.1	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	78.10	558309.0	486036.7	72272.3	0.0	0.00
25YR-72HR	78.18	558309.0	486067.9	72241.1	0.0	0.00
25YR-72HR	78.27	558309.0	486098.3	72210.7	0.0	0.00
25YR-72HR	78.35	558309.0	486128.3	72180.7	0.0	0.00
25YR-72HR	78.43	558309.0	486157.7	72151.4	0.0	0.00
25YR-72HR	78.52	558309.0	486186.3	72122.7	0.0	0.00
25YR-72HR	78.60	558309.0	486214.5	72094.5	0.0	0.00
25YR-72HR	78.68	558309.0	486242.1	72066.9	0.0	0.00
25YR-72HR	78.77	558309.0	486269.3	72039.7	0.0	0.00
25YR-72HR	78.85	558309.0	486295.8	72013.2	0.0	0.00
25YR-72HR	78.93	558309.0	486322.0	71987.0	0.0	0.00
25YR-72HR	79.02	558309.0	486347.6	71961.4	0.0	0.00
25YR-72HR	79.10	558309.0	486372.8	71936.3	0.0	0.00
25YR-72HR	79.18	558309.0	486397.5	71911.5	0.0	0.00
25YR-72HR	79.27	558309.0	486421.8	71887.2	0.0	0.00
25YR-72HR	79.35	558309.0	486445.9	71863.2	0.0	0.00
25YR-72HR	79.43	558309.0	486469.5	71839.5	0.0	0.00
25YR-72HR	79.52	558309.0	486492.7	71816.3	0.0	0.00
25YR-72HR	79.60	558309.0	486515.4	71793.6	0.0	0.00
25YR-72HR	79.68	558309.0	486537.6	71771.4	0.0	0.00
25YR-72HR	79.77	558309.0	486559.6	71749.5	0.0	0.00
25YR-72HR	79.85	558309.0	486581.1	71727.9	0.0	0.00
25YR-72HR	79.93	558309.0	486602.4	71706.6	0.0	0.00
25YR-72HR	80.02	558309.0	486623.3	71685.8	0.0	0.00
25YR-72HR	80.10	558309.0	486643.8	71665.2	0.0	0.00
25YR-72HR	80.18	558309.0	486664.0	71645.0	0.0	0.00
25YR-72HR	80.27	558309.0	486683.9	71625.1	0.0	0.00
25YR-72HR	80.35	558309.0	486703.6	71605.4	0.0	0.00
25YR-72HR	80.43	558309.0	486722.9	71586.2	0.0	0.00
25YR-72HR	80.52	558309.0	486741.9	71567.1	0.0	0.00
25YR-72HR	80.60	558309.0	486760.7	71548.4	0.0	0.00
25YR-72HR	80.68	558309.0	486779.2	71529.8	0.0	0.00
25YR-72HR	80.77	558309.0	486797.4	71511.6	0.0	0.00
25YR-72HR	80.85	558309.0	486815.4	71493.6	0.0	0.00
25YR-72HR	80.93	558309.0	486833.1	71475.9	0.0	0.00
25YR-72HR	81.02	558309.0	486850.6	71458.4	0.0	0.00
25YR-72HR	81.10	558309.0	486867.8	71441.2	0.0	0.00
25YR-72HR	81.18	558309.0	486884.8	71424.2	0.0	0.00
25YR-72HR	81.27	558309.0	486901.6	71407.4	0.0	0.00
25YR-72HR	81.35	558309.0	486918.1	71390.9	0.0	0.00
25YR-72HR	81.43	558309.0	486934.5	71374.5	0.0	0.00
25YR-72HR	81.52	558309.0	486950.6	71358.4	0.0	0.00
25YR-72HR	81.60	558309.0	486966.6	71342.5	0.0	0.00
25YR-72HR	81.68	558309.0	486982.3	71326.8	0.0	0.00
25YR-72HR	81.77	558309.0	486997.8	71311.2	0.0	0.00
25YR-72HR	81.85	558309.0	487013.1	71295.9	0.0	0.00
25YR-72HR	81.93	558309.0	487028.3	71280.8	0.0	0.00
25YR-72HR	82.02	558309.0	487043.3	71265.8	0.0	0.00
25YR-72HR	82.10	558309.0	487058.0	71251.0	0.0	0.00
25YR-72HR	82.18	558309.0	487072.6	71236.4	0.0	0.00
25YR-72HR	82.27	558309.0	487087.1	71221.9	0.0	0.00
25YR-72HR	82.35	558309.0	487101.4	71207.7	0.0	0.00
25YR-72HR	82.43	558309.0	487115.5	71193.6	0.0	0.00
25YR-72HR	82.52	558309.0	487129.4	71179.6	0.0	0.00
25YR-72HR	82.60	558309.0	487143.3	71165.8	0.0	0.00
25YR-72HR	82.68	558309.0	487156.9	71152.1	0.0	0.00
25YR-72HR	82.77	558309.0	487170.4	71138.7	0.0	0.00
25YR-72HR	82.85	558309.0	487183.7	71125.3	0.0	0.00
25YR-72HR	82.93	558309.0	487196.9	71112.1	0.0	0.00
25YR-72HR	83.02	558309.0	487210.0	71099.0	0.0	0.00
25YR-72HR	83.10	558309.0	487222.8	71086.2	0.0	0.00
25YR-72HR	83.18	558309.0	487235.6	71073.5	0.0	0.00
25YR-72HR	83.27	558309.0	487248.2	71060.8	0.0	0.00
25YR-72HR	83.35	558309.0	487260.7	71048.3	0.0	0.00
25YR-72HR	83.43	558309.0	487273.2	71035.8	0.0	0.00
25YR-72HR	83.52	558309.0	487285.5	71023.5	0.0	0.00
25YR-72HR	83.60	558309.0	487297.7	71011.3	0.0	0.00
25YR-72HR	83.68	558309.0	487309.8	70999.3	0.0	0.00
25YR-72HR	83.77	558309.0	487321.8	70987.3	0.0	0.00
25YR-72HR	83.85	558309.0	487333.6	70975.4	0.0	0.00
25YR-72HR	83.93	558309.0	487345.4	70963.6	0.0	0.00
25YR-72HR	84.02	558309.0	487357.1	70951.9	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	84.10	558309.0	487368.6	70940.4	0.0	0.00
25YR-72HR	84.18	558309.0	487380.1	70929.0	0.0	0.00
25YR-72HR	84.27	558309.0	487391.4	70917.6	0.0	0.00
25YR-72HR	84.35	558309.0	487402.7	70906.4	0.0	0.00
25YR-72HR	84.43	558309.0	487413.8	70895.2	0.0	0.00
25YR-72HR	84.52	558309.0	487424.9	70884.1	0.0	0.00
25YR-72HR	84.60	558309.0	487435.9	70873.2	0.0	0.00
25YR-72HR	84.68	558309.0	487446.8	70862.3	0.0	0.00
25YR-72HR	84.77	558309.0	487457.5	70851.5	0.0	0.00
25YR-72HR	84.85	558309.0	487468.2	70840.8	0.0	0.00
25YR-72HR	84.93	558309.0	487478.9	70830.2	0.0	0.00
25YR-72HR	85.02	558309.0	487489.4	70819.7	0.0	0.00
25YR-72HR	85.10	558309.0	487499.8	70809.2	0.0	0.00
25YR-72HR	85.18	558309.0	487510.2	70798.8	0.0	0.00
25YR-72HR	85.27	558309.0	487520.5	70788.5	0.0	0.00
25YR-72HR	85.35	558309.0	487530.7	70778.3	0.0	0.00
25YR-72HR	85.43	558309.0	487540.8	70768.2	0.0	0.00
25YR-72HR	85.52	558309.0	487550.8	70758.2	0.0	0.00
25YR-72HR	85.60	558309.0	487560.8	70748.2	0.0	0.00
25YR-72HR	85.68	558309.0	487570.7	70738.3	0.0	0.00
25YR-72HR	85.77	558309.0	487580.5	70728.5	0.0	0.00
25YR-72HR	85.85	558309.0	487590.2	70718.8	0.0	0.00
25YR-72HR	85.93	558309.0	487599.9	70709.1	0.0	0.00
25YR-72HR	86.02	558309.0	487609.5	70699.5	0.0	0.00
25YR-72HR	86.10	558309.0	487619.0	70690.0	0.0	0.00
25YR-72HR	86.18	558309.0	487628.5	70680.5	0.0	0.00
25YR-72HR	86.27	558309.0	487637.9	70671.1	0.0	0.00
25YR-72HR	86.35	558309.0	487647.2	70661.8	0.0	0.00
25YR-72HR	86.43	558309.0	487656.5	70652.5	0.0	0.00
25YR-72HR	86.52	558309.0	487665.7	70643.3	0.0	0.00
25YR-72HR	86.60	558309.0	487674.8	70634.2	0.0	0.00
25YR-72HR	86.68	558309.0	487683.9	70625.1	0.0	0.00
25YR-72HR	86.77	558309.0	487692.9	70616.1	0.0	0.00
25YR-72HR	86.85	558309.0	487701.9	70607.2	0.0	0.00
25YR-72HR	86.93	558309.0	487710.7	70598.3	0.0	0.00
25YR-72HR	87.02	558309.0	487719.6	70589.4	0.0	0.00
25YR-72HR	87.10	558309.0	487728.3	70580.7	0.0	0.00
25YR-72HR	87.18	558309.0	487737.1	70572.0	0.0	0.00
25YR-72HR	87.27	558309.0	487745.7	70563.3	0.0	0.00
25YR-72HR	87.35	558309.0	487754.3	70554.7	0.0	0.00
25YR-72HR	87.43	558309.0	487762.9	70546.2	0.0	0.00
25YR-72HR	87.52	558309.0	487771.4	70537.7	0.0	0.00
25YR-72HR	87.60	558309.0	487779.8	70529.2	0.0	0.00
25YR-72HR	87.68	558309.0	487788.2	70520.8	0.0	0.00
25YR-72HR	87.77	558309.0	487796.5	70512.5	0.0	0.00
25YR-72HR	87.85	558309.0	487804.8	70504.2	0.0	0.00
25YR-72HR	87.93	558309.0	487813.0	70496.0	0.0	0.00
25YR-72HR	88.02	558309.0	487821.2	70487.9	0.0	0.00
25YR-72HR	88.10	558309.0	487829.3	70479.7	0.0	0.00
25YR-72HR	88.18	558309.0	487837.4	70471.7	0.0	0.00
25YR-72HR	88.27	558309.0	487845.4	70463.6	0.0	0.00
25YR-72HR	88.35	558309.0	487853.3	70455.7	0.0	0.00
25YR-72HR	88.43	558309.0	487861.3	70447.8	0.0	0.00
25YR-72HR	88.52	558309.0	487869.1	70439.9	0.0	0.00
25YR-72HR	88.60	558309.0	487877.0	70432.1	0.0	0.00
25YR-72HR	88.68	558309.0	487884.7	70424.3	0.0	0.00
25YR-72HR	88.77	558309.0	487892.5	70416.6	0.0	0.00
25YR-72HR	88.85	558309.0	487900.1	70408.9	0.0	0.00
25YR-72HR	88.93	558309.0	487907.8	70401.2	0.0	0.00
25YR-72HR	89.02	558309.0	487915.4	70393.6	0.0	0.00
25YR-72HR	89.10	558309.0	487922.9	70386.1	0.0	0.00
25YR-72HR	89.18	558309.0	487930.4	70378.6	0.0	0.00
25YR-72HR	89.27	558309.0	487937.9	70371.1	0.0	0.00
25YR-72HR	89.35	558309.0	487945.3	70363.7	0.0	0.00
25YR-72HR	89.43	558309.0	487952.7	70356.3	0.0	0.00
25YR-72HR	89.52	558309.0	487960.0	70349.0	0.0	0.00
25YR-72HR	89.60	558309.0	487967.3	70341.7	0.0	0.00
25YR-72HR	89.68	558309.0	487974.5	70334.5	0.0	0.00
25YR-72HR	89.77	558309.0	487981.7	70327.3	0.0	0.00
25YR-72HR	89.85	558309.0	487988.9	70320.1	0.0	0.00
25YR-72HR	89.93	558309.0	487996.0	70313.0	0.0	0.00
25YR-72HR	90.02	558309.0	488003.1	70305.9	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	90.10	558309.0	488010.1	70298.9	0.0	0.00
25YR-72HR	90.18	558309.0	488017.1	70291.9	0.0	0.00
25YR-72HR	90.27	558309.0	488024.1	70285.0	0.0	0.00
25YR-72HR	90.35	558309.0	488031.0	70278.1	0.0	0.00
25YR-72HR	90.43	558309.0	488037.8	70271.2	0.0	0.00
25YR-72HR	90.52	558309.0	488044.7	70264.4	0.0	0.00
25YR-72HR	90.60	558309.0	488051.4	70257.6	0.0	0.00
25YR-72HR	90.68	558309.0	488058.2	70250.8	0.0	0.00
25YR-72HR	90.77	558309.0	488064.9	70244.1	0.0	0.00
25YR-72HR	90.85	558309.0	488071.6	70237.5	0.0	0.00
25YR-72HR	90.93	558309.0	488078.2	70230.8	0.0	0.00
25YR-72HR	91.02	558309.0	488084.8	70224.2	0.0	0.00
25YR-72HR	91.10	558309.0	488091.3	70217.7	0.0	0.00
25YR-72HR	91.18	558309.0	488097.8	70211.2	0.0	0.00
25YR-72HR	91.27	558309.0	488104.3	70204.7	0.0	0.00
25YR-72HR	91.35	558309.0	488110.7	70198.3	0.0	0.00
25YR-72HR	91.43	558309.0	488117.1	70191.9	0.0	0.00
25YR-72HR	91.52	558309.0	488123.5	70185.6	0.0	0.00
25YR-72HR	91.60	558309.0	488129.8	70179.2	0.0	0.00
25YR-72HR	91.68	558309.0	488136.0	70173.0	0.0	0.00
25YR-72HR	91.77	558309.0	488142.3	70166.7	0.0	0.00
25YR-72HR	91.85	558309.0	488148.5	70160.5	0.0	0.00
25YR-72HR	91.93	558309.0	488154.6	70154.4	0.0	0.00
25YR-72HR	92.02	558309.0	488160.7	70148.3	0.0	0.00
25YR-72HR	92.10	558309.0	488166.8	70142.2	0.0	0.00
25YR-72HR	92.18	558309.0	488172.9	70136.2	0.0	0.00
25YR-72HR	92.27	558309.0	488178.8	70130.2	0.0	0.00
25YR-72HR	92.35	558309.0	488184.8	70124.2	0.0	0.00
25YR-72HR	92.43	558309.0	488190.7	70118.3	0.0	0.00
25YR-72HR	92.52	558309.0	488196.6	70112.4	0.0	0.00
25YR-72HR	92.60	558309.0	488202.4	70106.6	0.0	0.00
25YR-72HR	92.68	558309.0	488208.3	70100.8	0.0	0.00
25YR-72HR	92.77	558309.0	488214.0	70095.0	0.0	0.00
25YR-72HR	92.85	558309.0	488219.7	70089.3	0.0	0.00
25YR-72HR	92.93	558309.0	488225.4	70083.6	0.0	0.00
25YR-72HR	93.02	558309.0	488231.1	70078.0	0.0	0.00
25YR-72HR	93.10	558309.0	488236.6	70072.4	0.0	0.00
25YR-72HR	93.18	558309.0	488242.1	70066.9	0.0	0.00
25YR-72HR	93.27	558309.0	488247.6	70061.4	0.0	0.00
25YR-72HR	93.35	558309.0	488253.1	70056.0	0.0	0.00
25YR-72HR	93.43	558309.0	488258.5	70050.6	0.0	0.00
25YR-72HR	93.52	558309.0	488263.8	70045.2	0.0	0.00
25YR-72HR	93.60	558309.0	488269.1	70040.0	0.0	0.00
25YR-72HR	93.68	558309.0	488273.2	70035.9	0.0	0.00
25YR-72HR	93.77	558309.0	488277.8	70031.2	0.0	0.00
25YR-72HR	93.85	558309.0	488282.6	70026.4	0.0	0.00
25YR-72HR	93.93	558309.0	488287.3	70021.7	0.0	0.00
25YR-72HR	94.02	558309.0	488292.1	70016.9	0.0	0.00
25YR-72HR	94.10	558309.0	488296.7	70012.3	0.0	0.00
25YR-72HR	94.18	558309.0	488300.9	70008.1	0.0	0.00
25YR-72HR	94.27	558309.0	488303.8	70005.2	0.0	0.00
25YR-72HR	94.35	558309.0	488308.3	70000.7	0.0	0.00
25YR-72HR	94.43	558309.0	488312.8	69996.2	0.0	0.00
25YR-72HR	94.52	558309.0	488317.4	69991.7	0.0	0.00
25YR-72HR	94.60	558309.0	488321.9	69987.1	0.0	0.00
25YR-72HR	94.68	558309.0	488326.4	69982.6	0.0	0.00
25YR-72HR	94.77	558309.0	488330.9	69978.2	0.0	0.00
25YR-72HR	94.85	558309.0	488335.3	69973.7	0.0	0.00
25YR-72HR	94.93	558309.0	488339.7	69969.3	0.0	0.00
25YR-72HR	95.02	558309.0	488344.1	69964.9	0.0	0.00
25YR-72HR	95.10	558309.0	488348.4	69960.6	0.0	0.00
25YR-72HR	95.18	558309.0	488352.7	69956.3	0.0	0.00
25YR-72HR	95.27	558309.0	488356.9	69952.1	0.0	0.00
25YR-72HR	95.35	558309.0	488361.1	69947.9	0.0	0.00
25YR-72HR	95.43	558309.0	488365.2	69943.8	0.0	0.00
25YR-72HR	95.52	558309.0	488369.2	69939.8	0.0	0.00
25YR-72HR	95.60	558309.0	488373.1	69935.9	0.0	0.00
25YR-72HR	95.68	558309.0	488377.0	69932.0	0.0	0.00
25YR-72HR	95.77	558309.0	488380.6	69928.4	0.0	0.00
25YR-72HR	95.85	558309.0	488384.1	69924.9	0.0	0.00
25YR-72HR	95.93	558309.0	488387.7	69921.3	0.0	0.00
25YR-72HR	96.00	558309.0	488390.7	69918.3	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %

Basin 17

BASIN 17
28.47 AC

0 50 200
Feet

T 53S / R 40E
SECTION 02
MATCHLINE 504+40.00

T 53S / R 40E
SECTION 03
MATCHLINE 532+40.00

R/W LINE
NW 95TH ST.
NW 99TH ST.
NW 98TH ST.
NW 97TH AVE
W 20TH AVE.
W 44TH PL.
NW 103RD AVE
SR 826 SB
SR 826 NB
LA R/W LINE
FLORIDA NATIONAL UNIVERSITY
EL DORADO FURNITURE

S17FW-01
B17FW-1 0.03 AC
S17FW-02
S17FW-2A
B17FW-2 0.42 AC
S17FW-03
S17FW-04
S17FW-05
S17FW-06
S17FW-07
S17FW-08
R-1588
S17FW-09
S17FW-10
S17FW-11
B17FW-11 0.10 AC
S17FW-12
B17FW-12 0.11 AC
S17FW-13
B17FW-13 0.29 AC
S17-211A
B17-210A 0.07 AC
B17-212 0.65 AC
B17-233 0.34 AC
S17FW-14 0.40 AC
BX17-36 0.72 AC
S17FW-14
S17-216
EX-16
B17-216 0.16 AC
S17-222
B17-222 0.11 AC
S17-224
S17-252
S17-253
S17-254
B17-254 0.19 AC
18" PIPE
48" PIPE
B17-221 0.37 AC
B17-226 0.39 AC
48" PIPE
S17-241
S17-240B
S17-240A
B17-240 0.45 AC
B17-239 0.29 AC
BX17-54 0.22 AC
S17-239
B17-237 0.32 AC
S17-239A
BX17-45 0.19 AC
S17-237
BX17-43 0.24 AC
B17-235 0.64 AC
S17-235
BX17-38 0.21 AC
S17-232
R-1565
BX17-26 0.21 AC
S17-233
S17-212
S17-211
S17-210
B17-210 0.28 AC
S17-210B
S17-210A
B17-208 0.28 AC
S17-209
S17-208A
S17-208
S17-206
S17-205
B17-205 0.32 AC
B17-206 0.35 AC
S17-212A
B17-208A 0.13 AC
S17-204
B17-204 0.49 AC
S17-203
B17-203 0.21 AC
S17-202
B17-202 0.35 AC
S17-201
B17-201 0.69 AC
B17-12A 0.15 AC
N 1° 48' 08" W
N 1° 47' 04" W
N 1° 44' 40" W
18" PIPE
24" FD

505 510 515 520 525 530 535 540
5510 5515 5520 5523
7520 7540 7545 7550 7554

LEGEND
DRAINAGE DIVIDE
FLOW ARROW
SXX-XXX PROPOSED STRUCTURE
XX EXISTING STRUCTURE

DO NOT USE THE INFORMATION ON THIS SHEET FOR CONSTRUCTION PURPOSES. THIS SHEET IS IN THE PLANS FOR DOCUMENTATION AND TO ASSIST CONSTRUCTION PERSONNEL WITH DRAINAGE CONCERNS.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01, 441830-1-52-01, 441831-1-52-01

DRAINAGE MAP

SHEET NO.

CALLI 12/18/2020 1:15:01 PM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\44716515201\drainage\DRMPRD04.dgn

T 52S / R 40E SECTION 03 | T 52S / R 40E SECTION 34

T 52S / R 40E SECTION 02 | T 52S / R 40E SECTION 35

MATCHLINE 532+40.00 NE

MATCHLINE 560+40.00 NE

BASIN 17
28.47 AC

BASIN 18
15.88 AC

0 50 200
Feet

R/W LINE

LITTLE RIVER CANAL

NW 106TH ST.

W 54TH ST.

W 56TH ST.

W 20TH AVE WEST

W 20TH AVE. EAST

PETER'S PIKE CANAL

SR 826 SB

SR 826 NB

OUTFALL TO THE LITTLE RIVER CANAL BEGIN BRIDGE #870758 540+84.16

END BRIDGE #870758 541+69.16

LA R/W LINE

EX-25 EX-26 EX-27 EX-28 EX-29 EX-30 Y-221 R-1581 P-48 P-51 P-51A

S17-225 S17-226 S17-227 S17-228 S17-229 S17-230 S17-231 S17-234 S17-240 S17-241A S17-241B S17-242 S17-243 S17-245 S17-247 S17-248 S17-249 S17-250 S17-251 S17-255 S17-240A S17-240B S17-227A

S17FW-14A S17FW-15

S18FW-01 S18FW-02 S18FW-03 S18FW-04 S18FW-05 S18FW-06 S18FW-07 S18FW-1A S18FW-11 S18FW-12 S18FW-13 S18FW-14

S17FE-01 S18FE-01 S18FE-02 S18FE-03 S18FE-05 S18FE-06 S18FE-07

B17FW-3 0.17 AC

B18FW-1 0.82 AC

B18FW-2 0.38 AC

B18FW-4 1.42 AC

B17-229 0.47 AC

B17-225 0.09 AC

B17-227 0.25 AC

B17-241 0.18 AC

B17-241A 0.28 AC

B17-241B 0.06 AC

B17-242 0.54 AC

B17-243 0.08 AC

B17FE-1 0.13 AC

B18FE-1 0.19 AC

B18FE-2 0.26 AC

B18FE-3 0.14 AC

B18FE-4 0.14 AC

BX18-9 0.41 AC

BX18-15 0.34 AC

BX18-23 1.49 AC

18" PIPE

24" FD

30" FD

30" PIPE

N 47° 57" W

N 2° 38' 07" W

DO NOT USE THE INFORMATION ON THIS SHEET FOR CONSTRUCTION PURPOSES. THIS SHEET IS IN THE PLANS FOR DOCUMENTATION AND TO ASSIST CONSTRUCTION PERSONNEL WITH DRAINAGE CONCERNS.

LEGEND

- DRAINAGE DIVIDE
- FLOW ARROW
- SXX-XXX PROPOSED STRUCTURE
- XX EXISTING STRUCTURE

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01, 441830-1-52-01, 441831-1-52-01

DRAINAGE MAP

SHEET NO.

CALLI 12/17/2020 11:24:27 AM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\44716515201\drainage\DRMPRD05.dgn

SUMMARY OF MAX STAGE - PROPOSED CONDITIONS - BASIN 17

NODE	STORM EVENT							WARNING STAGE (FT)
	100YR-1HR	100YR-24HR	100YR-8HR	10YR-1HR	10YR-24HR	10YR-8HR	25YR-72HR	
EX17-114	1.49	1.45	1.45	1.45	1.45	1.45	1.49	6.52
EX17-116	7.25	2.89	5.13	5.15	2.53	4	6.66	6
EX17-120	7.18	2.88	5.11	5.12	2.53	3.99	6.6	4.73
EX17-121	6.6	2.86	4.9	4.86	2.52	3.9	6.17	4.97
EX17-124	1.48	1.45	1.46	1.46	1.45	1.46	1.49	6.49
EX17-139	3.88	2.34	3.44	3.47	2.24	2.94	3.78	5.41
EX17-145	3.75	2.32	3.36	3.36	2.24	2.89	3.7	5.14
EX17-148	3.19	2.28	3.03	2.91	2.23	2.72	3.29	7.46
EX17-150	3.52	3.47	3.58	2.68	3.42	3.46	3.69	9.39
EX17-151	4.01	3.62	3.83	3.89	3.57	3.74	3.95	9.18
EX17-152	7.97	3.91	5.26	5.3	3.8	4.18	7.22	16.96
EX17-153	4.4	4.07	4.24	4.29	4.02	4.16	4.34	6.13
EX17-36	22.82	21.7	22.25	22.42	21.57	21.99	22.6	26.1
EX17-47	26.77	25.91	26.33	26.46	25.81	26.14	26.6	30.65
GWT-17	1.45	2.2	2.2	1.45	2.2	2.2	2.2	99
L_RIVER_CANAL	1.45	1.45	1.45	1.45	1.45	1.45	1.45	99
NODE-17B	3.45	2.32	3.27	3.06	2.25	2.84	3.48	6.95
NODE-17D	3.24	2.26	2.92	2.69	2.23	2.61	3.41	4.69
NODE-17F	2.97	2.25	2.83	2.49	2.23	2.54	3.09	5.96
S17-1	4.58	2.43	3.67	3.43	2.27	3.09	4.67	4.74
S17-11	3.79	2.42	3.44	3.05	2.27	3	4.1	5.24
S17-12	3.9	2.44	3.49	3.1	2.27	3.03	4.18	5.41
S17-12A	3.25	2.33	3.17	2.77	2.26	2.82	3.68	4.49
S17-13	4.09	2.46	3.57	3.18	2.27	3.08	4.32	5.57
S17-14	4.28	2.46	3.63	3.27	2.27	3.1	4.46	4.74
S17-15	4.4	2.49	3.69	3.33	2.27	3.15	4.54	5.44
S17-16	4.65	2.5	3.77	3.44	2.27	3.19	4.72	4.8
S17-17	4.82	2.52	3.85	3.54	2.28	3.24	4.83	6.11
S17-18	5.79	2.56	4.18	4.02	2.31	3.4	5.5	6.4
S17-19	8.84	2.82	5.13	5.42	2.65	3.74	7.65	11.63
S17-1A	3.43	2.36	3.27	2.88	2.26	2.89	3.83	5.4

NODE	STORM EVENT							WARNING STAGE (FT)
	100YR-1HR	100YR-24HR	100YR-8HR	10YR-1HR	10YR-24HR	10YR-8HR	25YR-72HR	
S17-2	4.29	2.43	3.58	3.29	2.27	3.05	4.46	5.35
S17-20	8.19	2.63	4.93	5.12	2.36	3.74	7.2	10.87
S17-201	3.22	2.33	3.17	2.76	2.26	2.82	3.66	4.79
S17-202	3.15	2.32	3.12	2.72	2.26	2.79	3.6	4.82
S17-203	3.13	2.31	3.11	2.71	2.26	2.78	3.58	5.11
S17-204	3.12	2.31	3.1	2.7	2.26	2.77	3.58	5.22
S17-205	3.11	2.3	3.09	2.69	2.26	2.77	3.56	6.3
S17-206	4.37	3.84	4.11	4.19	3.77	3.99	4.27	8.53
S17-208	4.21	3.43	3.82	3.94	3.34	3.64	4.07	12.59
S17-208A	3.13	2.3	3.1	2.7	2.26	2.77	3.57	4.94
S17-209	3.22	2.5	3.12	3.07	2.38	2.9	3.72	13.18
S17-21	14.56	12.94	13.69	13.94	12.78	13.34	14.21	17.13
S17-210	12.14	11.68	11.92	11.99	11.62	11.81	12.06	16.57
S17-210A	3.14	2.3	3.1	2.7	2.26	2.77	3.58	5.26
S17-210B	3.15	2.3	3.1	2.71	2.25	2.77	3.59	5.29
S17-211	3.38	2.31	3.16	2.81	2.25	2.79	3.74	6.5
S17-211A	3.23	2.3	3.12	2.75	2.26	2.78	3.64	6.26
S17-212	4.04	2.33	3.36	3.12	2.26	2.88	4.19	19.65
S17-212A	3.13	2.3	3.08	2.69	2.25	2.76	3.57	7.09
S17-216	26.88	26.01	26.41	26.55	25.91	26.22	26.7	29.86
S17-22	14.69	12.95	13.73	14	12.78	13.36	14.3	16.6
S17-222	27.14	26.5	26.82	26.93	26.42	26.68	27.03	30.37
S17-224	27.29	26.75	27.03	27.12	26.68	26.9	27.2	30.77
S17-225	6.54	2.86	4.88	4.82	2.52	3.9	6.13	6.1
S17-226	25.75	25.5	25.5	25.57	25.5	25.5	25.65	30.38
S17-227	24.11	24	24	24	24	24	24.03	28.7
S17-227A	6.95	2.9	5.01	4.98	2.55	3.94	6.44	8.05
S17-228	7.51	3.11	5.19	5.2	2.95	4.05	6.87	17.04
S17-229	16	16	16	16	16	16	16	23.1
S17-230	7.32	2.98	5.13	5.13	2.67	4	6.72	13.91
S17-231	7.61	3.23	5.24	5.26	3.11	4.09	6.94	18.13
S17-232	17.41	15.78	16.51	16.78	15.62	16.15	17.04	22

NODE	STORM EVENT							WARNING STAGE (FT)
	100YR-1HR	100YR-24HR	100YR-8HR	10YR-1HR	10YR-24HR	10YR-8HR	25YR-72HR	
S17-233	18.84	17.43	18.02	18.27	17.43	17.66	18.55	23.18
S17-234	7.68	3.37	5.21	5.24	3.27	4.09	7	16.26
S17-235	22.34	21.88	21.88	22	21.88	21.88	22.16	26.24
S17-237	24.24	24.24	24.24	24.24	24.24	24.24	24.24	29.33
S17-239	28	28	28	28	28	28	28	33.27
S17-240	26	25.38	25.69	25.79	25.3	25.55	25.89	30.48
S17-241	3.74	2.32	3.36	3.36	2.24	2.89	3.69	5.75
S17-241A	4.03	2.33	3.44	3.48	2.24	2.92	3.89	28.95
S17-241B	3.75	2.32	3.39	3.41	2.24	2.91	3.7	5.06
S17-242	20.49	19.9	20.21	20.3	19.82	20.07	20.39	23.77
S17-243	3.39	2.29	3.15	3.07	2.23	2.78	3.45	7.99
S17-244	3.39	2.29	3.16	3.07	2.24	2.78	3.46	9.5
S17-245	3.17	2.28	3.02	2.9	2.23	2.71	3.28	7.84
S17-246	2.95	2.27	2.91	2.74	2.23	2.65	3.11	8.58
S17-247	2.82	2.26	2.83	2.65	2.23	2.62	3.01	6.67
S17-248	5.2	2.8	4.41	4.26	2.49	3.68	5.1	6.31
S17-249	4.71	2.78	4.24	4.07	2.48	3.6	4.71	6.36
S17-25	16.99	15.74	16.34	16.54	15.59	16.06	16.74	19.85
S17-250A+A	4.69	2.78	4.25	4.06	2.48	3.61	4.69	6.49
S17-250B	1.48	1.45	1.45	1.45	1.45	1.45	1.48	6.49
S17-254	1.49	1.45	1.46	1.46	1.45	1.45	1.49	6.32
S17-255	6.08	2.84	4.72	4.63	2.51	3.82	5.78	6.1
S17-26	16.99	15.74	16.34	16.54	15.59	16.06	16.75	19.4
S17-27A+A	3.04	2.3	3.05	2.65	2.25	2.74	3.5	6.58
S17-27A+B	1.49	1.45	1.46	1.46	1.45	1.45	1.49	6.58
S17-3	3.42	2.36	3.27	2.87	2.26	2.89	3.83	4.78
S17-30+A	3.75	2.34	3.39	3.4	2.25	2.91	3.69	5.31
S17-30+B	3.74	2.32	3.4	3.41	2.23	2.93	3.69	5.31
S17-30+C	1.73	1.45	1.46	1.47	1.45	1.45	1.66	5.31
S17-30A	1.51	1.45	1.46	1.46	1.45	1.45	1.5	6.6
S17-30C	3.81	2.34	3.42	3.44	2.24	2.93	3.74	5.38
S17-31	3.78	2.33	3.4	3.42	2.24	2.91	3.72	4.75

NODE	STORM EVENT							WARNING STAGE (FT)
	100YR-1HR	100YR-24HR	100YR-8HR	10YR-1HR	10YR-24HR	10YR-8HR	25YR-72HR	
S17-33A	6.53	2.86	4.87	4.81	2.52	3.89	6.12	6.86
S17-36	6.26	3.17	4.78	4.72	3.08	3.85	5.91	7.5
S17-37	6.39	5.47	5.74	5.82	5.41	5.62	6.05	10.95
S17-3A	3.44	2.36	3.27	2.88	2.26	2.89	3.84	5.32
S17-4	4.19	2.42	3.55	3.24	2.27	3.04	4.38	5.42
S17-44	1.46	1.45	1.45	1.45	1.45	1.45	1.48	5.96
S17-45	1.46	1.45	1.45	1.45	1.45	1.45	1.46	16.05
S17-49	7.73	3.45	5.21	5.24	3.35	4.08	7.04	15.63
S17-5	4.39	2.43	3.61	3.34	2.27	3.07	4.53	4.74
S17-6	3.78	2.4	3.42	3.04	2.27	2.98	4.1	5.28
S17-7	3.41	2.36	3.27	2.87	2.26	2.88	3.82	4.94
S17-8	3.79	2.41	3.43	3.05	2.27	2.99	4.1	5.35
S17-9	3.98	2.42	3.49	3.13	2.27	3.02	4.24	4.74
S17FW-11	3.13	2.3	3.1	2.7	2.26	2.77	3.57	5.07
S17FW-12	3.1	2.3	3.08	2.68	2.25	2.76	3.55	5.27
S17FW-13	3.27	2.31	3.13	2.77	2.26	2.78	3.67	5.69
S17FW-14	3.04	2.3	3.05	2.65	2.25	2.74	3.5	6.41

Curve Number Calculations

CN CALCULATIONS FOR PROPOSED CONDITIONS - BASIN B-17

SUB-BASIN	TOTAL DRAINAGE AREA (AC)	PERVIOUS DRAINAGE AREA (AC)	PERVIOUS AREA CURVE NUMBER	IMP. DRAINAGE AREA (AC)	IMP. AREA CURVE NUMBER	COMPOSITE CURVE NUMBER
B17-1	0.64	0.02	61	0.62	96	95
B17-1A	0.08	0	61	0.08	96	96
B17-3	0.67	0	61	0.67	96	96
B17-3A	0.12	0	61	0.12	96	96
B17-5	0.71	0.03	61	0.68	96	95
B17-7	0.61	0	61	0.61	96	96
B17-9	0.71	0.04	61	0.67	96	94
B17-14	0.71	0.04	61	0.67	96	94
B17-16	0.81	0.05	61	0.76	96	94
B17-18	0.64	0.03	61	0.61	96	94
B17-20	0.57	0.05	61	0.52	96	93
B17-22	0.56	0	61	0.56	96	96
B17-201	0.69	0	61	0.69	96	96
B17-12A	0.15	0	61	0.15	96	96
B17-202	0.35	0	61	0.35	96	96
B17-203	0.21	0.00	61	0.21	96	96
B17-204	0.49	0.00	61	0.49	96	96
B17-205	0.32	0.00	61	0.32	96	96
B17-206	0.35	0.00	61	0.35	96	96
B17-208A	0.13	0.00	61	0.13	96	96
B17-208	0.28	0.00	61	0.28	96	96
B17FW-11	0.1	0.00	61	0.10	96	96
B17-210A	0.07	0.00	61	0.07	96	96
B17FW-12	0.11	0.00	61	0.11	96	96
B17-210	0.28	0.00	61	0.28	96	96
B17FW-13	0.29	0.00	61	0.29	96	96
B17FW-14	0.4	0.04	61	0.36	96	93
B17-212	0.65	0.00	61	0.65	96	96
BX17-36	0.72	0.00	61	0.72	96	96
BX17-47	0.08	0.00	61	0.08	96	96
BX17-50	0.33	0.00	61	0.33	96	96
B17-216	0.16	0.00	61	0.16	96	96
B17-222	0.11	0.00	61	0.11	96	96
B17-224	0.37	0.00	61	0.37	96	96
BX17-102	0.19	0.04	61	0.15	96	89
TOTAL SUB-BASIN B-17A	13.66	0.34	61	13.32	96	95

CN CALCULATIONS FOR PROPOSED CONDITIONS - BASIN B-17

SUB-BASIN	TOTAL DRAINAGE AREA (AC)	PERVIOUS DRAINAGE AREA (AC)	PERVIOUS AREA CURVE NUMBER	IMP. DRAINAGE AREA (AC)	IMP. AREA CURVE NUMBER	COMPOSITE CURVE NUMBER
BX17-105	0.1	0	61	0.1	96	96
BX17-107	0.05	0	61	0.05	96	96
BX17-108	0.01	0	61	0.01	96	96
BX17-109	0.13	0	61	0.13	96	96
BX17-110	0.28	0.07	61	0.21	96	87
BX17-112	0.39	0.01	61	0.38	96	95
TOTAL SUB-BASIN B-17B	0.96	0.08	61	0.88	96	93
B17-240	0.45	0.00	61	0.45	96	96
B17-241A	0.28	0.00	61	0.28	96	96
B17-241B	0.06	0.01	61	0.05	96	90
B17-31	0.26	0.00	61	0.26	96	96
B17-38A	0.02	0.00	61	0.02	96	96
B17-34A	0.13	0.00	61	0.13	96	96
B17-241	0.18	0.03	61	0.15	96	90
B17-243	0.08	0.04	61	0.04	96	79
BX17-139	0.36	0	61	0.36	96	96
BX17-145	0.1	0	61	0.1	96	96
BX17-148	0.22	0	61	0.22	96	96
BX17-150	0.07	0.07	61	0	96	61
BX17-153	0.16	0	61	0.16	96	96
TOTAL SUB-BASIN B-17C	2.37	0.15	61	2.22	96	94
BX17-38	0.21	0	61	0.21	96	96
BX17-43	0.24	0	61	0.24	96	96
BX17-45	0.19	0	61	0.19	96	96
BX17-54	0.22	0.00	61	0.22	96	96
BX17-70	0.33	0.09	61	0.24	96	86
BX17-71	0.18	0	61	0.18	96	96
BX17-73	0.23	0	61	0.23	96	96
BX17-74	0.16	0	61	0.16	96	96
BX17-77	0.08	0.00	61	0.08	96	96
BX17-79	0.06	0	61	0.06	96	96
BX17-80	0.06	0	61	0.06	96	96
BX17-81	0.13	0	61	0.13	96	96
BX17-82	0.14	0.00	61	0.14	96	96
BX17-83	0.16	0	61	0.16	96	96
BX17-85	0.34	0	61	0.34	96	96
BX17-86	0.15	0	61	0.15	96	96
BX17-90	0.2	0.00	61	0.2	96	96
BX17-91	0.07	0.01	61	0.06	96	91
BX17-92	0.19	0.00	61	0.19	96	96
BX17-93	0.2	0.00	61	0.2	96	96
B17-29A	0.47	0.00	61	0.47	96	96
B17-29D	0.16	0.00	61	0.16	96	96
BX17-99	0.05	0.04	61	0.01	96	68
TOTAL SUB-BASIN B-17D	4.22	0.14	61	4.08	96	95

CN CALCULATIONS FOR PROPOSED CONDITIONS - BASIN B-17

SUB-BASIN	TOTAL DRAINAGE AREA (AC)	PERVIOUS DRAINAGE AREA (AC)	PERVIOUS AREA CURVE NUMBER	IMP. DRAINAGE AREA (AC)	IMP. AREA CURVE NUMBER	COMPOSITE CURVE NUMBER
B17-226	0.39	0.00	61	0.39	96	96
B17-227	0.25	0.00	61	0.25	96	96
B17-229	0.47	0.00	61	0.47	96	96
B17-225	0.09	0.04	61	0.05	96	80
B17-231	0.43	0.00	61	0.43	96	96
BX17-26	0.21	0.00	61	0.21	96	96
B17-233	0.34	0.00	61	0.34	96	96
B17-235	0.64	0.00	61	0.64	96	96
B17-237	0.32	0.00	61	0.32	96	96
B17-239	0.29	0.00	61	0.29	96	96
B17-242	0.54	0.00	61	0.54	96	96
B17-36	0.2	0	61	0.2	96	96
B17-37	0.33	0	61	0.33	96	96
BX17-118	0.29	0	61	0.29	96	96
BX17-119	0.28	0	61	0.28	96	96
BX17-120	0.3	0	61	0.3	96	96
TOTAL SUB-BASIN B-17E	5.37	0.04	61	5.33	96	96
B17-44	0.5	0.1	61	0.4	96	89
BX17-55	0.18	0	61	0.18	96	96
BX17-57	0.15	0	61	0.15	96	96
BX17-58	0.11	0.01	61	0.1	96	93
BX17-59	0.04	0.00	61	0.04	96	96
BX17-60	0.04	0.01	61	0.03	96	87
BX17-61	0.04	0	61	0.04	96	96
BX17-62	0.04	0.01	61	0.03	96	87
BX17-64	0.15	0	61	0.15	96	96
BX17-65	0.14	0.05	61	0.09	96	84
BX17-66	0.17	0.06	61	0.11	96	84
BX17-67	0.33	0.03	61	0.3	96	93
TOTAL SUB-BASIN B-17F	1.89	0.27	61	1.62	96	91
TOTAL BASIN B-17	28.47	1.02		27.45		

Average Hydraulic Conductivity

Average Hydraulic Conductivity

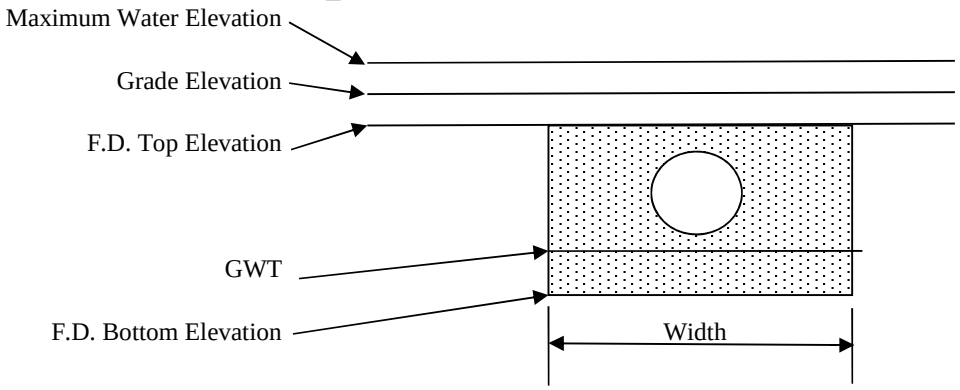
Basin B-17		
Percolation Test	P-29	P-30
Average Flow to 10 ft. depth (gpm)	0.20	14.27
Depth to Water Table (ft)	2.90	2.40
Head Maintained (ft)	1.90	1.40
Borehole Diameter (ft)	0.604	0.604
Borehole Depth (ft)	10.00	10.00
Du (ft)	1.90	1.40
Average Flow (cfs)	0.0004	0.0318
Ds (ft)	7.10	7.60
Hydraulic Conductivity K (cfs/ft2-ft head)	1.50E-05	1.42E-03
Average Hydraulic Conductivity K	**7.16E-04**	

Rating Curve Calculations

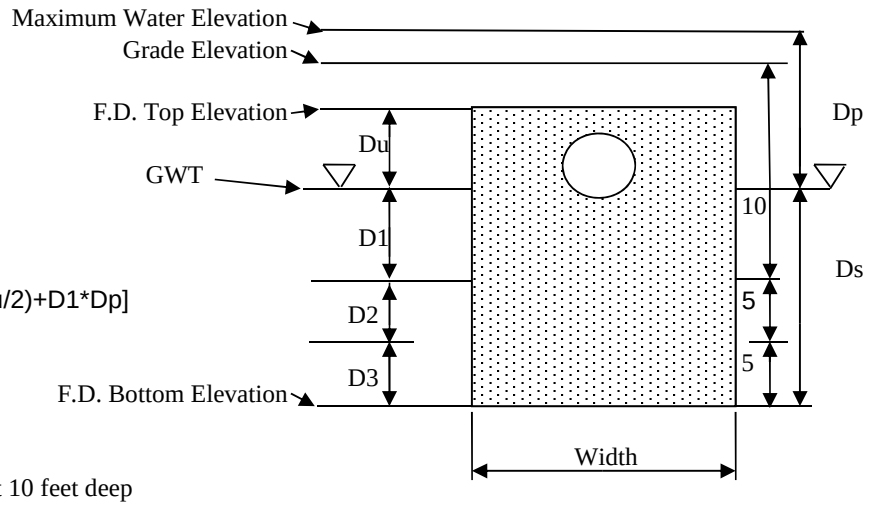
Made by: _____ _____
Checked by: _____ _____

Determination of Rating Curve

Proposed Exfiltration Trench: E_OPT-17A



Maximum Water Elevation =	**5.45**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**4.45**	ft.NAVD	
F.D.Top Elevation =	**3.45**	ft.NAVD	
Ground Water Table =	**1.45**	ft.NAVD	
F.D. Bottom Elevation =	**-10.06**	ft.NAVD	
Width =	**5.00**	feet.	
Pipe Diameter =	**24**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**7.16E-04**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K15 =	**7.16E-04**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____
Checked by: _____ _____

Determination of Rating Curve

Proposed Exfiltration Trench: E_OPT-17A

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs/ft)	(cfs/ft)
1.45	0.000	0.000
2.20	0.012	0.000
3.45	0.036	0.023
5.45	0.075	0.062

Rating Curve (Q)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs)	(cfs)
1.45	0.00	0.00
2.20	0.01	0.00
3.45	0.04	0.02
5.45	0.07	0.06

Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

Rating Curve Adjusted (Q)

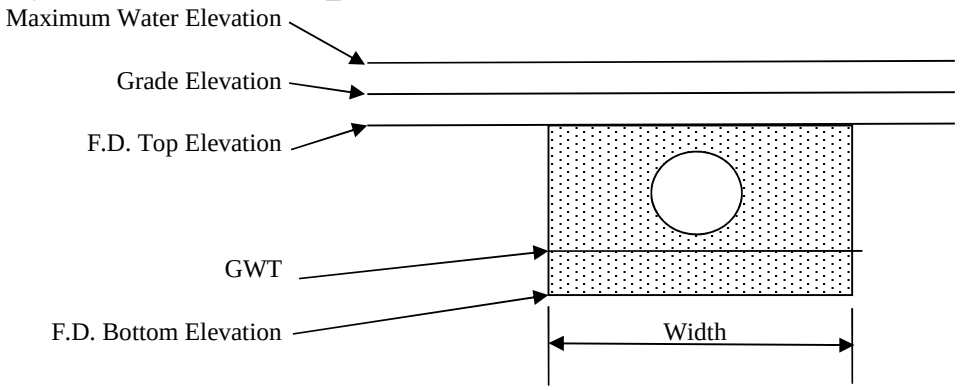
Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.45	1.45	0.00
1.45	2.20	0.01
1.45	3.45	0.04
1.45	5.45	0.07
2.20	2.20	0.00
2.20	3.45	0.02
2.20	5.45	0.06

Made by: _____ _____

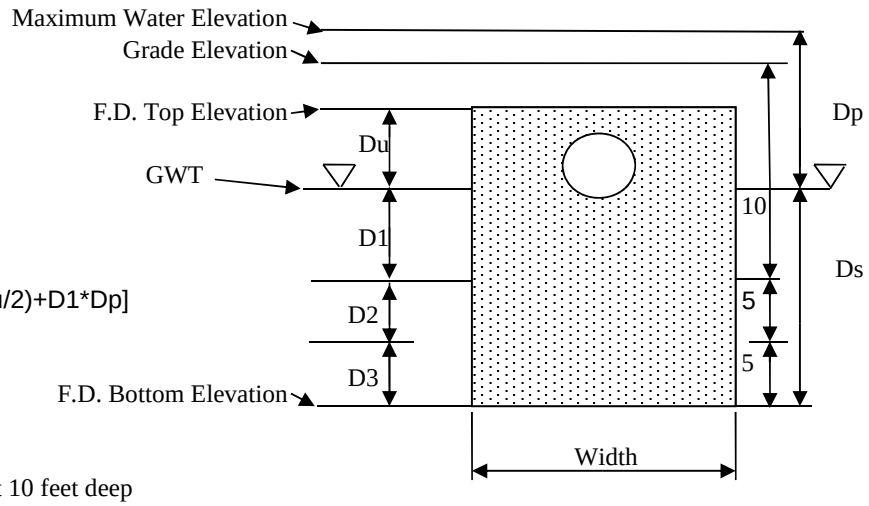
Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-17B



Maximum Water Elevation =	**5.45**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**4.45**	ft.NAVD	
F.D.Top Elevation =	**2.95**	ft.NAVD	
Ground Water Table =	**1.45**	ft.NAVD	
F.D. Bottom Elevation =	**-9.56**	ft.NAVD	
Width =	**5.00**	feet.	
Pipe Diameter =	**18**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**7.16E-04**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K15 =	**7.16E-04**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____

Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-17B

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs/ft)	(cfs/ft)
1.45	0.000	0.000
2.20	0.012	0.000
3.45	0.034	0.022
5.45	0.070	0.058

Rating Curve (Q)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs)	(cfs)
1.45	0.00	0.00
2.20	0.01	0.00
3.45	0.03	0.02
5.45	0.07	0.06

Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

Rating Curve Adjusted (Q)

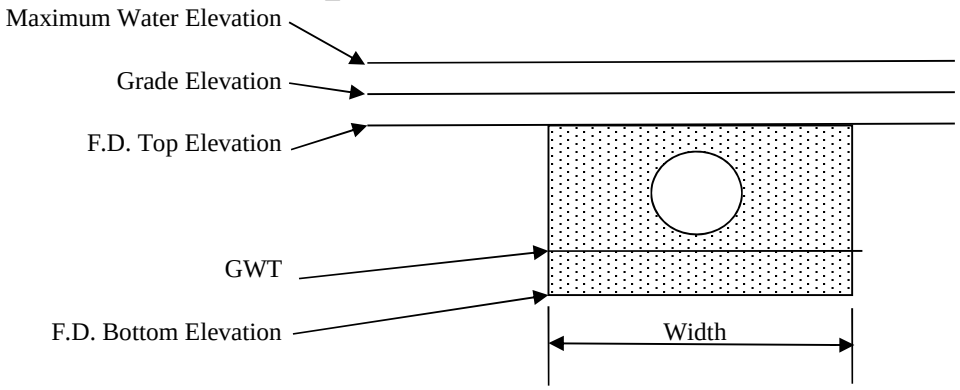
Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.45	1.45	0.00
1.45	2.20	0.01
1.45	3.45	0.03
1.45	5.45	0.07
2.20	2.20	0.00
2.20	3.45	0.02
2.20	5.45	0.06

Made by: _____ _____

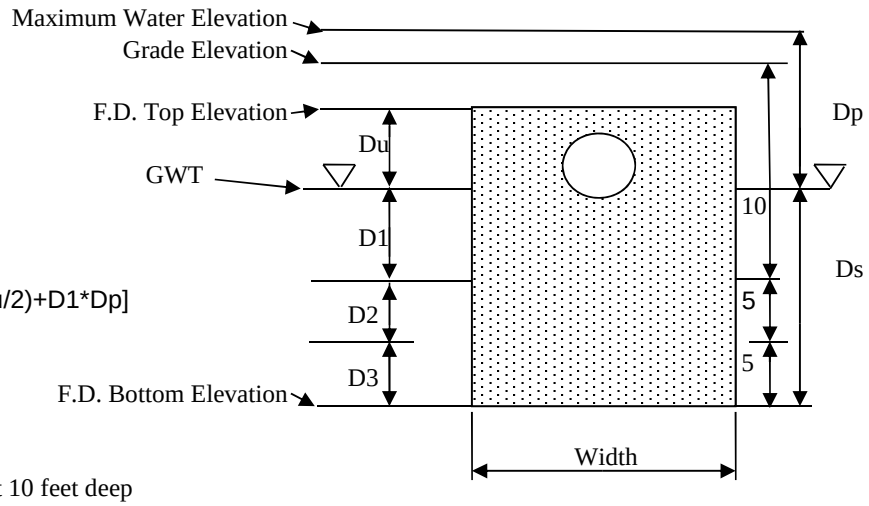
Checked by: _____ _____

Determination of Rating Curve

Proposed Exfiltration Trench: E_OPT-17C



Maximum Water Elevation =	**5.45**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**4.45**	ft.NAVD	
F.D.Top Elevation =	**3.45**	ft.NAVD	
Ground Water Table =	**1.45**	ft.NAVD	
F.D. Bottom Elevation =	**-11.56**	ft.NAVD	
Width =	**4.00**	feet.	
Pipe Diameter =	**24**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**7.16E-04**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K15 =	**0.00E+00**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____

Checked by: _____ _____

Determination of Rating Curve

Proposed Exfiltration Trench: E_OPT-17C

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs/ft)	(cfs/ft)
1.45	0.000	0.000
2.20	0.013	0.000
3.45	0.040	0.026
5.45	0.083	0.069

Rating Curve (Q)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs)	(cfs)
1.45	0.00	0.00
2.20	0.01	0.00
3.45	0.04	0.03
5.45	0.08	0.07

Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

Rating Curve Adjusted (Q)

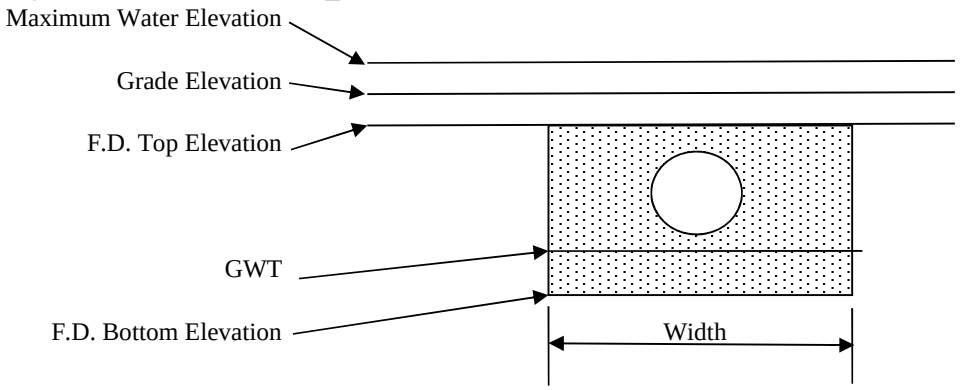
Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.45	1.45	0.00
1.45	2.20	0.01
1.45	3.45	0.04
1.45	5.45	0.08
2.20	2.20	0.00
2.20	3.45	0.03
2.20	5.45	0.07

Made by: _____ _____

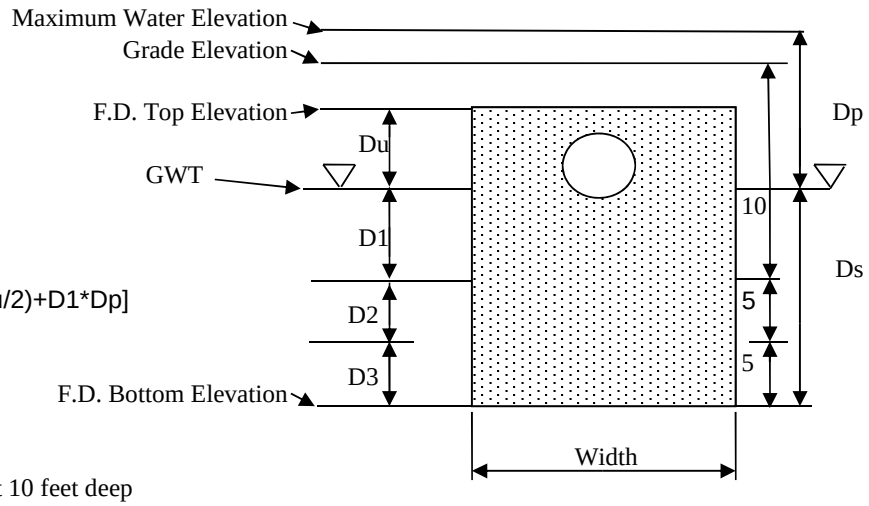
Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-17D



Maximum Water Elevation =	**5.45**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**4.45**	ft.NAVD	
F.D.Top Elevation =	**3.95**	ft.NAVD	
Ground Water Table =	**1.45**	ft.NAVD	
F.D. Bottom Elevation =	**-8.56**	ft.NAVD	
Width =	**5.00**	feet.	
Pipe Diameter =	**30**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**7.16E-04**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K15 =	**7.16E-04**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____

Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-17D

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs/ft)	(cfs/ft)
1.45	0.000	0.000
2.20	0.009	0.000
3.45	0.031	0.020
5.45	0.067	0.056

Rating Curve (Q)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs)	(cfs)
1.45	0.00	0.00
2.20	0.01	0.00
3.45	0.03	0.02
5.45	0.07	0.06

Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

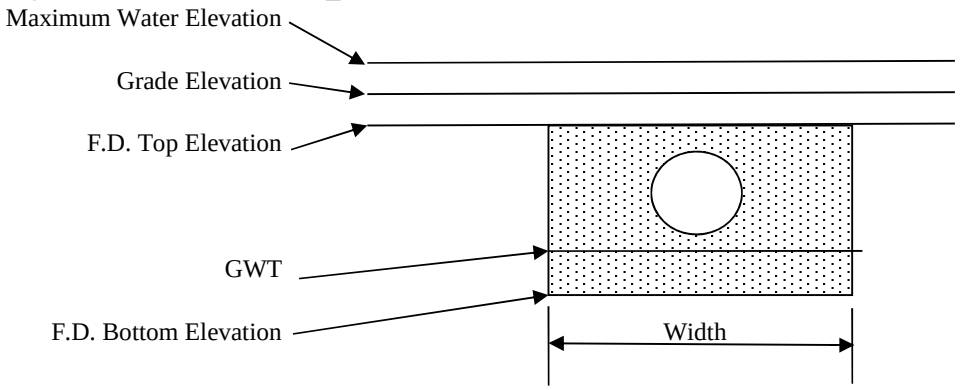
Rating Curve Adjusted (Q)

Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.45	1.45	0.00
1.45	2.20	0.01
1.45	3.45	0.03
1.45	5.45	0.07
2.20	2.20	0.00
2.20	3.45	0.02
2.20	5.45	0.06

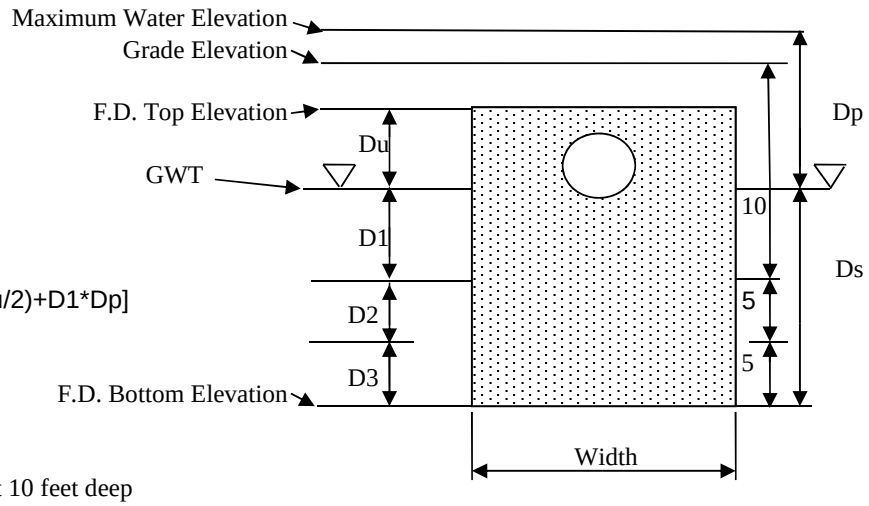
Made by: _____ _____
Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-17E



Maximum Water Elevation =	**5.45**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**4.45**	ft.NAVD	
F.D.Top Elevation =	**3.45**	ft.NAVD	
Ground Water Table =	**1.45**	ft.NAVD	
F.D. Bottom Elevation =	**-8.66**	ft.NAVD	
Width =	**5.00**	feet.	
Pipe Diameter =	**30**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**7.16E-04**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K15 =	**7.16E-04**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____

Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-17E

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs/ft)	(cfs/ft)
1.45	0.000	0.000
2.20	0.010	0.000
3.45	0.032	0.021
5.45	0.067	0.055

Rating Curve (Q)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs)	(cfs)
1.45	0.00	0.00
2.20	0.01	0.00
3.45	0.03	0.02
5.45	0.07	0.06

Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

Rating Curve Adjusted (Q)

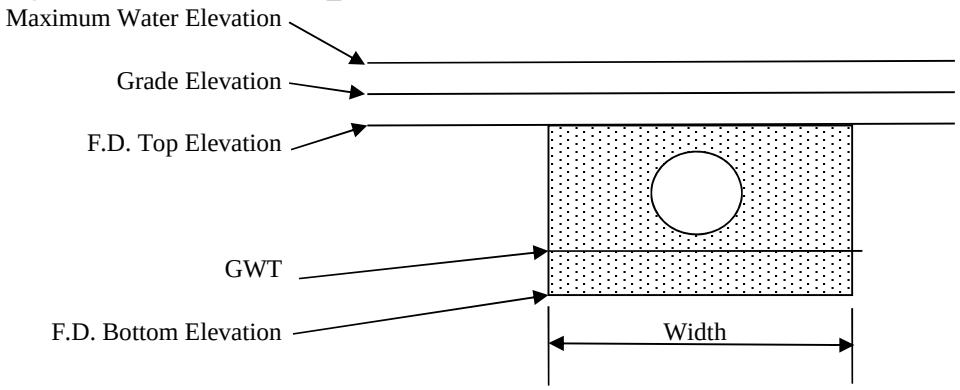
Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.45	1.45	0.00
1.45	2.20	0.01
1.45	3.45	0.03
1.45	5.45	0.07
2.20	2.20	0.00
2.20	3.45	0.02
2.20	5.45	0.06

Made by: _____ _____

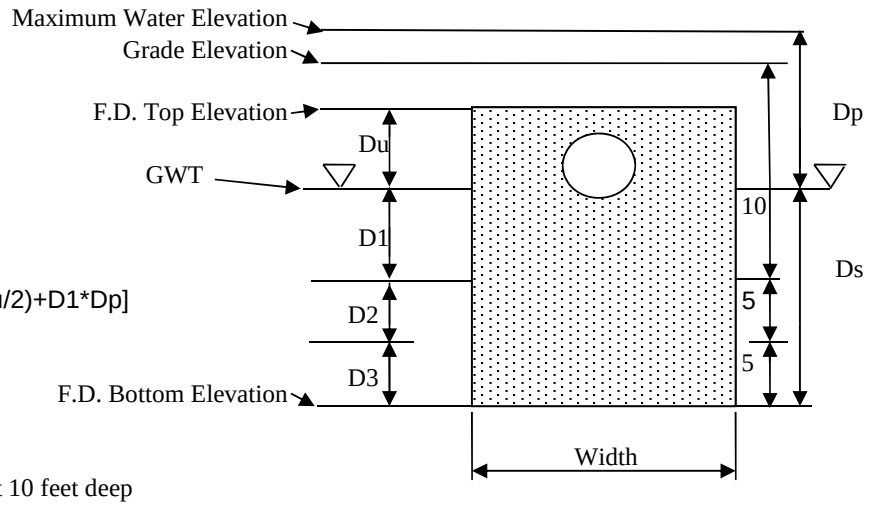
Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-17F



Maximum Water Elevation =	**5.45**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**4.45**	ft.NAVD	
F.D.Top Elevation =	**2.95**	ft.NAVD	
Ground Water Table =	**1.45**	ft.NAVD	
F.D. Bottom Elevation =	**-9.56**	ft.NAVD	
Width =	**4.00**	feet.	
Pipe Diameter =	**18**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**7.16E-04**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K15 =	**7.16E-04**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____

Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-17F

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs/ft)	(cfs/ft)
1.45	0.000	0.000
2.20	0.012	0.000
3.45	0.034	0.022
5.45	0.070	0.058

Rating Curve (Q)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs)	(cfs)
1.45	0.00	0.00
2.20	0.01	0.00
3.45	0.03	0.02
5.45	0.07	0.06

Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

Rating Curve Adjusted (Q)

Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.45	1.45	0.00
1.45	2.20	0.01
1.45	3.45	0.03
1.45	5.45	0.07
2.20	2.20	0.00
2.20	3.45	0.02
2.20	5.45	0.06

French Drain Length Calcs

SUMMARY OF ADDITIONAL IMP. AREA - BASIN 17

PRE-DEVELOPMENT				POST-DEVELOPMENT CONDITIONS						
SUB-BASIN	TOTAL DRAINAGE AREA (AC)	IMPERVIOUS DRAINAGE AREA (AC)	COMPOSITE CURVE NUMBER	SUB-BASIN	TOTAL DRAINAGE AREA (AC)	PERVIOUS DRAINAGE AREA (AC)	PERVIOUS AREA CURVE NUMBER	IMPERVIOUS DRAINAGE AREA (AC)	IMPERVIOUS AREA CURVE NUMBER	COMPOSITE CURVE NUMBER
B17-10	0.67	0.63	94	B17-201	0.69	0.00	61	0.69	96	96
B17-12A	0.12	0.07	81	B17-12A	0.15	0.00	61	0.15	96	96
BX17-10	0.34	0.34	96	B17-202	0.35	0.00	61	0.35	96	96
BX17-12	0.21	0.21	96	B17-203	0.21	0.00	61	0.21	96	96
BX17-13	0.46	0.46	96	B17-204	0.49	0.00	61	0.49	96	96
BX17-15	0.16	0.06	74	B17-205	0.32	0.00	61	0.32	96	96
BX17-16	0.2	0.2	96	B17-206	0.35	0.00	61	0.35	96	96
BX17-20	0.35	0.35	96	B17-208A	0.13	0.00	61	0.13	96	96
BX17-23	0.5	0.5	96	B17-208	0.28	0.00	61	0.28	96	96
BX17-24	0.14	0.14	96	B17FW-11	0.1	0.00	61	0.10	96	96
BX17-26	0.13	0.13	96	B17-210A	0.07	0.00	61	0.07	96	96
BX17-27	0.06	0	61	B17FW-12	0.11	0.00	61	0.11	96	96
BX17-28	0.14	0.14	96	B17-210	0.28	0.00	61	0.28	96	96
BX17-31	0.27	0.24	92	B17FW-13	0.29	0.00	61	0.29	96	96
BX17-39	0.4	0.36	93	B17FW-14	0.4	0.04	61	0.36	96	93
BX17-33	0.63	0.63	96	B17-212	0.65	0.00	61	0.65	96	96
BX17-36	0.74	0.74	96	BX17-36	0.72	0.00	61	0.72	96	96
BX17-47	0.08	0.08	96	BX17-47	0.08	0.00	61	0.08	96	96
BX17-48	0.05	0.05	96	BX17-50	0.33	0.00	61	0.33	96	96
BX17-49	0.09	0.09	96	B17-216	0.16	0.00	61	0.16	96	96
BX17-50	0.33	0.33	96	B17-222	0.11	0.00	61	0.11	96	96
BX17-51	0.11	0.11	96	B17-224	0.37	0.00	61	0.37	96	96
BX17-106	0.03	0.03	96	B17-226	0.39	0.00	61	0.39	96	96
BX17-102	0.19	0.04	89	B17-254	0.19	0.03	61	0.16	96	90
BX17-117	0.04	0.04	96	B17-227	0.25	0.00	61	0.25	96	96
BX17-52	0.19	0.19	96	B17-229	0.47	0.00	61	0.47	96	96
BX17-123	0.4	0.4	96	B17-225	0.09	0.04	61	0.05	96	80
BX17-127	0.24	0.24	96	B17-231	0.43	0.00	61	0.43	96	96
B17-40	0.55	0.55	96	BX17-26	0.21	0.00	61	0.21	96	96
B17-47	0.4	0.4	96	B17-233	0.34	0.00	61	0.34	96	96

PRE-DEVELOPMENT

SUB-BASIN	TOTAL DRAINAGE AREA (AC)	IMPERVIOUS DRAINAGE AREA (AC)	COMPOSITE CURVE NUMBER
B17-33A	0.22	0.17	88
B17-26	0.08	0.08	96
B17-24	0.44	0.44	96
B17-27	0.58	0.58	96
B17-28	0.28	0.28	96
B17-29	0.21	0.21	96
BX17-38	0.24	0.24	96
BX17-43	0.28	0.28	96
BX17-45	0.21	0.21	96
BX17-54	0.23	0.23	96
B17-33	0.45	0.45	96
B17-34	0.23	0.23	96
B17-42	0.49	0.49	96
BX17-152	0.56	0.56	96
B17-31	0.25	0.22	92
B17-38A	0.02	0	61
B17-34A	0.13	0.09	85
TOTAL B-17	13.12	12.51	

POST-DEVELOPMENT CONDITIONS

SUB-BASIN	TOTAL DRAINAGE AREA (AC)	PERVIOUS DRAINAGE AREA (AC)	PERVIOUS AREA CURVE NUMBER	IMPERVIOUS DRAINAGE AREA (AC)	IMPERVIOUS AREA CURVE NUMBER	COMPOSITE CURVE NUMBER
B17-235	0.64	0.00	61	0.64	96	96
B17-237	0.32	0.00	61	0.32	96	96
B17-239	0.29	0.00	61	0.29	96	96
BX17-38	0.21	0.00	61	0.21	96	96
BX17-43	0.24	0.00	61	0.24	96	96
BX17-45	0.19	0.00	61	0.19	96	96
BX17-54	0.22	0.00	61	0.22	96	96
B17-240	0.45	0.00	61	0.45	96	96
B17-241A	0.28	0.00	61	0.28	96	96
B17-242	0.54	0.00	61	0.54	96	96
B17-243	0.06	0.01	61	0.05	96	90
B17-31	0.26	0.00	61	0.26	96	96
B17-38A	0.02	0.00	61	0.02	96	96
B17-34A	0.13	0.00	61	0.13	96	96
B17-241B	0.18	0.03	61	0.15	96	90
B17-243	0.08	0.04	61	0.04	96	79
	13.12			12.93		

Total Additional Imp. Area for Basin 17= 0.42 ac

Note: This table is for additional imp area calculations only

SUMMARY OF ADD/REMOVAL OF FRENCH DRAIN - BASIN 17

REMOVAL OF FRENCH DRAIN (FD) DUE TO WIDENING						PROPOSED FRENCH DRAIN					
FROM STA.	**TO STA.**	**SIDE**	**TOTAL LENGTH OF FD (FT)**	**NON PERFORATED FD LENGTH (FT)**	**PERFORATED FD LENGTH (FT)**	**FROM STA.**	**TO STA.**	**SIDE**	**TOTAL LENGTH OF FD (FT)**	**NON PERFORATED FD LENGTH (FT)**	**PERFORATED FD LENGTH (FT)**
512+09.56	514+29.00	LT	219	16	203	511+29.97	513+52.34	LT	222	16	206
514+29.00	516+59.00	LT	230	16	214	513+54.34	514+29.97	LT	76	16	60
						514+29.97	515+19.43	LT	89	16	73
						515+19.43	516+58.97	LT	140	16	124
519+54.62	520+56.21	LT	102	16	86	519+53.42	520+36.66	LT	83	16	67
520+56.21	521+79.61	LT	123	16	107	520+55.45	521+79.34	LT	124	16	108
521+79.61	523+07.76	LT	128	8	120	521+79.94	522+88.02	LT	108	8	100
						726+43.04	726+85.11	LT	42	8	34
						727+44.62	728+53.08	LT	108	8	100
						732+69.30	733+71.91	LT	103	8	95
TOTAL PERFORMATED FD LENGTH IS REMOVED (BASIN B-17A) =					**731**	**TOTAL PERFORATED FD LENGTH IS ADDED (BASIN B17-A) =**					**967**
532+83.49	533+80.11	LT	97	16	81	6532+63.78	6533+79.23	LT	115	8	107
533+80.11	534+78.95	LT	99	16	83	6533+79.23	6534+28.38	LT	49	16	33
534+78.95	537+26.30	LT	247	16	231	6534+28.38	6537+29.27	LT	301	8	293
537+26.30	538+59.17	LT	133	16	117						
TOTAL PERFORMATED FD LENGTH IS REMOVED (BASIN B-17E) =					**512**	**TOTAL PERFORATED FD LENGTH IS ADDED ((BASIN B-17E)=**					**433**
532+38.00	534+27.73	RT	190	16	174	305+28.59	306+00.00	RT	71	8	63
						306+00.00	306+79.74	RT	80	16	64
						306+79.74	308+98.20	RT	218	16	202
						308+98.20	310+00.00	RT	102	16	86
TOTAL PERFORMATED FD LENGTH IS REMOVED (BASIN B-17B) =					**174**	**TOTAL PERFORATED FD LENGTH IS ADDED ((BASIN B-17B)=**					**415**
TOTAL REMOVAL OF FD (PERFORATED) IN BASIN B-17 =					**1416**	TOTAL ADDITION OF FD (PERFORATED) IN BASIN B-17 =					1816

TOTAL ADDITION OF FD (PERFORATED) IN BASIN 17 = 400 FT

REQUIRED VOLUME IN PROPOSED FRENCH DRAIN-BASIN17

Additional Imp. Area 0.42 ac

Required Treatment Volume

= 2.5" of Imp. area

Required Treatment Volume = 0.09 ac-ft (A)

Required Attenation Volume

$$Q = \frac{(P - 0.2S)^2}{(P + 0.8S)}$$

Q = Runoff (in) 13.51 in

P = Rainfall 25YR-72HR (in) = 14 in

S= maximum retention after runoff begins (in) 0.42 in

$$S = \frac{1000}{CN} - 10$$

CN = 96

Total Q in ac-ft 0.47 ac-ft (B)

Q (in) X Added Imp. Area/12

Provided Volume in French Drain =

maximum of (A) or (B) 0.47 ac-ft

Factor of Safety (F.S.) = 2

Required Volume in French Drain = 0.95 ac-ft

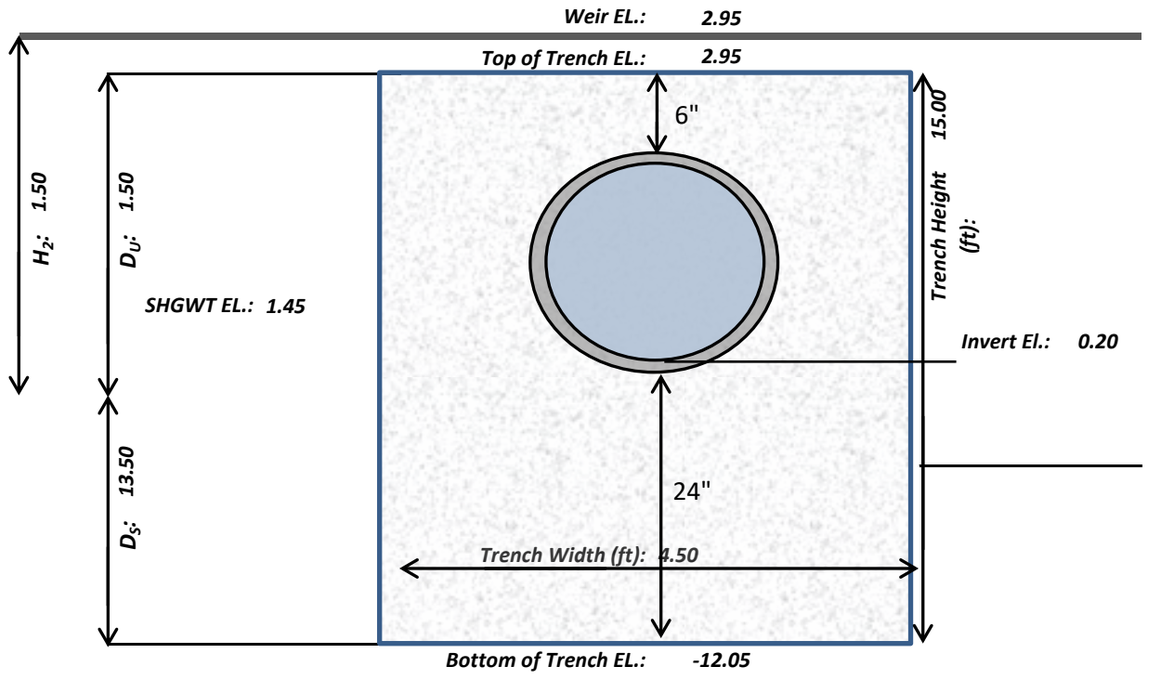
Provided in Volume in French Drain = 1.05 ac-ft

Basin 17

Palmetto Expressway Improvments

FRENCH DRAIN DESIGN VOLUMES

French Drain (ICPR Link Name):	
Location	
SHGWT EL. (ft-NAVD):	1.45
Pipe Size (in):	24
Length of French Drain, L (LF):	400
Pipe Thickness (in):	3.00
Pipe Invert EL. (ft-NAVD):	0.20
Top of Trench EL. (ft-NAVD):	2.95
Bottom of Trench EL. (ft-NAVD):	-12.05
Trench Height, H_T (ft):	15.00
Weir EL. (ft-NAVD):	4.45
Trench Width, W (ft):	4.50
Average Hydraulic Conductivity, K_{10} (cfs/ft^2/ft-head):	7.160E-04
Depth to Water Table, H_2 (ft):	1.50
Non-Saturated Trench Depth, D_U (ft):	1.50
Saturated Trench Depth, D_S (ft):	13.50
H_2W:	6.75
$2H_2D_U$:	4.50
D_U^2:	2.25
$2H_2D_S$:	40.50
$(1.39x10^{-4})WD_U$:	0.000938
If $D_U > D_S$ and $W < 2H_T$, Treatment Provided, V (ac-in):	14.55
If $D_S > D_U$ and/or $W > 2H_T$, Treatment Provided, V (ac-in):	12.62
$D_U > D_S$ and $W < 2H_T$ (Yes/No):	No
Treatment Volume Provided, V (Ac-ft):	**1.052**

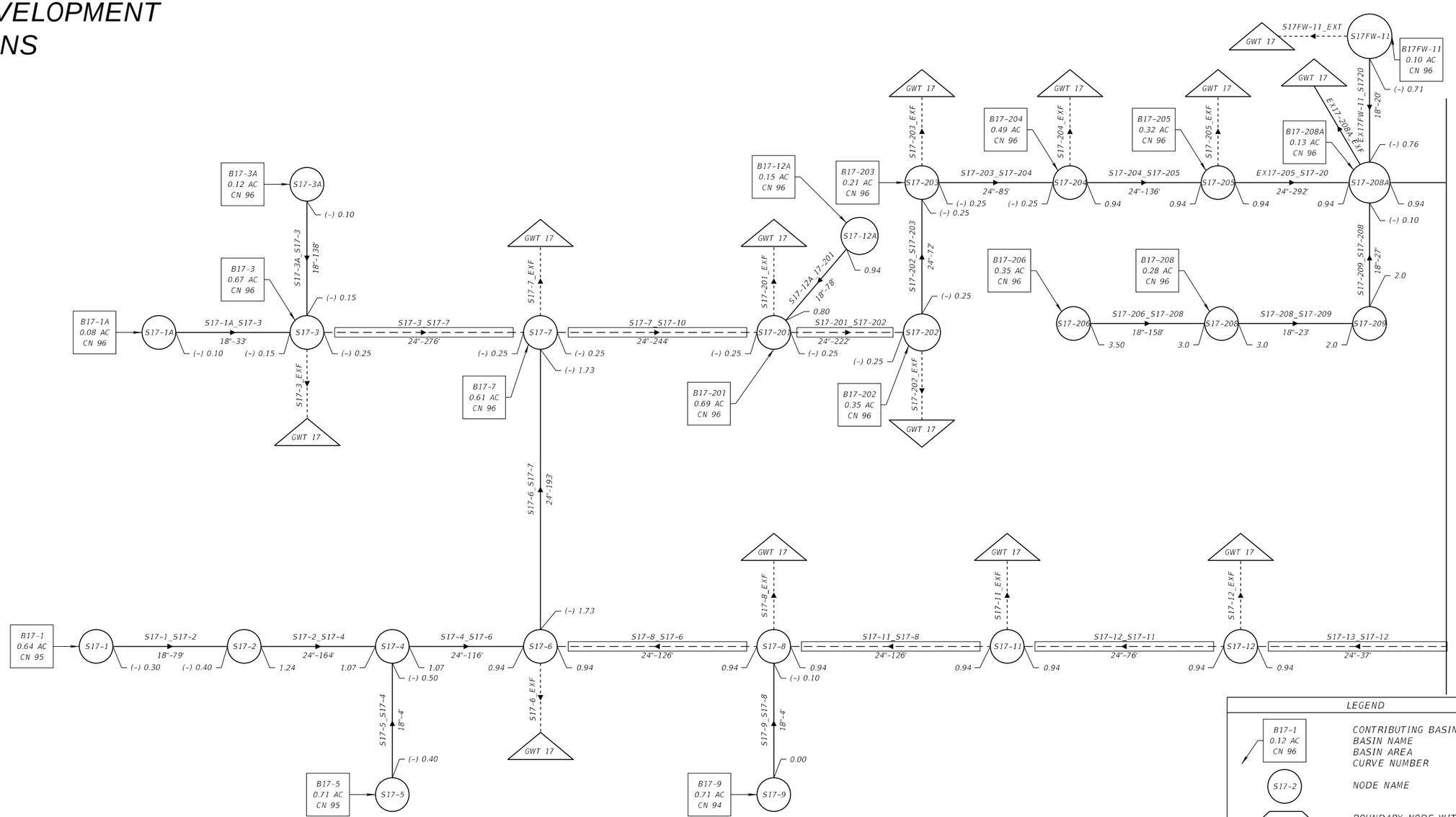


$$V = L[K_{10}(H_2W + 2H_2D_U - D_U^{\,2} + 2H_2D_S) + (1.39x10^{-4})WD_U]$$

$$V = L[K_{10}(2H_2D_U - D_U^{\,2} + 2H_2D_S) + (1.39x10^{-4})WD_U]$$

Nodal Diagram

POST-DEVELOPMENT CONDITIONS



MATCH LINE A-A'

LEGEND

- B17-1 / 0.12 AC / CN 96 — CONTRIBUTING BASIN, BASIN NAME, BASIN AREA, CURVE NUMBER
- S17-2 — NODE NAME
- 58ST_CANAL — BOUNDARY NODE WITH CONSTANT TAILWATER
- GWT 17-12 — BOUNDARY NODE WITH VARIABLE TAILWATER
- S17-2_S17-3 / 18"-42' / 21.50 / 21.40 — PIPE LINK WITH (QUANTITY)SIZE-LENGTH, INVERT ELEVATIONS
- WEX17_14 — WEIR LINK
- AREA 1_EXF — RATING CURVE LINK

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
826	MIAMI-DADE	447165-1-52-01

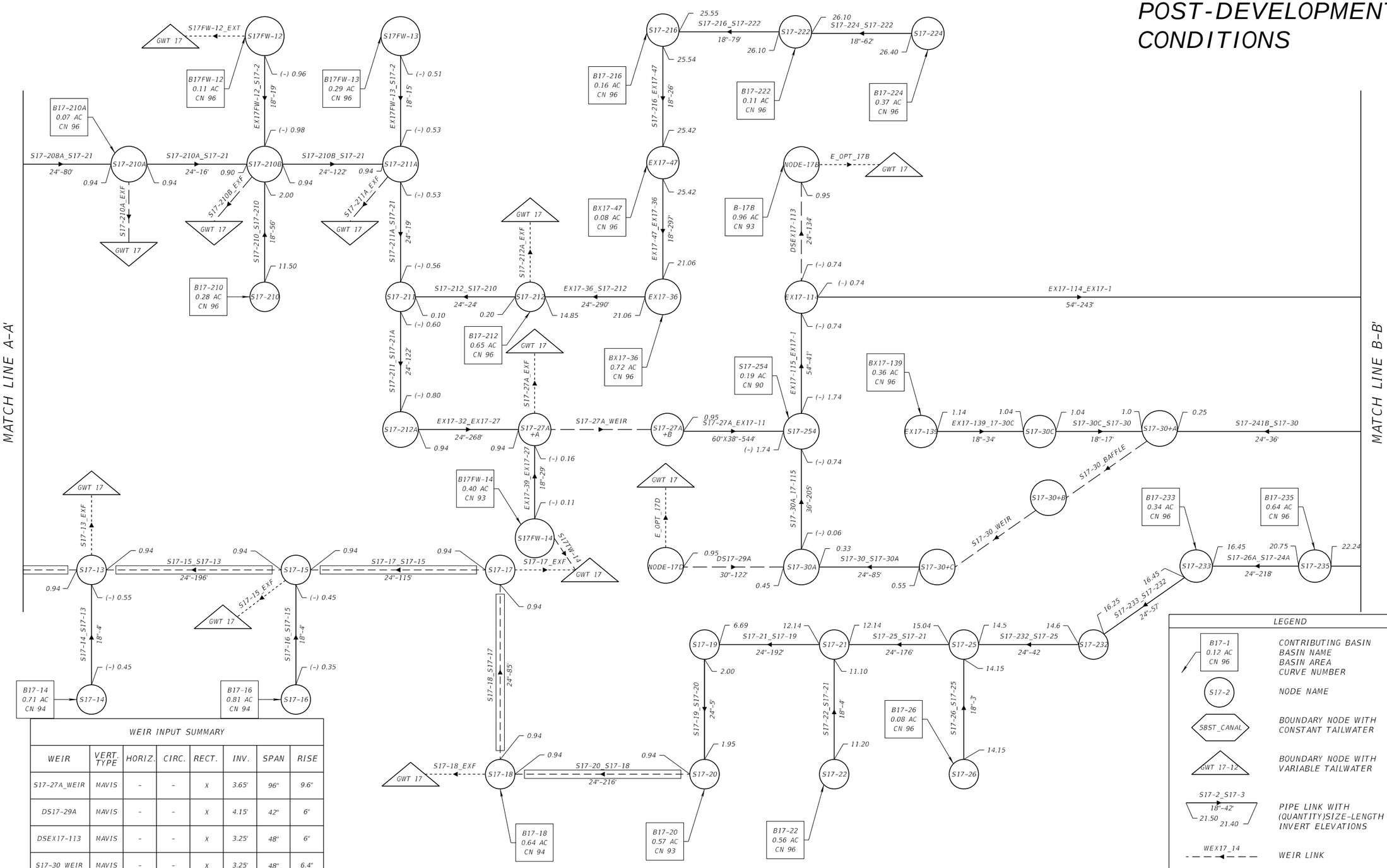
NODAL DIAGRAM BASIN 17

SHEET NO.

POST-DEVELOPMENT CONDITIONS

MATCH LINE A-A'

MATCH LINE B-B'



WEIR INPUT SUMMARY

WEIR	VERT. TYPE	HORIZ.	CIRC.	RECT.	INV.	SPAN	RISE
S17-27A_WEIR	MAVIS	-	-	X	3.65'	96"	9.6"
DS17-29A	MAVIS	-	-	X	4.15'	42"	6"
DSEX17-113	MAVIS	-	-	X	3.25'	48"	6"
S17-30_WEIR	MAVIS	-	-	X	3.25'	48"	6.4"
S17-30_BAFFLE	MAVIS	-	-	X	(-) 2.95'	60"	24"

LEGEND

- B17-1 / 0.12 AC / CN 96 — CONTRIBUTING BASIN, BASIN NAME, BASIN AREA, CURVE NUMBER
- S17-2 — NODE NAME
- 58ST_CANAL — BOUNDARY NODE WITH CONSTANT TAILWATER
- GWT 17-12 — BOUNDARY NODE WITH VARIABLE TAILWATER
- S17-2_S17-3 / 18"-42' / 21.50 / 21.40 — PIPE LINK WITH (QUANTITY)SIZE-LENGTH, INVERT ELEVATIONS
- WEX17_14 — WEIR LINK
- AREA 1_EXF — RATING CURVE LINK

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

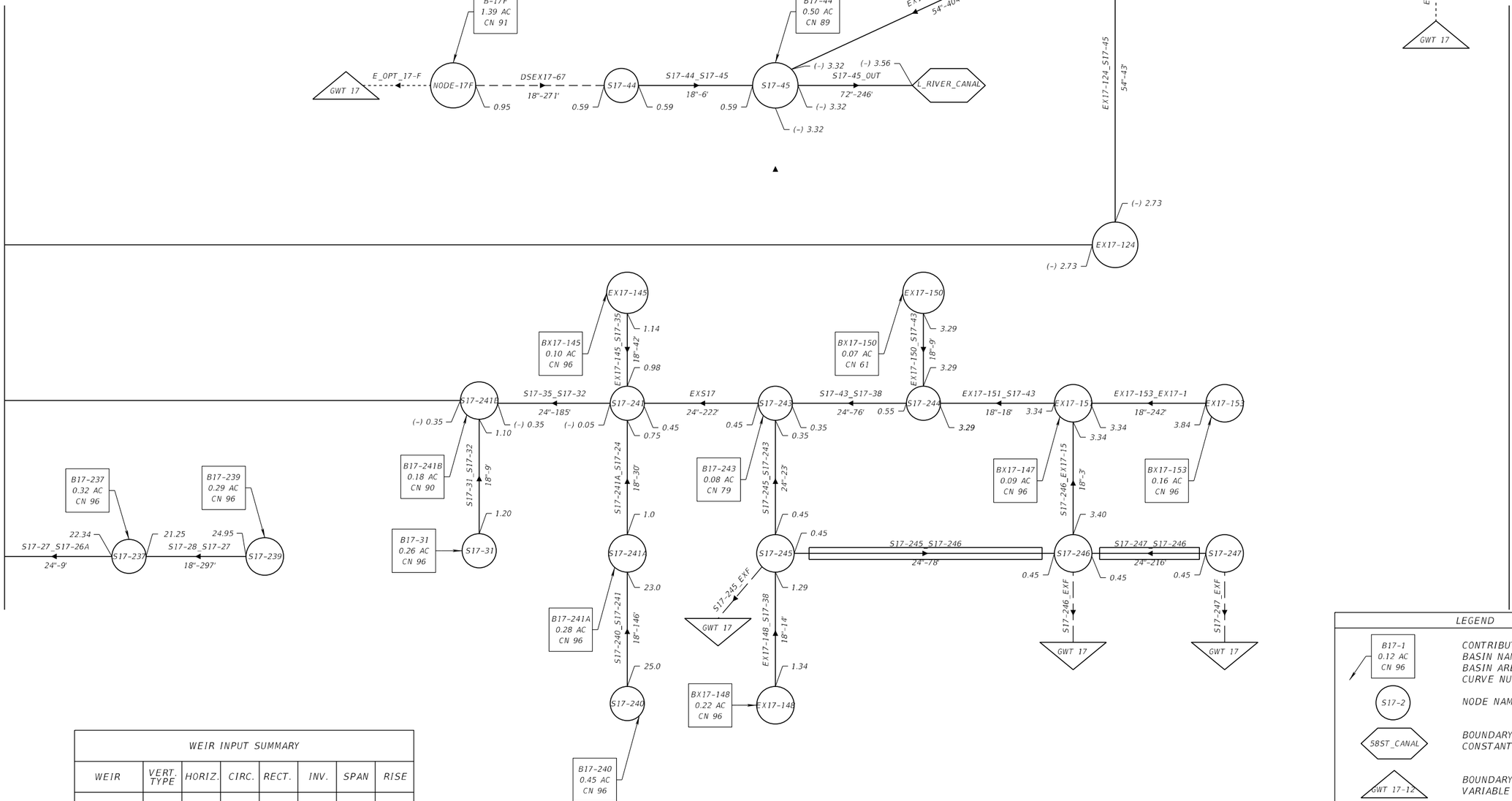
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
826	MIAMI-DADE	447165-1-52-01

NODAL DIAGRAM BASIN 17

SHEET NO.

POST-DEVELOPMENT CONDITIONS



WEIR INPUT SUMMARY							
WEIR	VERT. TYPE	HORIZ.	CIRC.	RECT.	INV.	SPAN	RISE
DSEX17-67	-	X	-	X	2.95'	48"	6"

LEGEND	
B17-1 0.12 AC CN 96	CONTRIBUTING BASIN BASIN NAME BASIN AREA CURVE NUMBER
S17-2	NODE NAME
58ST_CANAL	BOUNDARY NODE WITH CONSTANT TAILWATER
GWT 17-12	BOUNDARY NODE WITH VARIABLE TAILWATER
S17-2_S17-3 18"-42' 21.50 21.40	PIPE LINK WITH (QUANTITY)SIZE-LENGTH INVERT ELEVATIONS
WEX17_14	WEIR LINK
AREA 1_EXF	RATING CURVE LINK

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

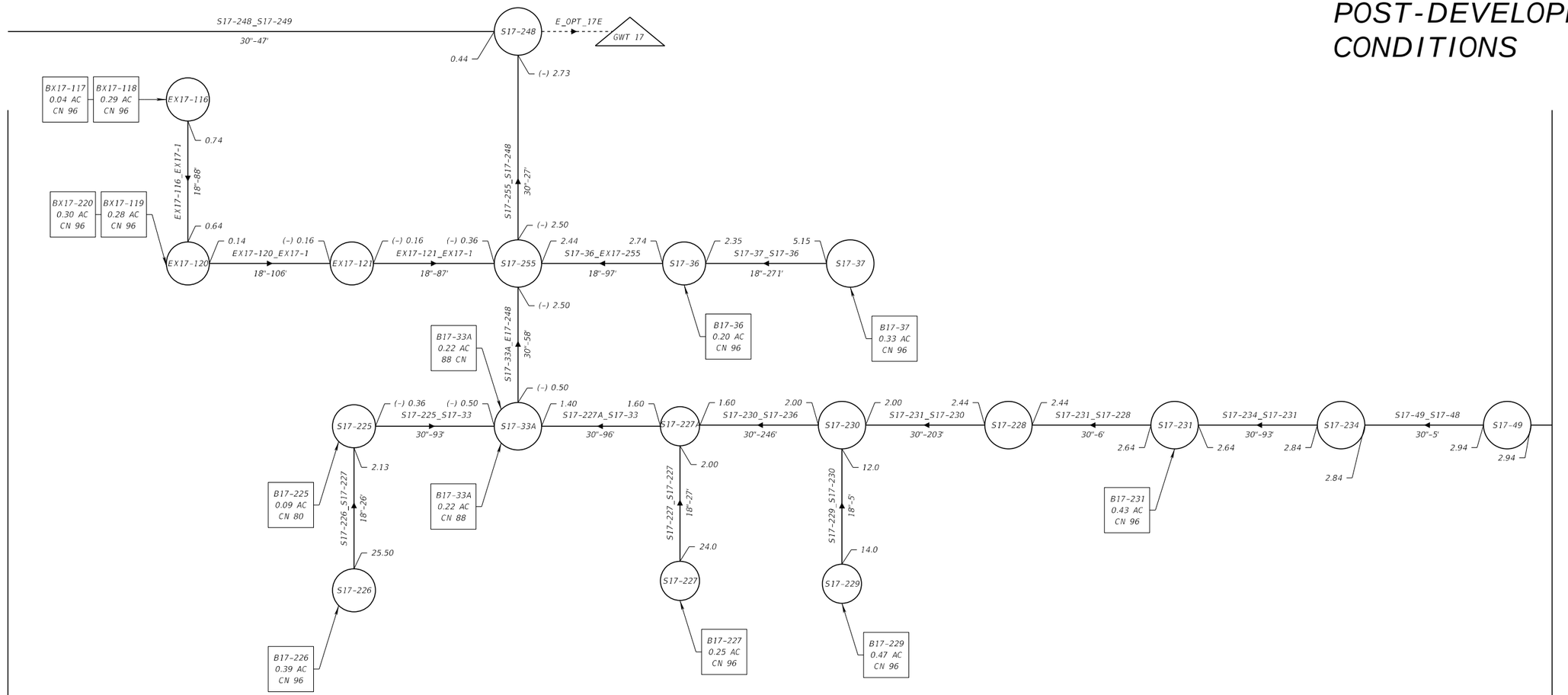
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
826	MIAMI-DADE	447165-1-52-01

NODAL DIAGRAM BASIN 17

SHEET NO.

ISHAIKH 12/18/2020 1:03:59 PM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\44716515201\drainage\eng_data\DR

POST-DEVELOPMENT CONDITIONS



WEIR INPUT SUMMARY							
WEIR	VERT. TYPE	HORIZ.	CIRC.	RECT.	INV.	SPAN	RISE
S17-33A_WEIR	MAVIS	-	-	X	4.25'	48"	8.4"

LEGEND

B17-1 / 0.12 AC / CN 96	CONTRIBUTING BASIN BASIN NAME BASIN AREA CURVE NUMBER
S17-2	NODE NAME
58ST_CANAL	BOUNDARY NODE WITH CONSTANT TAILWATER
GWT 17-12	BOUNDARY NODE WITH VARIABLE TAILWATER
S17-2_S17-3 / 18"-42' / 21.50 / 21.40	PIPE LINK WITH (QUANTITY)SIZE-LENGTH INVERT ELEVATIONS
WEX17_14	WEIR LINK
AREA 1_EXF	RATING CURVE LINK

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

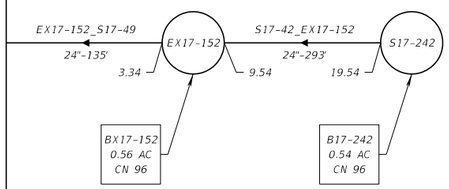
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
826	MIAMI-DADE	447165-1-52-01

NODAL DIAGRAM
BASIN 17

SHEET NO.

POST-DEVELOPMENT CONDITIONS

MATCH LINE B-B'



LEGEND

B17-1 / 0.12 AC / CN 96	CONTRIBUTING BASIN BASIN NAME BASIN AREA CURVE NUMBER
S17-2	NODE NAME
58ST_CANAL	BOUNDARY NODE WITH CONSTANT TAILWATER
GWT 17-12	BOUNDARY NODE WITH VARIABLE TAILWATER
S17-2_S17-3 / 18"-42" / 21.50 / 21.40	PIPE LINK WITH (QUANTITY)SIZE-LENGTH INVERT ELEVATIONS
WEX17_14	WEIR LINK
AREA 1_EXF	RATING CURVE LINK

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
826	MIAMI-DADE	447165-1-52-01

NODAL DIAGRAM BASIN 17

SHEET NO.

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
EX17-114	Basin 17	100YR-1HR	0.70	1.49	6.52	-0.0038	680	0.69	7.00	0.69	10.70
EX17-116	Basin 17	100YR-1HR	0.75	7.25	6.00	0.0029	116	0.65	2.48	0.72	2.23
EX17-120	Basin 17	100YR-1HR	0.75	7.18	4.73	0.0029	120	0.67	6.49	0.70	6.25
EX17-121	Basin 17	100YR-1HR	0.77	6.60	4.97	0.0026	120	0.70	6.25	0.73	6.12
EX17-124	Basin 17	100YR-1HR	0.69	1.48	6.49	-0.0030	493	0.69	10.70	0.69	10.06
EX17-139	Basin 17	100YR-1HR	0.67	3.88	5.41	0.0025	114	0.65	2.71	0.65	2.69
EX17-145	Basin 17	100YR-1HR	0.68	3.75	5.14	0.0020	115	0.65	0.75	0.68	0.74
EX17-148	Basin 17	100YR-1HR	0.68	3.19	7.46	0.0012	114	0.65	1.66	0.66	1.64
EX17-150	Basin 17	100YR-1HR	0.96	3.52	9.39	0.0017	118	0.73	0.18	0.96	0.11
EX17-151	Basin 17	100YR-1HR	0.67	4.01	9.18	0.0003	300	0.64	1.08	0.67	1.07
EX17-152	Basin 17	100YR-1HR	0.78	7.97	16.96	-0.0044	365	0.65	8.27	0.75	7.18
EX17-153	Basin 17	100YR-1HR	0.66	4.40	6.13	-0.0003	287	0.65	1.20	0.65	1.20
EX17-36	Basin 17	100YR-1HR	0.67	22.82	26.10	0.0012	525	0.66	10.77	0.67	10.74
EX17-47	Basin 17	100YR-1HR	0.67	26.77	30.65	0.0023	281	0.66	5.39	0.67	5.38
GWT-17	Basin 17	100YR-1HR	0.00	1.45	99.00	0.0000	0	0.68	187.63	0.00	0.00
L_RIVER_CANAL	Basin 17	100YR-1HR	0.00	1.45	99.00	0.0000	560	0.73	12.74	0.00	0.00
NODE-17B	Basin 17	100YR-1HR	0.65	3.45	6.95	-0.0032	113	0.65	6.83	0.65	6.83
NODE-17D	Basin 17	100YR-1HR	0.65	3.24	4.69	-0.0130	113	0.65	31.20	0.65	31.20
NODE-17F	Basin 17	100YR-1HR	0.65	2.97	5.96	-0.0044	113	0.65	9.48	0.65	9.48
S17-1	Basin 17	100YR-1HR	0.69	4.58	4.74	0.0019	116	0.65	4.73	0.67	4.64
S17-11	Basin 17	100YR-1HR	0.69	3.79	5.24	0.0012	123	0.77	4.86	0.78	4.94
S17-12	Basin 17	100YR-1HR	0.70	3.90	5.41	0.0012	119	0.73	6.64	0.75	6.69
S17-12A	Basin 17	100YR-1HR	0.67	3.25	4.49	0.0011	116	0.65	1.13	0.68	1.12
S17-13	Basin 17	100YR-1HR	0.70	4.09	5.57	0.0013	125	0.70	11.62	0.71	11.63
S17-14	Basin 17	100YR-1HR	0.70	4.28	4.74	-0.0017	113	0.65	5.15	0.67	5.06
S17-15	Basin 17	100YR-1HR	0.71	4.40	5.44	0.0015	129	0.72	14.27	0.73	14.29
S17-16	Basin 17	100YR-1HR	0.70	4.65	4.80	-0.0020	113	0.65	5.88	0.67	5.76
S17-17	Basin 17	100YR-1HR	0.72	4.82	6.11	0.0017	123	0.74	13.78	0.75	13.83
S17-18	Basin 17	100YR-1HR	0.72	5.79	6.40	0.0024	128	0.72	24.43	0.73	24.43
S17-19	Basin 17	100YR-1HR	0.73	8.84	11.63	0.0114	258	0.68	16.55	0.74	16.32
S17-1A	Basin 17	100YR-1HR	0.68	3.43	5.40	-0.0017	114	0.65	0.60	0.71	0.60
S17-2	Basin 17	100YR-1HR	0.69	4.29	5.35	0.0028	124	0.67	4.64	0.69	4.61
S17-20	Basin 17	100YR-1HR	0.73	8.19	10.87	0.0229	124	0.72	20.09	0.74	20.10
S17-201	Basin 17	100YR-1HR	0.67	3.22	4.79	-0.0014	139	0.67	11.13	0.68	11.13
S17-202	Basin 17	100YR-1HR	0.67	3.15	4.82	-0.0011	128	0.67	6.23	0.67	6.22
S17-203	Basin 17	100YR-1HR	0.67	3.13	5.11	-0.0021	121	0.51	3.56	0.67	3.51
S17-204	Basin 17	100YR-1HR	0.67	3.12	5.22	-0.0009	124	0.65	5.15	0.65	5.13
S17-205	Basin 17	100YR-1HR	0.67	3.11	6.30	0.0010	134	0.50	4.66	0.64	4.49
S17-206	Basin 17	100YR-1HR	0.65	4.37	8.53	0.0039	230	0.65	2.63	0.65	2.63
S17-208	Basin 17	100YR-1HR	0.66	4.21	12.59	0.0030	245	0.65	4.74	0.65	4.73
S17-208A	Basin 17	100YR-1HR	0.68	3.13	4.94	-0.0025	137	0.53	5.05	0.53	4.57
S17-209	Basin 17	100YR-1HR	0.68	3.22	13.18	0.0055	140	0.65	4.73	0.53	4.84
S17-21	Basin 17	100YR-1HR	0.68	14.56	17.13	0.0050	313	0.67	16.57	0.68	16.55
S17-210	Basin 17	100YR-1HR	0.65	12.14	16.57	-0.0009	152	0.65	2.11	0.65	2.11
S17-210A	Basin 17	100YR-1HR	0.68	3.14	5.26	0.0018	118	0.43	1.20	0.47	0.98
S17-210B	Basin 17	100YR-1HR	0.68	3.15	5.29	0.0011	153	0.43	0.83	0.43	0.25
S17-211	Basin 17	100YR-1HR	0.68	3.38	6.50	-0.0012	121	0.67	8.08	0.68	8.07
S17-211A	Basin 17	100YR-1HR	0.68	3.23	6.26	0.0011	121	0.43	0.76	0.21	0.92
S17-212	Basin 17	100YR-1HR	0.68	4.04	19.65	0.0015	372	0.67	15.60	0.68	15.52
S17-212A	Basin 17	100YR-1HR	0.68	3.13	7.09	0.0010	133	0.68	8.07	0.69	8.08
S17-216	Basin 17	100YR-1HR	0.67	26.88	29.86	0.0050	182	0.65	4.81	0.67	4.79

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S17-22	Basin 17	100YR-1HR	0.67	14.69	16.60	-0.0110	113	0.65	4.21	1.39	6.31
S17-222	Basin 17	100YR-1HR	0.66	27.14	30.37	0.0055	214	0.65	3.61	0.65	3.61
S17-224	Basin 17	100YR-1HR	0.65	27.29	30.77	0.0039	159	0.65	2.78	0.65	2.78
S17-225	Basin 17	100YR-1HR	0.78	6.54	6.10	-0.0058	131	0.65	3.39	0.69	3.10
S17-226	Basin 17	100YR-1HR	0.65	25.75	30.38	0.0040	127	0.65	2.93	0.65	2.93
S17-227	Basin 17	100YR-1HR	0.65	24.11	28.70	0.0035	124	0.65	1.88	0.65	1.88
S17-227A	Basin 17	100YR-1HR	0.78	6.95	8.05	-0.0040	145	0.78	14.54	0.79	14.56
S17-228	Basin 17	100YR-1HR	0.78	7.51	17.04	-0.0115	126	0.79	9.88	0.82	9.94
S17-229	Basin 17	100YR-1HR	0.00	16.00	231.00	-0.0440	114	0.65	3.54	0.00	10.08
S17-230	Basin 17	100YR-1HR	0.78	7.32	13.91	0.0350	144	0.77	12.92	0.80	12.93
S17-231	Basin 17	100YR-1HR	0.78	7.61	18.13	-0.0532	119	0.58	25.33	0.79	9.88
S17-232	Basin 17	100YR-1HR	0.67	17.41	22.00	0.0047	157	0.66	11.81	0.67	11.80
S17-233	Basin 17	100YR-1HR	0.66	18.84	23.18	0.0077	329	0.65	11.82	0.66	11.81
S17-234	Basin 17	100YR-1HR	0.78	7.68	16.26	-0.0746	119	1.05	22.55	1.05	22.27
S17-235	Basin 17	100YR-1HR	0.68	22.34	26.24	0.0125	306	0.56	10.70	0.67	9.27
S17-237	Basin 17	100YR-1HR	0.00	24.24	29.33	0.0177	285	0.00	11.47	0.00	8.41
S17-239	Basin 17	100YR-1HR	0.00	28.00	33.27	-0.0461	124	0.65	2.18	0.00	11.47
S17-240	Basin 17	100YR-1HR	0.65	26.00	30.48	-0.0010	217	0.65	3.39	0.65	3.38
S17-241	Basin 17	100YR-1HR	0.68	3.74	5.75	0.0018	136	3.57	0.20	0.00	0.00
S17-241A	Basin 17	100YR-1HR	0.67	4.03	28.95	0.0018	218	0.65	5.49	0.67	5.45
S17-241B	Basin 17	100YR-1HR	0.68	3.75	5.06	-0.0037	124	0.69	1.72	0.76	2.19
S17-242	Basin 17	100YR-1HR	0.66	20.49	23.77	0.0028	391	0.65	4.06	0.65	4.06
S17-243	Basin 17	100YR-1HR	0.68	3.39	7.99	0.0017	129	0.00	0.00	4.91	0.15
S17-244	Basin 17	100YR-1HR	0.68	3.39	9.50	0.0019	132	0.66	1.05	0.70	1.05
S17-245	Basin 17	100YR-1HR	0.68	3.17	7.84	0.0012	119	0.66	1.64	0.67	1.63
S17-246	Basin 17	100YR-1HR	0.68	2.95	8.58	0.0011	130	0.67	2.87	0.70	2.88
S17-247	Basin 17	100YR-1HR	0.68	2.82	6.67	0.0010	124	0.00	0.00	1.36	0.24
S17-248	Basin 17	100YR-1HR	0.78	5.20	6.31	0.0022	118	0.77	28.22	0.78	28.22
S17-249	Basin 17	100YR-1HR	0.78	4.71	6.36	0.0020	117	0.78	20.28	0.78	20.28
S17-25	Basin 17	100YR-1HR	0.67	16.99	19.85	0.0047	202	0.67	12.40	0.67	12.40
S17-250A+A	Basin 17	100YR-1HR	0.78	4.69	6.49	-0.0022	114	0.78	3.75	0.78	3.75
S17-250B	Basin 17	100YR-1HR	0.73	1.48	6.49	-0.0035	380	0.69	13.06	0.73	10.08
S17-254	Basin 17	100YR-1HR	0.71	1.49	6.32	-0.0033	801	0.69	5.68	0.69	5.99
S17-255	Basin 17	100YR-1HR	0.78	6.08	6.10	0.0026	125	0.77	28.23	0.77	28.22
S17-26	Basin 17	100YR-1HR	0.67	16.99	19.40	0.0089	113	0.65	0.60	0.78	0.63
S17-27A+A	Basin 17	100YR-1HR	0.68	3.04	6.58	0.0010	127	0.67	3.79	0.68	3.79
S17-27A+B	Basin 17	100YR-1HR	0.71	1.49	6.58	0.0002	950	0.00	0.00	1.34	0.21
S17-3	Basin 17	100YR-1HR	0.68	3.42	4.78	-0.0013	133	0.66	6.47	0.67	6.45
S17-30+A	Basin 17	100YR-1HR	0.68	3.75	5.31	-0.0043	115	0.76	4.79	0.69	5.81
S17-30+B	Basin 17	100YR-1HR	0.68	3.74	5.31	0.0044	113	0.69	5.81	0.68	4.35
S17-30+C	Basin 17	100YR-1HR	0.69	1.73	5.31	0.0005	197	0.68	4.35	0.68	4.35
S17-30A	Basin 17	100YR-1HR	0.70	1.51	6.60	-0.0009	494	0.68	4.35	0.69	4.35
S17-30C	Basin 17	100YR-1HR	0.68	3.81	5.38	0.0017	115	0.65	2.69	0.67	2.68
S17-31	Basin 17	100YR-1HR	0.68	3.78	4.75	0.0017	113	0.65	1.96	0.68	1.94
S17-33A	Basin 17	100YR-1HR	0.78	6.53	6.86	0.0034	128	0.77	18.77	0.78	18.76
S17-36	Basin 17	100YR-1HR	0.78	6.26	7.50	0.0029	163	0.65	3.98	0.78	3.43
S17-37	Basin 17	100YR-1HR	0.78	6.39	10.95	0.0013	230	0.65	2.48	0.65	2.47
S17-3A	Basin 17	100YR-1HR	0.68	3.44	5.32	-0.0013	118	0.65	0.90	0.69	0.89
S17-4	Basin 17	100YR-1HR	0.69	4.19	5.42	0.0017	127	0.67	9.74	0.69	9.72
S17-44	Basin 17	100YR-1HR	0.73	1.46	5.96	0.0000	14524	0.65	0.08	1.40	0.26
S17-45	Basin 17	100YR-1HR	0.73	1.46	16.05	-0.0001	29735	0.73	13.13	0.73	12.74

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S17-49	Basin 17	100YR-1HR	0.78	7.73	15.63	0.0491	120	0.75	7.18	1.05	22.55
S17-5	Basin 17	100YR-1HR	0.69	4.39	4.74	0.0017	113	0.65	5.25	0.67	5.16
S17-6	Basin 17	100YR-1HR	0.69	3.78	5.28	0.0014	135	0.71	10.68	0.72	10.71
S17-7	Basin 17	100YR-1HR	0.68	3.41	4.94	-0.0017	149	0.68	13.92	0.69	13.93
S17-8	Basin 17	100YR-1HR	0.69	3.79	5.35	0.0015	126	0.72	5.92	0.74	5.97
S17-9	Basin 17	100YR-1HR	0.69	3.98	4.74	-0.0017	113	0.65	5.15	0.67	5.08
S17FW-11	Basin 17	100YR-1HR	0.68	3.13	5.07	-0.0020	114	0.65	0.75	0.69	1.26
S17FW-12	Basin 17	100YR-1HR	0.68	3.10	5.27	0.0011	114	0.65	0.83	0.69	0.82
S17FW-13	Basin 17	100YR-1HR	0.68	3.27	5.69	0.0011	114	0.65	2.18	0.67	2.15
S17FW-14	Basin 17	100YR-1HR	0.68	3.04	6.41	0.0010	114	0.65	2.85	0.67	2.82
EX17-114	Basin 17	100YR-24HR	0.00	1.45	6.52	-0.0038	683	1.39	5.68	0.00	0.00
EX17-116	Basin 17	100YR-24HR	12.05	2.89	6.00	0.0004	116	11.98	0.45	12.00	0.44
EX17-120	Basin 17	100YR-24HR	12.05	2.88	4.73	0.0006	120	12.00	1.22	12.00	1.22
EX17-121	Basin 17	100YR-24HR	12.05	2.86	4.97	-0.0010	120	12.00	1.22	12.00	1.22
EX17-124	Basin 17	100YR-24HR	12.00	1.45	6.49	0.0030	505	0.00	0.00	12.00	8.55
EX17-139	Basin 17	100YR-24HR	12.05	2.34	5.41	-0.0004	133	11.98	0.49	12.02	0.66
EX17-145	Basin 17	100YR-24HR	12.05	2.32	5.14	0.0001	137	11.98	0.13	11.35	0.09
EX17-148	Basin 17	100YR-24HR	12.06	2.28	7.46	-0.0002	123	11.98	0.30	12.00	0.29
EX17-150	Basin 17	100YR-24HR	12.02	3.47	9.39	0.0001	117	12.00	0.07	12.02	0.07
EX17-151	Basin 17	100YR-24HR	12.00	3.62	9.18	-0.0000	252	11.95	0.23	12.00	0.23
EX17-152	Basin 17	100YR-24HR	11.98	3.91	16.96	-0.0001	413	11.98	1.48	11.98	1.48
EX17-153	Basin 17	100YR-24HR	12.00	4.07	6.13	-0.0000	242	11.98	0.22	11.95	0.22
EX17-36	Basin 17	100YR-24HR	12.00	21.70	26.10	0.0001	549	11.98	1.94	11.98	1.94
EX17-47	Basin 17	100YR-24HR	12.01	25.91	30.65	0.0002	329	11.98	0.97	11.98	0.97
GWT-17	Basin 17	100YR-24HR	24.00	2.20	99.00	0.0000	0	12.01	37.36	0.00	0.00
L_RIVER_CANAL	Basin 17	100YR-24HR	0.00	1.45	99.00	0.0000	560	12.00	1.14	0.00	0.00
NODE-17B	Basin 17	100YR-24HR	12.01	2.32	6.95	-0.0002	113	12.00	1.29	12.00	1.28
NODE-17D	Basin 17	100YR-24HR	21.00	2.26	4.69	-0.0007	113	11.98	5.68	12.00	5.68
NODE-17F	Basin 17	100YR-24HR	21.00	2.25	5.96	-0.0002	113	12.00	1.85	12.00	1.85
S17-1	Basin 17	100YR-24HR	12.04	2.43	4.74	0.0002	116	11.98	0.86	12.00	0.86
S17-11	Basin 17	100YR-24HR	12.05	2.42	5.24	-0.0001	290	12.03	1.84	12.10	1.85
S17-12	Basin 17	100YR-24HR	12.05	2.44	5.41	-0.0002	211	12.00	2.18	12.03	2.18
S17-12A	Basin 17	100YR-24HR	12.04	2.33	4.49	-0.0003	137	11.98	0.20	24.06	0.35
S17-13	Basin 17	100YR-24HR	12.05	2.46	5.57	-0.0001	312	12.00	3.07	12.02	3.06
S17-14	Basin 17	100YR-24HR	12.04	2.46	4.74	0.0001	113	11.98	0.95	12.00	0.95
S17-15	Basin 17	100YR-24HR	12.04	2.49	5.44	-0.0001	374	12.00	3.41	12.02	3.41
S17-16	Basin 17	100YR-24HR	12.04	2.50	4.80	-0.0002	113	11.98	1.09	12.00	1.09
S17-17	Basin 17	100YR-24HR	12.04	2.52	6.11	0.0001	276	12.00	3.14	12.03	3.14
S17-18	Basin 17	100YR-24HR	12.04	2.56	6.40	0.0001	346	12.00	4.62	12.01	4.62
S17-19	Basin 17	100YR-24HR	12.02	2.82	11.63	0.0004	276	12.00	3.01	12.01	3.01
S17-1A	Basin 17	100YR-24HR	12.04	2.36	5.40	-0.0005	114	11.98	0.11	5.63	0.45
S17-2	Basin 17	100YR-24HR	12.04	2.43	5.35	-0.0001	275	12.00	0.86	12.02	0.85
S17-20	Basin 17	100YR-24HR	12.04	2.63	10.87	-0.0003	277	12.00	3.77	12.01	3.76
S17-201	Basin 17	100YR-24HR	12.04	2.33	4.79	-0.0003	146	12.00	3.05	12.01	3.04
S17-202	Basin 17	100YR-24HR	12.04	2.32	4.82	-0.0010	128	12.00	2.02	5.70	2.17
S17-203	Basin 17	100YR-24HR	12.05	2.31	5.11	0.0009	121	5.70	1.94	12.00	1.43
S17-204	Basin 17	100YR-24HR	12.05	2.31	5.22	0.0003	244	12.00	1.67	12.00	1.67
S17-205	Basin 17	100YR-24HR	19.04	2.30	6.30	-0.0001	512	11.99	1.48	12.01	1.52
S17-206	Basin 17	100YR-24HR	11.95	3.84	8.53	0.0004	210	11.98	0.47	11.95	0.47
S17-208	Basin 17	100YR-24HR	11.99	3.43	12.59	0.0003	221	11.98	0.85	11.99	0.85
S17-208A	Basin 17	100YR-24HR	19.04	2.30	4.94	0.0002	466	12.00	1.45	11.69	0.78

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S17-209	Basin 17	100YR-24HR	12.03	2.50	13.18	-0.0011	140	11.99	0.85	12.01	0.85
S17-21	Basin 17	100YR-24HR	12.01	12.94	17.13	0.0050	435	15.54	7.48	12.00	3.01
S17-210	Basin 17	100YR-24HR	12.00	11.68	16.57	0.0002	138	11.98	0.38	11.93	0.38
S17-210A	Basin 17	100YR-24HR	19.04	2.30	5.26	0.0001	202	2.97	0.15	21.00	0.61
S17-210B	Basin 17	100YR-24HR	12.05	2.30	5.29	0.0002	264	22.56	0.84	0.00	0.00
S17-211	Basin 17	100YR-24HR	12.05	2.31	6.50	-0.0014	121	22.56	2.65	12.00	1.70
S17-211A	Basin 17	100YR-24HR	12.05	2.30	6.26	0.0004	228	0.00	0.00	21.29	1.36
S17-212	Basin 17	100YR-24HR	12.05	2.33	19.65	0.0006	340	11.98	2.82	12.00	2.81
S17-212A	Basin 17	100YR-24HR	19.04	2.30	7.09	-0.0002	369	12.00	1.70	12.03	1.69
S17-216	Basin 17	100YR-24HR	11.98	26.01	29.86	0.0007	178	12.00	0.86	11.98	0.86
S17-22	Basin 17	100YR-24HR	12.00	12.95	16.60	-0.0116	113	11.98	0.76	15.54	6.31
S17-222	Basin 17	100YR-24HR	12.00	26.50	30.37	0.0005	200	11.98	0.65	12.00	0.65
S17-224	Basin 17	100YR-24HR	11.97	26.75	30.77	0.0004	151	11.98	0.50	11.97	0.50
S17-225	Basin 17	100YR-24HR	12.06	2.86	6.10	-0.0050	134	12.00	1.80	24.25	2.18
S17-226	Basin 17	100YR-24HR	12.01	25.50	30.38	-0.0036	116	11.98	0.53	11.29	1.69
S17-227	Basin 17	100YR-24HR	11.88	24.00	28.70	-0.0030	116	11.98	0.34	11.23	1.41
S17-227A	Basin 17	100YR-24HR	12.06	2.90	8.05	0.0009	553	12.05	4.10	12.09	3.07
S17-228	Basin 17	100YR-24HR	12.05	3.11	17.04	0.0009	349	11.98	2.06	12.01	2.06
S17-229	Basin 17	100YR-24HR	0.00	16.00	231.00	-0.0440	114	11.98	0.63	0.00	10.08
S17-230	Basin 17	100YR-24HR	12.06	2.98	13.91	0.0350	659	0.00	10.08	12.05	2.69
S17-231	Basin 17	100YR-24HR	11.98	3.23	18.13	0.0004	210	12.01	2.06	11.98	2.06
S17-232	Basin 17	100YR-24HR	12.02	15.78	22.00	0.0047	205	0.05	3.03	0.07	2.86
S17-233	Basin 17	100YR-24HR	0.05	17.43	23.18	0.0077	353	0.02	5.35	0.05	3.03
S17-234	Basin 17	100YR-24HR	12.01	3.37	16.26	0.0000	211	12.00	1.48	12.01	1.48
S17-235	Basin 17	100YR-24HR	0.02	21.88	26.24	0.0125	332	0.00	8.41	0.02	5.35
S17-237	Basin 17	100YR-24HR	0.00	24.24	29.33	0.0177	285	0.00	11.47	0.00	8.41
S17-239	Basin 17	100YR-24HR	0.00	28.00	33.27	-0.0461	124	11.98	0.39	0.00	11.47
S17-240	Basin 17	100YR-24HR	11.97	25.38	30.48	-0.0001	204	11.98	0.61	11.97	0.61
S17-241	Basin 17	100YR-24HR	12.05	2.32	5.75	0.0005	175	0.00	0.00	24.53	0.85
S17-241A	Basin 17	100YR-24HR	12.05	2.33	28.95	0.0002	206	11.98	0.99	12.00	0.97
S17-241B	Basin 17	100YR-24HR	12.05	2.32	5.06	0.0004	129	22.34	1.33	0.00	0.00
S17-242	Basin 17	100YR-24HR	12.00	19.90	23.77	0.0003	324	11.98	0.73	11.93	0.73
S17-243	Basin 17	100YR-24HR	12.06	2.29	7.99	-0.0002	215	24.38	2.43	0.00	0.00
S17-244	Basin 17	100YR-24HR	12.06	2.29	9.50	-0.0004	171	12.01	0.29	21.20	1.15
S17-245	Basin 17	100YR-24HR	12.06	2.28	7.84	0.0009	178	12.00	0.29	24.00	2.67
S17-246	Basin 17	100YR-24HR	12.06	2.27	8.58	-0.0007	284	22.31	1.44	12.05	0.83
S17-247	Basin 17	100YR-24HR	21.04	2.26	6.67	-0.0002	239	0.00	0.00	24.35	0.32
S17-248	Basin 17	100YR-24HR	12.06	2.80	6.31	0.0031	142	12.03	5.85	12.03	5.96
S17-249	Basin 17	100YR-24HR	12.06	2.78	6.36	-0.0028	149	12.03	4.23	12.02	2.72
S17-25	Basin 17	100YR-24HR	12.02	15.74	19.85	0.0047	314	12.00	2.25	11.99	2.25
S17-250A+A	Basin 17	100YR-24HR	12.06	2.78	6.49	-0.0027	120	22.29	1.22	0.00	0.00
S17-250B	Basin 17	100YR-24HR	0.00	1.45	6.49	-0.0035	407	12.00	8.55	0.00	0.00
S17-254	Basin 17	100YR-24HR	12.00	1.45	6.32	-0.0033	798	12.00	1.29	1.39	5.68
S17-255	Basin 17	100YR-24HR	12.06	2.84	6.10	0.0033	184	12.02	5.94	12.03	5.85
S17-26	Basin 17	100YR-24HR	12.02	15.74	19.40	0.0089	113	11.98	0.11	10.24	0.17
S17-27A+A	Basin 17	100YR-24HR	19.04	2.30	6.58	-0.0001	364	11.26	0.83	12.03	0.79
S17-27A+B	Basin 17	100YR-24HR	12.00	1.45	6.58	0.0002	929	0.00	0.00	1.39	0.19
S17-3	Basin 17	100YR-24HR	12.04	2.36	4.78	-0.0005	133	12.00	1.66	12.01	1.18
S17-30+A	Basin 17	100YR-24HR	12.05	2.34	5.31	0.0032	123	0.00	0.00	21.03	5.98
S17-30+B	Basin 17	100YR-24HR	12.05	2.32	5.31	-0.0040	113	21.03	5.98	0.00	0.00
S17-30+C	Basin 17	100YR-24HR	12.00	1.45	5.31	-0.0001	198	0.00	0.00	1.39	0.19

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S17-30A	Basin 17	100YR-24HR	12.00	1.45	6.60	-0.0009	496	1.39	0.19	1.39	0.96
S17-30C	Basin 17	100YR-24HR	12.05	2.34	5.38	-0.0004	140	12.02	0.66	0.00	0.00
S17-31	Basin 17	100YR-24HR	12.05	2.33	4.75	0.0005	119	11.98	0.35	12.10	0.65
S17-33A	Basin 17	100YR-24HR	12.06	2.86	6.86	0.0022	241	12.06	5.30	12.06	4.01
S17-36	Basin 17	100YR-24HR	11.49	3.17	7.50	0.0002	322	11.98	0.71	12.00	0.72
S17-37	Basin 17	100YR-24HR	12.00	5.47	10.95	-0.0001	273	11.98	0.45	11.95	0.45
S17-3A	Basin 17	100YR-24HR	12.04	2.36	5.32	0.0004	118	11.98	0.16	5.63	0.35
S17-4	Basin 17	100YR-24HR	12.04	2.42	5.42	-0.0001	376	12.00	1.81	12.02	1.80
S17-44	Basin 17	100YR-24HR	1.39	1.45	5.96	-0.0000	14524	0.00	0.00	0.00	0.00
S17-45	Basin 17	100YR-24HR	12.00	1.45	16.05	0.0000	29744	1.39	0.00	12.00	1.14
S17-49	Basin 17	100YR-24HR	12.00	3.45	15.63	0.0000	233	11.98	1.48	12.00	1.48
S17-5	Basin 17	100YR-24HR	12.04	2.43	4.74	-0.0001	113	11.98	0.96	12.00	0.95
S17-6	Basin 17	100YR-24HR	12.04	2.40	5.28	-0.0001	339	12.04	3.00	12.08	3.01
S17-7	Basin 17	100YR-24HR	12.04	2.36	4.94	-0.0004	149	12.02	3.61	12.02	3.61
S17-8	Basin 17	100YR-24HR	12.05	2.41	5.35	-0.0001	336	12.02	2.09	12.06	2.09
S17-9	Basin 17	100YR-24HR	12.04	2.42	4.74	-0.0002	113	11.98	0.95	12.00	0.95
S17FW-11	Basin 17	100YR-24HR	19.04	2.30	5.07	0.0002	114	11.98	0.13	12.09	0.35
S17FW-12	Basin 17	100YR-24HR	19.04	2.30	5.27	0.0002	114	11.98	0.15	19.26	0.36
S17FW-13	Basin 17	100YR-24HR	12.05	2.31	5.69	-0.0002	114	11.98	0.39	12.00	0.39
S17FW-14	Basin 17	100YR-24HR	19.04	2.30	6.41	0.0001	114	12.00	0.54	11.25	0.59
EX17-114	Basin 17	100YR-8HR	4.01	1.45	6.52	-0.0038	682	1.03	5.68	0.00	0.00
EX17-116	Basin 17	100YR-8HR	4.03	5.13	6.00	0.0007	116	4.00	1.33	4.01	1.32
EX17-120	Basin 17	100YR-8HR	4.03	5.11	4.73	-0.0007	120	4.00	3.66	4.00	3.65
EX17-121	Basin 17	100YR-8HR	4.03	4.90	4.97	-0.0010	120	4.00	3.65	4.01	3.64
EX17-124	Basin 17	100YR-8HR	4.01	1.46	6.49	0.0030	503	0.00	0.00	4.01	9.49
EX17-139	Basin 17	100YR-8HR	4.02	3.44	5.41	0.0009	114	4.00	1.46	4.00	1.44
EX17-145	Basin 17	100YR-8HR	4.02	3.36	5.14	0.0008	115	4.00	0.40	4.03	0.41
EX17-148	Basin 17	100YR-8HR	4.03	3.03	7.46	0.0003	114	4.00	0.89	4.00	0.88
EX17-150	Basin 17	100YR-8HR	4.03	3.58	9.39	0.0006	118	4.02	0.18	4.03	0.18
EX17-151	Basin 17	100YR-8HR	4.01	3.83	9.18	0.0001	283	4.00	0.61	4.01	0.60
EX17-152	Basin 17	100YR-8HR	4.04	5.26	16.96	-0.0009	380	4.00	4.45	4.02	4.97
EX17-153	Basin 17	100YR-8HR	4.00	4.24	6.13	0.0001	272	4.00	0.65	4.00	0.65
EX17-36	Basin 17	100YR-8HR	4.00	22.25	26.10	0.0002	600	4.00	5.82	4.00	5.82
EX17-47	Basin 17	100YR-8HR	4.01	26.33	30.65	0.0005	347	4.00	2.91	4.00	2.91
GWT-17	Basin 17	100YR-8HR	8.00	2.20	99.00	0.0000	0	4.01	110.32	0.00	0.00
L_RIVER_CANAL	Basin 17	100YR-8HR	0.00	1.45	99.00	0.0000	560	4.01	3.50	0.00	0.00
NODE-17B	Basin 17	100YR-8HR	4.00	3.27	6.95	0.0005	113	4.00	3.84	4.00	3.84
NODE-17D	Basin 17	100YR-8HR	4.00	2.92	4.69	-0.0015	113	4.00	17.01	4.00	17.01
NODE-17F	Basin 17	100YR-8HR	4.01	2.83	5.96	-0.0005	113	4.00	5.51	4.00	5.50
S17-1	Basin 17	100YR-8HR	4.02	3.67	4.74	-0.0005	116	4.00	2.58	4.00	2.57
S17-11	Basin 17	100YR-8HR	4.03	3.44	5.24	0.0004	123	4.10	3.25	4.13	3.31
S17-12	Basin 17	100YR-8HR	4.03	3.49	5.41	0.0004	119	4.00	4.28	4.04	4.27
S17-12A	Basin 17	100YR-8HR	4.03	3.17	4.49	0.0005	116	4.00	0.61	4.04	0.60
S17-13	Basin 17	100YR-8HR	4.03	3.57	5.57	0.0004	125	4.00	7.07	4.01	7.06
S17-14	Basin 17	100YR-8HR	4.03	3.63	4.74	0.0004	113	4.00	2.85	4.00	2.84
S17-15	Basin 17	100YR-8HR	4.03	3.69	5.44	0.0004	129	4.01	8.47	4.02	8.46
S17-16	Basin 17	100YR-8HR	4.02	3.77	4.80	0.0005	113	4.00	3.25	4.00	3.24
S17-17	Basin 17	100YR-8HR	4.03	3.85	6.11	0.0005	123	4.02	8.05	4.04	8.05
S17-18	Basin 17	100YR-8HR	4.03	4.18	6.40	0.0011	128	4.02	13.78	4.02	13.77
S17-19	Basin 17	100YR-8HR	4.03	5.13	11.63	-0.0115	287	4.00	9.00	4.27	13.61
S17-1A	Basin 17	100YR-8HR	4.03	3.27	5.40	0.0004	114	4.00	0.32	4.09	0.33

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S17-2	Basin 17	100YR-8HR	4.03	3.58	5.35	0.0011	124	4.00	2.57	4.02	2.56
S17-20	Basin 17	100YR-8HR	4.03	4.93	10.87	-0.0245	124	3.42	15.49	4.04	11.23
S17-201	Basin 17	100YR-8HR	4.03	3.17	4.79	0.0007	139	4.00	6.92	4.01	6.91
S17-202	Basin 17	100YR-8HR	4.03	3.12	4.82	-0.0004	128	4.00	4.15	4.00	4.14
S17-203	Basin 17	100YR-8HR	4.03	3.11	5.11	0.0008	121	4.00	2.57	4.00	2.56
S17-204	Basin 17	100YR-8HR	4.03	3.10	5.22	0.0005	124	4.00	3.39	4.00	3.37
S17-205	Basin 17	100YR-8HR	4.03	3.09	6.30	-0.0007	134	4.00	2.94	3.69	3.67
S17-206	Basin 17	100YR-8HR	4.00	4.11	8.53	0.0010	228	4.00	1.42	4.00	1.42
S17-208	Basin 17	100YR-8HR	4.00	3.82	12.59	0.0008	241	4.00	2.55	4.00	2.55
S17-208A	Basin 17	100YR-8HR	4.03	3.10	4.94	0.0013	138	3.69	3.99	3.37	2.72
S17-209	Basin 17	100YR-8HR	4.03	3.12	13.18	-0.0051	141	4.00	2.55	3.56	3.86
S17-21	Basin 17	100YR-8HR	4.01	13.69	17.13	0.0050	442	4.00	9.00	4.00	9.00
S17-210	Basin 17	100YR-8HR	3.99	11.92	16.57	-0.0002	148	4.00	1.13	3.99	1.13
S17-210A	Basin 17	100YR-8HR	4.03	3.10	5.26	0.0019	118	3.19	0.76	3.56	0.95
S17-210B	Basin 17	100YR-8HR	4.03	3.10	5.29	0.0009	149	7.00	0.81	1.73	0.34
S17-211	Basin 17	100YR-8HR	4.03	3.16	6.50	0.0016	121	4.00	4.56	4.02	4.55
S17-211A	Basin 17	100YR-8HR	4.03	3.12	6.26	-0.0005	121	1.66	0.62	7.37	1.37
S17-212	Basin 17	100YR-8HR	4.03	3.36	19.65	0.0006	379	4.00	8.44	4.02	8.41
S17-212A	Basin 17	100YR-8HR	4.03	3.08	7.09	0.0003	133	4.02	4.55	4.03	4.55
S17-216	Basin 17	100YR-8HR	4.00	26.41	29.86	0.0015	188	4.00	2.59	4.00	2.59
S17-22	Basin 17	100YR-8HR	4.01	13.73	16.60	-0.0131	113	4.00	2.26	1.64	6.31
S17-222	Basin 17	100YR-8HR	4.00	26.82	30.37	0.0013	214	4.00	1.94	3.99	1.94
S17-224	Basin 17	100YR-8HR	3.99	27.03	30.77	0.0011	158	4.00	1.50	3.99	1.50
S17-225	Basin 17	100YR-8HR	4.04	4.88	6.10	-0.0053	120	3.99	2.03	4.38	2.36
S17-226	Basin 17	100YR-8HR	3.97	25.50	30.38	0.0037	116	4.00	1.58	3.98	1.70
S17-227	Basin 17	100YR-8HR	3.96	24.00	28.70	0.0030	116	4.00	1.01	4.03	1.42
S17-227A	Basin 17	100YR-8HR	4.04	5.01	8.05	-0.0033	135	4.05	8.78	4.05	8.37
S17-228	Basin 17	100YR-8HR	4.04	5.19	17.04	0.0031	126	4.04	7.11	3.73	5.63
S17-229	Basin 17	100YR-8HR	0.00	16.00	231.00	-0.0440	114	4.00	1.90	0.00	10.08
S17-230	Basin 17	100YR-8HR	4.04	5.13	13.91	0.0350	144	0.00	10.08	4.05	7.36
S17-231	Basin 17	100YR-8HR	4.04	5.24	18.13	-0.0314	131	4.03	22.34	4.04	7.11
S17-232	Basin 17	100YR-8HR	4.01	16.51	22.00	0.0047	186	4.00	6.42	4.01	6.42
S17-233	Basin 17	100YR-8HR	4.00	18.02	23.18	0.0077	360	4.00	6.43	4.00	6.42
S17-234	Basin 17	100YR-8HR	4.04	5.21	16.26	-0.0284	180	4.04	19.71	4.04	20.64
S17-235	Basin 17	100YR-8HR	0.02	21.88	26.24	0.0125	332	0.00	8.41	0.02	5.35
S17-237	Basin 17	100YR-8HR	0.00	24.24	29.33	0.0177	285	0.00	11.47	0.00	8.41
S17-239	Basin 17	100YR-8HR	0.00	28.00	33.27	-0.0461	124	4.00	1.17	0.00	11.47
S17-240	Basin 17	100YR-8HR	4.00	25.69	30.48	0.0002	219	4.00	1.82	4.00	1.82
S17-241	Basin 17	100YR-8HR	4.02	3.36	5.75	0.0010	136	8.41	1.10	0.00	0.00
S17-241A	Basin 17	100YR-8HR	4.02	3.44	28.95	0.0004	212	4.00	2.95	4.00	2.95
S17-241B	Basin 17	100YR-8HR	4.02	3.39	5.06	0.0007	124	0.00	0.00	8.00	1.81
S17-242	Basin 17	100YR-8HR	4.00	20.21	23.77	0.0010	372	4.00	2.18	3.99	2.18
S17-243	Basin 17	100YR-8HR	4.03	3.15	7.99	0.0016	129	0.00	0.00	8.57	0.50
S17-244	Basin 17	100YR-8HR	4.03	3.16	9.50	-0.0014	132	4.02	0.79	4.72	1.00
S17-245	Basin 17	100YR-8HR	4.03	3.02	7.84	0.0012	119	4.00	0.88	4.01	0.88
S17-246	Basin 17	100YR-8HR	4.03	2.91	8.58	0.0003	129	3.87	2.20	3.89	2.20
S17-247	Basin 17	100YR-8HR	4.04	2.83	6.67	0.0003	124	0.00	0.00	4.26	0.03
S17-248	Basin 17	100YR-8HR	4.04	4.41	6.31	0.0031	118	4.03	16.76	4.03	16.85
S17-249	Basin 17	100YR-8HR	4.05	4.24	6.36	-0.0028	117	4.03	11.72	4.03	9.45
S17-25	Basin 17	100YR-8HR	4.01	16.34	19.85	0.0047	301	4.01	6.74	4.01	6.74
S17-250A+A	Basin 17	100YR-8HR	4.05	4.25	6.49	-0.0028	114	8.00	1.22	0.00	0.00

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S17-250B	Basin 17	100YR-8HR	0.00	1.45	6.49	-0.0035	407	4.01	9.49	0.00	0.00
S17-254	Basin 17	100YR-8HR	4.01	1.46	6.32	-0.0033	798	4.02	1.96	1.03	5.68
S17-255	Basin 17	100YR-8HR	4.04	4.72	6.10	0.0033	125	4.02	16.79	4.03	16.76
S17-26	Basin 17	100YR-8HR	4.01	16.34	19.40	0.0089	113	4.00	0.32	4.00	0.32
S17-27A+A	Basin 17	100YR-8HR	4.03	3.05	6.58	0.0003	127	4.00	2.17	4.02	2.17
S17-27A+B	Basin 17	100YR-8HR	4.01	1.46	6.58	0.0002	933	0.00	0.00	1.03	0.19
S17-3	Basin 17	100YR-8HR	4.03	3.27	4.78	-0.0005	133	4.01	3.49	4.01	3.48
S17-30+A	Basin 17	100YR-8HR	4.02	3.39	5.31	-0.0039	115	5.01	2.84	0.00	0.00
S17-30+B	Basin 17	100YR-8HR	4.02	3.40	5.31	0.0039	113	0.00	0.00	4.02	0.77
S17-30+C	Basin 17	100YR-8HR	4.02	1.46	5.31	-0.0001	198	4.02	0.77	4.02	0.74
S17-30A	Basin 17	100YR-8HR	4.02	1.46	6.60	-0.0009	496	4.02	0.74	4.02	1.11
S17-30C	Basin 17	100YR-8HR	4.02	3.42	5.38	0.0004	115	4.00	1.44	4.00	1.81
S17-31	Basin 17	100YR-8HR	4.02	3.40	4.75	0.0004	113	4.00	1.05	4.00	0.93
S17-33A	Basin 17	100YR-8HR	4.04	4.87	6.86	-0.0025	128	4.02	11.12	4.02	11.04
S17-36	Basin 17	100YR-8HR	4.04	4.78	7.50	-0.0004	294	4.00	2.14	4.04	2.12
S17-37	Basin 17	100YR-8HR	4.00	5.74	10.95	0.0001	304	4.00	1.33	3.99	1.33
S17-3A	Basin 17	100YR-8HR	4.03	3.27	5.32	0.0004	118	4.00	0.49	4.07	0.48
S17-4	Basin 17	100YR-8HR	4.03	3.55	5.42	-0.0008	127	4.00	5.40	4.02	5.39
S17-44	Basin 17	100YR-8HR	4.02	1.45	5.96	0.0000	14524	0.00	0.00	0.00	0.00
S17-45	Basin 17	100YR-8HR	4.01	1.45	16.05	0.0000	29744	1.03	0.00	4.01	3.50
S17-49	Basin 17	100YR-8HR	4.04	5.21	15.63	0.0295	136	4.02	4.97	4.04	19.71
S17-5	Basin 17	100YR-8HR	4.02	3.61	4.74	0.0004	113	4.00	2.86	4.00	2.85
S17-6	Basin 17	100YR-8HR	4.03	3.42	5.28	-0.0004	135	4.02	6.63	4.04	6.63
S17-7	Basin 17	100YR-8HR	4.03	3.27	4.94	-0.0005	149	4.01	8.45	4.02	8.44
S17-8	Basin 17	100YR-8HR	4.03	3.43	5.35	0.0004	126	4.01	3.95	4.05	3.95
S17-9	Basin 17	100YR-8HR	4.03	3.49	4.74	0.0004	113	4.00	2.85	4.00	2.84
S17FW-11	Basin 17	100YR-8HR	4.03	3.10	5.07	-0.0014	114	4.00	0.40	4.17	1.03
S17FW-12	Basin 17	100YR-8HR	4.03	3.08	5.27	0.0005	114	4.00	0.44	3.69	0.46
S17FW-13	Basin 17	100YR-8HR	4.03	3.13	5.69	0.0004	114	4.00	1.17	4.01	1.16
S17FW-14	Basin 17	100YR-8HR	4.03	3.05	6.41	0.0003	114	4.00	1.60	4.00	1.59
EX17-114	Basin 17	10YR-1HR	0.73	1.45	6.52	-0.0038	682	0.19	5.68	0.00	0.00
EX17-116	Basin 17	10YR-1HR	0.77	5.15	6.00	0.0021	116	0.65	1.69	0.70	1.49
EX17-120	Basin 17	10YR-1HR	0.77	5.12	4.73	0.0021	120	0.67	4.42	0.69	4.22
EX17-121	Basin 17	10YR-1HR	0.78	4.86	4.97	0.0019	120	0.69	4.22	0.74	4.08
EX17-124	Basin 17	10YR-1HR	0.73	1.46	6.49	0.0030	503	0.00	0.00	0.73	9.53
EX17-139	Basin 17	10YR-1HR	0.72	3.47	5.41	0.0020	114	0.65	1.84	0.69	1.74
EX17-145	Basin 17	10YR-1HR	0.72	3.36	5.14	0.0017	115	0.65	0.51	0.74	0.49
EX17-148	Basin 17	10YR-1HR	0.73	2.91	7.46	0.0008	114	0.65	1.13	0.66	1.08
EX17-150	Basin 17	10YR-1HR	1.33	2.68	9.39	0.0003	113	0.77	0.08	0.00	0.00
EX17-151	Basin 17	10YR-1HR	0.68	3.89	9.18	0.0003	290	0.65	0.75	0.68	0.75
EX17-152	Basin 17	10YR-1HR	0.79	5.30	16.96	-0.0014	372	0.65	5.62	0.62	5.44
EX17-153	Basin 17	10YR-1HR	0.67	4.29	6.13	-0.0002	278	0.65	0.82	0.66	0.81
EX17-36	Basin 17	10YR-1HR	0.68	22.42	26.10	0.0009	593	0.67	7.31	0.68	7.27
EX17-47	Basin 17	10YR-1HR	0.68	26.46	30.65	0.0019	338	0.67	3.66	0.68	3.65
GWT-17	Basin 17	10YR-1HR	0.00	1.45	99.00	0.0000	0	0.70	129.63	0.00	0.00
L_RIVER_CANAL	Basin 17	10YR-1HR	0.00	1.45	99.00	0.0000	560	0.72	3.62	0.00	0.00
NODE-17B	Basin 17	10YR-1HR	0.67	3.06	6.95	-0.0022	113	0.65	4.51	0.67	4.51
NODE-17D	Basin 17	10YR-1HR	0.65	2.69	4.69	-0.0090	113	0.65	21.02	0.65	21.02
NODE-17F	Basin 17	10YR-1HR	0.67	2.49	5.96	-0.0030	113	0.67	6.15	0.67	6.14
S17-1	Basin 17	10YR-1HR	0.69	3.43	4.74	-0.0012	116	0.65	3.19	0.67	3.14
S17-11	Basin 17	10YR-1HR	0.69	3.05	5.24	0.0009	123	0.80	3.54	0.80	3.59

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S17-12	Basin 17	10YR-1HR	0.70	3.10	5.41	0.0009	119	0.77	4.67	0.78	4.72
S17-12A	Basin 17	10YR-1HR	0.68	2.77	4.49	0.0008	116	0.65	0.77	0.68	0.76
S17-13	Basin 17	10YR-1HR	0.70	3.18	5.57	0.0010	125	0.72	7.99	0.73	8.01
S17-14	Basin 17	10YR-1HR	0.70	3.27	4.74	-0.0011	113	0.65	3.44	0.67	3.39
S17-15	Basin 17	10YR-1HR	0.71	3.33	5.44	0.0010	129	0.72	9.89	0.73	9.91
S17-16	Basin 17	10YR-1HR	0.70	3.44	4.80	-0.0013	113	0.65	3.92	0.67	3.86
S17-17	Basin 17	10YR-1HR	0.72	3.54	6.11	0.0011	123	0.74	9.65	0.74	9.67
S17-18	Basin 17	10YR-1HR	0.72	4.02	6.40	0.0015	128	0.72	16.52	0.73	16.53
S17-19	Basin 17	10YR-1HR	0.73	5.42	11.63	0.0145	281	0.70	11.21	0.92	14.39
S17-1A	Basin 17	10YR-1HR	0.68	2.88	5.40	-0.0011	114	0.65	0.41	1.34	0.49
S17-2	Basin 17	10YR-1HR	0.69	3.29	5.35	0.0015	124	0.67	3.14	0.75	3.30
S17-20	Basin 17	10YR-1HR	0.73	5.12	10.87	-0.0274	124	0.58	16.28	0.74	13.62
S17-201	Basin 17	10YR-1HR	0.68	2.76	4.79	-0.0010	139	0.67	7.90	0.67	7.89
S17-202	Basin 17	10YR-1HR	0.68	2.72	4.82	0.0011	128	0.65	4.60	0.65	4.57
S17-203	Basin 17	10YR-1HR	0.68	2.71	5.11	-0.0014	121	0.54	2.91	0.55	2.80
S17-204	Basin 17	10YR-1HR	0.69	2.70	5.22	0.0007	206	0.55	4.00	0.62	3.83
S17-205	Basin 17	10YR-1HR	0.69	2.69	6.30	0.0008	394	0.48	3.77	0.63	3.30
S17-206	Basin 17	10YR-1HR	0.66	4.19	8.53	0.0034	230	0.65	1.79	0.65	1.79
S17-208	Basin 17	10YR-1HR	0.67	3.94	12.59	0.0028	244	0.65	3.22	0.66	3.21
S17-208A	Basin 17	10YR-1HR	0.69	2.70	4.94	0.0009	362	0.50	3.25	0.54	3.37
S17-209	Basin 17	10YR-1HR	0.68	3.07	13.18	0.0043	142	0.66	3.21	0.68	3.20
S17-21	Basin 17	10YR-1HR	0.70	13.94	17.13	0.0050	410	0.69	11.23	0.70	11.21
S17-210	Basin 17	10YR-1HR	0.65	11.99	16.57	-0.0006	149	0.65	1.43	0.65	1.43
S17-210A	Basin 17	10YR-1HR	0.69	2.70	5.26	0.0009	175	0.49	1.16	0.49	0.81
S17-210B	Basin 17	10YR-1HR	0.69	2.71	5.29	0.0009	230	0.48	0.79	0.49	0.34
S17-211	Basin 17	10YR-1HR	0.69	2.81	6.50	0.0015	121	0.67	5.65	0.68	5.63
S17-211A	Basin 17	10YR-1HR	0.69	2.75	6.26	0.0009	188	0.49	0.75	0.49	0.38
S17-212	Basin 17	10YR-1HR	0.69	3.12	19.65	0.0009	382	0.67	10.56	0.69	10.50
S17-212A	Basin 17	10YR-1HR	0.70	2.69	7.09	0.0008	299	0.68	5.63	0.69	5.61
S17-216	Basin 17	10YR-1HR	0.68	26.55	29.86	0.0045	188	0.66	3.27	0.67	3.25
S17-22	Basin 17	10YR-1HR	0.70	14.00	16.60	-0.0139	113	0.65	2.87	0.36	5.96
S17-222	Basin 17	10YR-1HR	0.66	26.93	30.37	0.0049	216	0.65	2.45	0.66	2.45
S17-224	Basin 17	10YR-1HR	0.65	27.12	30.77	0.0036	159	0.65	1.89	0.65	1.89
S17-225	Basin 17	10YR-1HR	0.79	4.82	6.10	-0.0056	128	0.66	2.26	1.02	2.32
S17-226	Basin 17	10YR-1HR	0.65	25.57	30.38	0.0037	122	0.65	2.00	0.65	1.99
S17-227	Basin 17	10YR-1HR	0.64	24.00	28.70	0.0031	116	0.65	1.28	0.66	1.42
S17-227A	Basin 17	10YR-1HR	0.79	4.98	8.05	-0.0038	135	0.80	9.61	0.80	9.29
S17-228	Basin 17	10YR-1HR	0.79	5.20	17.04	0.0062	126	0.79	7.58	0.92	6.30
S17-229	Basin 17	10YR-1HR	0.00	16.00	231.00	-0.0440	114	0.65	2.40	0.00	10.08
S17-230	Basin 17	10YR-1HR	0.79	5.13	13.91	0.0350	144	0.00	10.08	0.80	8.19
S17-231	Basin 17	10YR-1HR	0.79	5.26	18.13	-0.0310	129	0.78	22.85	0.79	7.58
S17-232	Basin 17	10YR-1HR	0.69	16.78	22.00	0.0058	166	0.68	8.07	0.68	8.05
S17-233	Basin 17	10YR-1HR	0.68	18.27	23.18	0.0077	353	0.67	8.09	0.68	8.07
S17-234	Basin 17	10YR-1HR	0.79	5.24	16.26	-0.0320	175	0.79	20.12	0.79	20.98
S17-235	Basin 17	10YR-1HR	0.67	22.00	26.24	0.0125	329	0.00	8.41	0.67	6.35
S17-237	Basin 17	10YR-1HR	0.00	24.24	29.33	0.0177	285	0.00	11.47	0.00	8.41
S17-239	Basin 17	10YR-1HR	0.00	28.00	33.27	-0.0461	124	0.65	1.48	0.00	11.47
S17-240	Basin 17	10YR-1HR	0.66	25.79	30.48	-0.0007	220	0.65	2.30	0.65	2.30
S17-241	Basin 17	10YR-1HR	0.72	3.36	5.75	0.0014	136	3.55	0.20	0.00	0.00
S17-241A	Basin 17	10YR-1HR	0.72	3.48	28.95	0.0011	215	0.65	3.73	0.69	3.58
S17-241B	Basin 17	10YR-1HR	0.72	3.41	5.06	0.0013	124	0.00	0.00	0.52	1.26

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S17-242	Basin 17	10YR-1HR	0.66	20.30	23.77	0.0027	381	0.65	2.76	0.66	2.75
S17-243	Basin 17	10YR-1HR	0.73	3.07	7.99	0.0010	129	0.00	0.00	4.85	0.15
S17-244	Basin 17	10YR-1HR	0.73	3.07	9.50	0.0014	129	0.68	0.75	0.73	0.73
S17-245	Basin 17	10YR-1HR	0.73	2.90	7.84	0.0008	119	0.66	1.08	0.72	1.05
S17-246	Basin 17	10YR-1HR	0.73	2.74	8.58	0.0008	130	0.73	2.50	0.74	2.51
S17-247	Basin 17	10YR-1HR	0.73	2.65	6.67	0.0008	124	0.00	0.00	1.35	0.18
S17-248	Basin 17	10YR-1HR	0.79	4.26	6.31	-0.0025	118	0.78	18.35	0.78	18.26
S17-249	Basin 17	10YR-1HR	0.79	4.07	6.36	0.0019	117	0.78	12.62	0.79	14.87
S17-25	Basin 17	10YR-1HR	0.69	16.54	19.85	0.0047	272	0.68	8.45	0.69	8.44
S17-250A+A	Basin 17	10YR-1HR	0.79	4.06	6.49	0.0016	114	0.56	2.40	0.00	0.00
S17-250B	Basin 17	10YR-1HR	0.00	1.45	6.49	-0.0035	407	0.73	9.53	0.00	0.00
S17-254	Basin 17	10YR-1HR	0.73	1.46	6.32	-0.0033	798	0.72	2.03	0.19	5.68
S17-255	Basin 17	10YR-1HR	0.79	4.63	6.10	0.0052	125	0.77	18.37	0.78	18.35
S17-26	Basin 17	10YR-1HR	0.69	16.54	19.40	0.0089	113	0.65	0.41	0.72	0.40
S17-27A+A	Basin 17	10YR-1HR	0.70	2.65	6.58	0.0008	300	0.67	2.65	0.70	2.62
S17-27A+B	Basin 17	10YR-1HR	0.73	1.46	6.58	0.0002	933	0.00	0.00	0.20	0.19
S17-3	Basin 17	10YR-1HR	0.68	2.87	4.78	-0.0011	133	0.67	4.40	0.67	4.38
S17-30+A	Basin 17	10YR-1HR	0.72	3.40	5.31	-0.0043	115	0.53	2.72	0.00	0.00
S17-30+B	Basin 17	10YR-1HR	0.72	3.41	5.31	0.0044	113	0.00	0.00	0.72	0.85
S17-30+C	Basin 17	10YR-1HR	0.73	1.47	5.31	0.0001	198	0.72	0.85	0.73	0.82
S17-30A	Basin 17	10YR-1HR	0.73	1.46	6.60	-0.0009	496	0.73	0.82	0.73	1.16
S17-30C	Basin 17	10YR-1HR	0.72	3.44	5.38	0.0011	115	0.69	1.74	0.71	2.02
S17-31	Basin 17	10YR-1HR	0.72	3.42	4.75	0.0011	113	0.65	1.33	0.70	1.17
S17-33A	Basin 17	10YR-1HR	0.79	4.81	6.86	0.0034	128	0.77	12.01	0.79	11.98
S17-36	Basin 17	10YR-1HR	0.79	4.72	7.50	0.0011	297	0.65	2.70	0.77	2.36
S17-37	Basin 17	10YR-1HR	0.67	5.82	10.95	-0.0004	309	0.65	1.69	0.66	1.68
S17-3A	Basin 17	10YR-1HR	0.68	2.88	5.32	-0.0010	118	0.65	0.61	0.69	0.61
S17-4	Basin 17	10YR-1HR	0.69	3.24	5.42	0.0009	127	0.67	6.61	0.68	6.59
S17-44	Basin 17	10YR-1HR	0.73	1.45	5.96	0.0000	14524	0.00	0.00	0.00	0.00
S17-45	Basin 17	10YR-1HR	0.72	1.45	16.05	0.0000	29744	0.19	0.00	0.72	3.62
S17-49	Basin 17	10YR-1HR	0.79	5.24	15.63	0.0306	131	0.62	5.44	0.79	20.12
S17-5	Basin 17	10YR-1HR	0.69	3.34	4.74	-0.0011	113	0.65	3.54	0.64	3.51
S17-6	Basin 17	10YR-1HR	0.69	3.04	5.28	0.0009	135	0.71	7.33	0.72	7.35
S17-7	Basin 17	10YR-1HR	0.68	2.87	4.94	-0.0011	149	0.68	9.66	0.69	9.66
S17-8	Basin 17	10YR-1HR	0.69	3.05	5.35	0.0009	126	0.75	4.16	0.78	4.21
S17-9	Basin 17	10YR-1HR	0.69	3.13	4.74	-0.0010	113	0.65	3.44	0.67	3.40
S17FW-11	Basin 17	10YR-1HR	0.69	2.70	5.07	0.0009	114	0.65	0.51	0.69	0.35
S17FW-12	Basin 17	10YR-1HR	0.69	2.68	5.27	0.0008	114	0.65	0.56	0.70	0.55
S17FW-13	Basin 17	10YR-1HR	0.69	2.77	5.69	0.0009	114	0.65	1.48	0.67	1.46
S17FW-14	Basin 17	10YR-1HR	0.70	2.65	6.41	0.0008	114	0.65	1.88	0.67	1.86
EX17-114	Basin 17	10YR-24HR	0.00	1.45	6.52	-0.0038	683	1.84	5.68	0.00	0.00
EX17-116	Basin 17	10YR-24HR	12.06	2.53	6.00	-0.0005	116	11.98	0.29	24.24	0.35
EX17-120	Basin 17	10YR-24HR	12.06	2.53	4.73	0.0006	120	12.00	0.81	12.00	0.80
EX17-121	Basin 17	10YR-24HR	12.06	2.52	4.97	-0.0010	120	12.00	0.80	12.01	0.81
EX17-124	Basin 17	10YR-24HR	1.84	1.45	6.49	0.0030	505	0.00	0.00	1.84	8.49
EX17-139	Basin 17	10YR-24HR	21.07	2.24	5.41	-0.0003	135	11.98	0.32	19.00	0.56
EX17-145	Basin 17	10YR-24HR	21.08	2.24	5.14	-0.0001	140	11.98	0.09	8.82	0.03
EX17-148	Basin 17	10YR-24HR	21.08	2.23	7.46	-0.0001	123	11.98	0.20	12.00	0.19
EX17-150	Basin 17	10YR-24HR	12.04	3.42	9.39	0.0001	117	12.00	0.04	12.04	0.04
EX17-151	Basin 17	10YR-24HR	12.01	3.57	9.18	-0.0000	240	11.94	0.16	12.01	0.16
EX17-152	Basin 17	10YR-24HR	12.00	3.80	16.96	-0.0001	389	11.98	0.98	11.98	0.98

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
EX17-153	Basin 17	10YR-24HR	12.00	4.02	6.13	-0.0000	231	11.98	0.14	11.94	0.14
EX17-36	Basin 17	10YR-24HR	12.01	21.57	26.10	0.0001	518	11.98	1.28	11.98	1.28
EX17-47	Basin 17	10YR-24HR	12.01	25.81	30.65	0.0002	315	12.00	0.64	11.98	0.64
GWT-17	Basin 17	10YR-24HR	24.00	2.20	99.00	0.0000	0	12.02	24.41	0.00	0.00
L_RIVER_CANAL	Basin 17	10YR-24HR	0.00	1.45	99.00	0.0000	560	11.86	1.05	0.00	0.00
NODE-17B	Basin 17	10YR-24HR	21.01	2.25	6.95	-0.0001	113	12.00	0.84	12.01	0.84
NODE-17D	Basin 17	10YR-24HR	21.00	2.23	4.69	-0.0004	113	12.00	3.73	12.00	3.73
NODE-17F	Basin 17	10YR-24HR	22.00	2.23	5.96	-0.0002	113	12.00	1.20	12.00	1.20
S17-1	Basin 17	10YR-24HR	21.04	2.27	4.74	0.0002	116	12.00	0.57	12.00	0.56
S17-11	Basin 17	10YR-24HR	21.04	2.27	5.24	-0.0002	304	12.05	1.27	12.10	1.27
S17-12	Basin 17	10YR-24HR	21.04	2.27	5.41	0.0001	220	12.02	1.49	12.04	1.48
S17-12A	Basin 17	10YR-24HR	21.04	2.26	4.49	-0.0003	146	11.98	0.13	22.29	0.34
S17-13	Basin 17	10YR-24HR	21.04	2.27	5.57	-0.0001	333	12.00	2.06	12.02	2.05
S17-14	Basin 17	10YR-24HR	21.04	2.27	4.74	0.0001	113	12.00	0.62	12.00	0.62
S17-15	Basin 17	10YR-24HR	21.04	2.27	5.44	0.0001	406	12.00	2.27	12.03	2.26
S17-16	Basin 17	10YR-24HR	21.04	2.27	4.80	-0.0002	113	12.00	0.71	12.00	0.71
S17-17	Basin 17	10YR-24HR	12.06	2.28	6.11	-0.0001	301	12.01	2.09	12.04	2.08
S17-18	Basin 17	10YR-24HR	12.05	2.31	6.40	0.0001	392	12.00	3.03	12.02	3.03
S17-19	Basin 17	10YR-24HR	12.02	2.65	11.63	0.0004	265	11.99	1.98	12.02	1.98
S17-1A	Basin 17	10YR-24HR	21.04	2.26	5.40	0.0001	114	11.98	0.07	31.29	0.45
S17-2	Basin 17	10YR-24HR	21.04	2.27	5.35	-0.0001	279	12.00	0.56	12.02	0.56
S17-20	Basin 17	10YR-24HR	12.05	2.36	10.87	-0.0002	315	12.00	2.48	12.02	2.47
S17-201	Basin 17	10YR-24HR	21.04	2.26	4.79	0.0002	160	12.00	2.11	12.02	2.09
S17-202	Basin 17	10YR-24HR	21.04	2.26	4.82	0.0012	128	12.00	1.42	7.73	2.09
S17-203	Basin 17	10YR-24HR	21.04	2.26	5.11	-0.0010	121	7.73	1.93	12.00	1.02
S17-204	Basin 17	10YR-24HR	21.04	2.26	5.22	-0.0003	246	12.00	1.18	12.00	1.17
S17-205	Basin 17	10YR-24HR	21.04	2.26	6.30	-0.0001	519	12.00	1.04	12.01	1.06
S17-206	Basin 17	10YR-24HR	12.00	3.77	8.53	0.0003	203	11.98	0.31	11.95	0.31
S17-208	Basin 17	10YR-24HR	11.97	3.34	12.59	0.0002	213	11.98	0.56	11.97	0.56
S17-208A	Basin 17	10YR-24HR	21.05	2.26	4.94	0.0001	472	12.00	1.06	11.71	0.55
S17-209	Basin 17	10YR-24HR	12.03	2.38	13.18	-0.0011	138	11.97	0.56	12.00	0.56
S17-21	Basin 17	10YR-24HR	12.02	12.78	17.13	0.0050	414	15.39	6.49	11.99	1.98
S17-210	Basin 17	10YR-24HR	11.99	11.62	16.57	0.0002	135	11.98	0.25	11.99	0.25
S17-210A	Basin 17	10YR-24HR	21.05	2.26	5.26	0.0001	204	10.13	0.12	19.05	0.57
S17-210B	Basin 17	10YR-24HR	21.05	2.25	5.29	-0.0002	256	22.19	0.83	0.00	0.00
S17-211	Basin 17	10YR-24HR	21.05	2.25	6.50	-0.0013	121	22.19	2.65	12.00	1.14
S17-211A	Basin 17	10YR-24HR	21.05	2.26	6.26	0.0004	230	0.00	0.00	18.84	1.35
S17-212	Basin 17	10YR-24HR	21.05	2.26	19.65	0.0005	276	11.98	1.85	12.00	1.85
S17-212A	Basin 17	10YR-24HR	21.05	2.25	7.09	0.0002	373	12.00	1.14	12.03	1.14
S17-216	Basin 17	10YR-24HR	12.00	25.91	29.86	0.0005	173	11.98	0.57	12.00	0.57
S17-22	Basin 17	10YR-24HR	12.02	12.78	16.60	-0.0131	113	11.98	0.50	15.39	5.69
S17-222	Basin 17	10YR-24HR	12.00	26.42	30.37	0.0004	193	11.98	0.43	11.98	0.43
S17-224	Basin 17	10YR-24HR	11.97	26.68	30.77	0.0003	148	11.98	0.33	11.97	0.33
S17-225	Basin 17	10YR-24HR	12.07	2.52	6.10	-0.0049	132	12.00	1.76	19.62	2.15
S17-226	Basin 17	10YR-24HR	11.97	25.50	30.38	-0.0036	116	11.98	0.35	11.20	1.69
S17-227	Basin 17	10YR-24HR	11.96	24.00	28.70	-0.0030	116	11.98	0.22	11.28	1.41
S17-227A	Basin 17	10YR-24HR	12.07	2.55	8.05	0.0009	537	12.04	3.18	12.10	2.01
S17-228	Basin 17	10YR-24HR	12.03	2.95	17.04	0.0009	319	11.97	1.36	11.99	1.36
S17-229	Basin 17	10YR-24HR	0.00	16.00	231.00	-0.0440	114	11.98	0.42	0.00	10.08
S17-230	Basin 17	10YR-24HR	12.06	2.67	13.91	0.0350	588	0.00	10.08	12.04	1.77
S17-231	Basin 17	10YR-24HR	12.01	3.11	18.13	0.0004	202	11.98	1.36	11.97	1.36

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S17-232	Basin 17	10YR-24HR	12.02	15.62	22.00	0.0047	203	0.05	3.03	0.07	2.86
S17-233	Basin 17	10YR-24HR	0.05	17.43	23.18	0.0077	353	0.02	5.35	0.05	3.03
S17-234	Basin 17	10YR-24HR	12.02	3.27	16.26	0.0000	203	12.00	0.98	12.02	0.98
S17-235	Basin 17	10YR-24HR	0.02	21.88	26.24	0.0125	332	0.00	8.41	0.02	5.35
S17-237	Basin 17	10YR-24HR	0.00	24.24	29.33	0.0177	285	0.00	11.47	0.00	8.41
S17-239	Basin 17	10YR-24HR	0.00	28.00	33.27	-0.0461	124	11.98	0.26	0.00	11.47
S17-240	Basin 17	10YR-24HR	12.00	25.30	30.48	-0.0001	197	11.98	0.40	11.93	0.40
S17-241	Basin 17	10YR-24HR	21.08	2.24	5.75	0.0005	188	0.00	0.00	24.49	0.85
S17-241A	Basin 17	10YR-24HR	21.07	2.24	28.95	0.0002	184	11.98	0.65	11.99	0.62
S17-241B	Basin 17	10YR-24HR	21.07	2.24	5.06	0.0001	130	24.00	1.30	0.00	0.00
S17-242	Basin 17	10YR-24HR	11.97	19.82	23.77	0.0003	304	11.98	0.48	11.97	0.48
S17-243	Basin 17	10YR-24HR	21.07	2.23	7.99	0.0002	246	24.00	2.48	0.00	0.00
S17-244	Basin 17	10YR-24HR	21.07	2.24	9.50	-0.0003	172	12.01	0.19	22.07	1.08
S17-245	Basin 17	10YR-24HR	21.08	2.23	7.84	0.0008	185	12.00	0.19	24.00	2.67
S17-246	Basin 17	10YR-24HR	21.08	2.23	8.58	-0.0006	298	24.00	1.43	12.06	0.54
S17-247	Basin 17	10YR-24HR	21.08	2.23	6.67	-0.0002	248	0.00	0.00	24.34	0.32
S17-248	Basin 17	10YR-24HR	12.07	2.49	6.31	0.0029	160	12.02	3.87	12.03	3.75
S17-249	Basin 17	10YR-24HR	12.07	2.48	6.36	-0.0027	170	12.02	2.62	12.05	3.75
S17-25	Basin 17	10YR-24HR	12.02	15.59	19.85	0.0047	305	0.08	1.97	12.00	1.48
S17-250A+A	Basin 17	10YR-24HR	12.07	2.48	6.49	-0.0026	125	19.68	1.14	0.00	0.00
S17-250B	Basin 17	10YR-24HR	0.00	1.45	6.49	-0.0035	407	1.84	8.49	0.00	0.00
S17-254	Basin 17	10YR-24HR	1.84	1.45	6.32	-0.0033	797	12.00	1.22	1.84	5.68
S17-255	Basin 17	10YR-24HR	12.07	2.51	6.10	0.0032	178	12.01	3.99	12.02	3.87
S17-26	Basin 17	10YR-24HR	12.02	15.59	19.40	0.0089	114	11.98	0.07	11.64	0.17
S17-27A+A	Basin 17	10YR-24HR	21.05	2.25	6.58	-0.0001	369	11.95	0.64	12.04	0.53
S17-27A+B	Basin 17	10YR-24HR	12.00	1.45	6.58	0.0002	929	0.00	0.00	1.85	0.19
S17-3	Basin 17	10YR-24HR	21.04	2.26	4.78	-0.0002	133	12.00	1.33	12.00	0.42
S17-30+A	Basin 17	10YR-24HR	21.07	2.25	5.31	0.0032	123	0.00	0.00	21.07	5.94
S17-30+B	Basin 17	10YR-24HR	21.07	2.23	5.31	-0.0040	113	21.07	5.94	0.00	0.00
S17-30+C	Basin 17	10YR-24HR	1.84	1.45	5.31	-0.0001	198	0.00	0.00	1.84	0.19
S17-30A	Basin 17	10YR-24HR	1.84	1.45	6.60	-0.0009	496	1.84	0.19	1.84	0.96
S17-30C	Basin 17	10YR-24HR	21.07	2.24	5.38	-0.0003	144	19.00	0.56	0.00	0.00
S17-31	Basin 17	10YR-24HR	21.07	2.24	4.75	-0.0001	119	11.98	0.23	19.02	0.52
S17-33A	Basin 17	10YR-24HR	12.07	2.52	6.86	0.0021	241	12.01	4.12	12.05	2.72
S17-36	Basin 17	10YR-24HR	12.00	3.08	7.50	0.0001	306	11.98	0.47	12.00	0.47
S17-37	Basin 17	10YR-24HR	12.00	5.41	10.95	-0.0000	260	11.98	0.29	11.95	0.29
S17-3A	Basin 17	10YR-24HR	21.04	2.26	5.32	0.0001	118	11.98	0.11	7.64	0.34
S17-4	Basin 17	10YR-24HR	21.04	2.27	5.42	0.0000	387	12.00	1.18	12.03	1.18
S17-44	Basin 17	10YR-24HR	1.85	1.45	5.96	-0.0000	14524	0.00	0.00	0.00	0.00
S17-45	Basin 17	10YR-24HR	11.86	1.45	16.05	0.0000	29745	1.84	0.00	11.86	1.05
S17-49	Basin 17	10YR-24HR	12.00	3.35	15.63	0.0000	224	11.98	0.98	12.00	0.98
S17-5	Basin 17	10YR-24HR	21.04	2.27	4.74	-0.0001	113	12.00	0.63	12.00	0.63
S17-6	Basin 17	10YR-24HR	21.04	2.27	5.28	0.0001	352	12.05	2.04	12.08	2.03
S17-7	Basin 17	10YR-24HR	21.04	2.26	4.94	-0.0004	149	12.02	2.08	12.03	2.46
S17-8	Basin 17	10YR-24HR	21.04	2.27	5.35	0.0001	351	12.02	1.44	12.08	1.44
S17-9	Basin 17	10YR-24HR	21.04	2.27	4.74	-0.0002	113	12.00	0.62	12.00	0.62
S17FW-11	Basin 17	10YR-24HR	21.05	2.26	5.07	0.0002	114	11.98	0.09	12.09	0.28
S17FW-12	Basin 17	10YR-24HR	21.05	2.25	5.27	-0.0002	114	11.98	0.10	21.15	0.35
S17FW-13	Basin 17	10YR-24HR	21.05	2.26	5.69	-0.0002	114	11.98	0.26	11.98	0.25
S17FW-14	Basin 17	10YR-24HR	21.05	2.25	6.41	0.0001	114	12.00	0.35	11.95	0.45
EX17-114	Basin 17	10YR-8HR	0.00	1.45	6.52	-0.0038	683	1.16	5.68	0.00	0.00

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
EX17-116	Basin 17	10YR-8HR	4.05	4.00	6.00	-0.0005	116	4.00	0.88	4.01	0.87
EX17-120	Basin 17	10YR-8HR	4.05	3.99	4.73	0.0006	120	4.00	2.42	4.00	2.40
EX17-121	Basin 17	10YR-8HR	4.05	3.90	4.97	-0.0011	120	4.00	2.40	4.02	2.39
EX17-124	Basin 17	10YR-8HR	4.00	1.46	6.49	0.0030	504	0.00	0.00	4.00	8.75
EX17-139	Basin 17	10YR-8HR	4.04	2.94	5.41	-0.0007	114	4.00	0.96	4.00	0.92
EX17-145	Basin 17	10YR-8HR	4.04	2.89	5.14	0.0006	115	4.00	0.27	5.28	0.32
EX17-148	Basin 17	10YR-8HR	4.05	2.72	7.46	0.0002	119	4.00	0.59	4.00	0.58
EX17-150	Basin 17	10YR-8HR	4.24	3.46	9.39	0.0004	117	4.02	0.09	4.24	0.06
EX17-151	Basin 17	10YR-8HR	4.01	3.74	9.18	0.0001	271	3.98	0.42	4.01	0.42
EX17-152	Basin 17	10YR-8HR	4.05	4.18	16.96	-0.0002	454	4.00	2.95	3.97	2.95
EX17-153	Basin 17	10YR-8HR	4.00	4.16	6.13	0.0001	261	4.00	0.43	3.98	0.43
EX17-36	Basin 17	10YR-8HR	4.01	21.99	26.10	0.0002	591	4.00	3.86	4.00	3.85
EX17-47	Basin 17	10YR-8HR	4.01	26.14	30.65	0.0004	347	4.00	1.93	4.00	1.93
GWT-17	Basin 17	10YR-8HR	8.00	2.20	99.00	0.0000	0	4.02	73.05	0.00	0.00
L_RIVER_CANAL	Basin 17	10YR-8HR	0.00	1.45	99.00	0.0000	560	4.00	1.86	0.00	0.00
NODE-17B	Basin 17	10YR-8HR	4.01	2.84	6.95	0.0003	113	4.00	2.52	4.01	2.51
NODE-17D	Basin 17	10YR-8HR	4.00	2.61	4.69	-0.0010	113	4.00	11.24	4.00	11.24
NODE-17F	Basin 17	10YR-8HR	4.01	2.54	5.96	-0.0004	113	4.00	3.58	4.00	3.57
S17-1	Basin 17	10YR-8HR	4.03	3.09	4.74	0.0003	116	4.00	1.70	4.00	1.69
S17-11	Basin 17	10YR-8HR	4.04	3.00	5.24	0.0003	123	4.12	2.81	4.12	2.85
S17-12	Basin 17	10YR-8HR	4.04	3.03	5.41	0.0003	119	3.98	3.46	4.06	3.46
S17-12A	Basin 17	10YR-8HR	4.03	2.82	4.49	-0.0003	116	4.00	0.40	4.04	0.40
S17-13	Basin 17	10YR-8HR	4.04	3.08	5.57	0.0003	125	4.00	5.25	4.01	5.24
S17-14	Basin 17	10YR-8HR	4.03	3.10	4.74	0.0003	113	4.00	1.88	4.00	1.87
S17-15	Basin 17	10YR-8HR	4.04	3.15	5.44	0.0003	129	4.01	6.05	4.03	6.04
S17-16	Basin 17	10YR-8HR	4.03	3.19	4.80	0.0003	113	4.00	2.14	4.00	2.13
S17-17	Basin 17	10YR-8HR	4.04	3.24	6.11	0.0003	123	4.03	5.67	4.05	5.67
S17-18	Basin 17	10YR-8HR	4.04	3.40	6.40	-0.0007	128	4.01	9.21	4.03	9.08
S17-19	Basin 17	10YR-8HR	4.04	3.74	11.63	-0.0078	290	4.01	5.96	4.04	10.50
S17-1A	Basin 17	10YR-8HR	4.03	2.89	5.40	-0.0006	114	4.00	0.21	10.47	0.45
S17-2	Basin 17	10YR-8HR	4.03	3.05	5.35	0.0003	197	4.00	1.69	4.03	1.68
S17-20	Basin 17	10YR-8HR	4.05	3.74	10.87	0.0178	127	4.03	11.97	4.05	7.55
S17-201	Basin 17	10YR-8HR	4.03	2.82	4.79	0.0005	139	4.00	5.13	4.01	5.12
S17-202	Basin 17	10YR-8HR	4.04	2.79	4.82	0.0009	128	4.00	3.22	4.00	3.21
S17-203	Basin 17	10YR-8HR	4.04	2.78	5.11	0.0014	121	4.00	2.13	4.00	2.12
S17-204	Basin 17	10YR-8HR	4.04	2.77	5.22	-0.0007	193	4.00	2.65	4.00	2.65
S17-205	Basin 17	10YR-8HR	4.04	2.77	6.30	0.0002	352	4.00	2.35	3.89	1.96
S17-206	Basin 17	10YR-8HR	4.00	3.99	8.53	0.0007	222	4.00	0.94	3.99	0.94
S17-208	Basin 17	10YR-8HR	4.00	3.64	12.59	0.0006	235	4.00	1.69	4.00	1.69
S17-208A	Basin 17	10YR-8HR	4.04	2.77	4.94	0.0003	327	3.32	1.40	4.02	2.68
S17-209	Basin 17	10YR-8HR	4.04	2.90	13.18	0.0011	142	4.00	1.69	4.02	1.68
S17-21	Basin 17	10YR-8HR	4.01	13.34	17.13	0.0050	455	5.31	7.47	4.01	5.96
S17-210	Basin 17	10YR-8HR	4.00	11.81	16.57	-0.0002	144	4.00	0.75	3.99	0.75
S17-210A	Basin 17	10YR-8HR	4.04	2.77	5.26	-0.0005	166	3.98	0.79	2.10	0.25
S17-210B	Basin 17	10YR-8HR	4.04	2.77	5.29	-0.0003	216	2.10	0.13	6.38	0.46
S17-211	Basin 17	10YR-8HR	4.04	2.79	6.50	0.0016	121	4.00	3.16	4.01	3.15
S17-211A	Basin 17	10YR-8HR	4.04	2.78	6.26	-0.0005	181	6.38	0.89	2.19	0.04
S17-212	Basin 17	10YR-8HR	4.04	2.88	19.65	-0.0005	367	4.00	5.59	4.02	5.56
S17-212A	Basin 17	10YR-8HR	4.04	2.76	7.09	0.0004	275	4.01	3.15	4.03	3.14
S17-216	Basin 17	10YR-8HR	4.01	26.22	29.86	0.0012	185	4.00	1.71	3.99	1.71
S17-22	Basin 17	10YR-8HR	4.01	13.36	16.60	-0.0116	113	4.00	1.50	5.31	6.31

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S17-222	Basin 17	10YR-8HR	4.00	26.68	30.37	0.0009	210	4.00	1.29	4.00	1.29
S17-224	Basin 17	10YR-8HR	4.00	26.90	30.77	0.0008	156	4.00	0.99	3.99	0.99
S17-225	Basin 17	10YR-8HR	4.06	3.90	6.10	-0.0053	120	4.02	1.89	4.15	2.16
S17-226	Basin 17	10YR-8HR	3.98	25.50	30.38	0.0036	116	4.00	1.05	3.89	1.70
S17-227	Basin 17	10YR-8HR	3.99	24.00	28.70	-0.0030	116	4.00	0.67	3.75	1.42
S17-227A	Basin 17	10YR-8HR	4.06	3.94	8.05	-0.0011	335	4.10	6.62	4.08	5.97
S17-228	Basin 17	10YR-8HR	4.06	4.05	17.04	0.0020	353	3.89	4.14	4.08	3.96
S17-229	Basin 17	10YR-8HR	0.00	16.00	231.00	-0.0440	114	4.00	1.26	0.00	10.08
S17-230	Basin 17	10YR-8HR	4.06	4.00	13.91	0.0350	550	0.00	10.08	4.10	5.21
S17-231	Basin 17	10YR-8HR	4.06	4.09	18.13	0.0079	235	4.05	8.42	3.89	4.14
S17-232	Basin 17	10YR-8HR	4.02	16.15	22.00	0.0047	203	4.01	4.26	4.01	4.25
S17-233	Basin 17	10YR-8HR	4.01	17.66	23.18	0.0077	356	0.02	5.35	4.01	4.26
S17-234	Basin 17	10YR-8HR	4.06	4.09	16.26	-0.0082	235	3.89	5.77	4.06	7.31
S17-235	Basin 17	10YR-8HR	0.02	21.88	26.24	0.0125	332	0.00	8.41	0.02	5.35
S17-237	Basin 17	10YR-8HR	0.00	24.24	29.33	0.0177	285	0.00	11.47	0.00	8.41
S17-239	Basin 17	10YR-8HR	0.00	28.00	33.27	-0.0461	124	4.00	0.78	0.00	11.47
S17-240	Basin 17	10YR-8HR	4.00	25.55	30.48	0.0001	214	4.00	1.21	3.99	1.21
S17-241	Basin 17	10YR-8HR	4.04	2.89	5.75	0.0008	136	9.44	0.54	0.00	0.00
S17-241A	Basin 17	10YR-8HR	4.04	2.92	28.95	0.0003	206	4.00	1.96	4.01	1.94
S17-241B	Basin 17	10YR-8HR	4.04	2.91	5.06	0.0007	124	0.00	0.00	8.00	1.80
S17-242	Basin 17	10YR-8HR	4.00	20.07	23.77	0.0008	355	4.00	1.45	3.99	1.45
S17-243	Basin 17	10YR-8HR	4.05	2.78	7.99	0.0014	129	8.00	2.12	0.75	0.17
S17-244	Basin 17	10YR-8HR	4.05	2.78	9.50	-0.0011	128	4.01	0.42	5.12	1.16
S17-245	Basin 17	10YR-8HR	4.05	2.71	7.84	0.0009	123	4.00	0.58	8.00	2.50
S17-246	Basin 17	10YR-8HR	4.05	2.65	8.58	-0.0007	129	4.03	1.55	4.05	1.55
S17-247	Basin 17	10YR-8HR	4.05	2.62	6.67	-0.0002	124	0.00	0.00	6.41	0.34
S17-248	Basin 17	10YR-8HR	4.06	3.68	6.31	0.0028	118	4.05	11.25	4.05	11.39
S17-249	Basin 17	10YR-8HR	4.07	3.60	6.36	-0.0028	117	4.05	8.02	4.05	5.67
S17-25	Basin 17	10YR-8HR	4.02	16.06	19.85	0.0047	318	4.01	4.47	4.01	4.47
S17-250A+A	Basin 17	10YR-8HR	4.07	3.61	6.49	-0.0027	114	7.23	1.20	0.00	0.00
S17-250B	Basin 17	10YR-8HR	0.00	1.45	6.49	-0.0035	407	4.00	8.75	0.00	0.00
S17-254	Basin 17	10YR-8HR	4.00	1.45	6.32	-0.0033	798	4.00	1.48	1.16	5.68
S17-255	Basin 17	10YR-8HR	4.06	3.82	6.10	0.0032	167	4.04	11.32	4.05	11.25
S17-26	Basin 17	10YR-8HR	4.02	16.06	19.40	0.0089	113	4.00	0.21	4.00	0.21
S17-27A+A	Basin 17	10YR-8HR	4.04	2.74	6.58	0.0002	272	4.00	1.50	4.03	1.48
S17-27A+B	Basin 17	10YR-8HR	4.00	1.45	6.58	0.0002	930	0.00	0.00	1.16	0.19
S17-3	Basin 17	10YR-8HR	4.03	2.89	4.78	-0.0006	133	4.01	2.31	4.01	2.30
S17-30+A	Basin 17	10YR-8HR	4.04	2.91	5.31	-0.0039	115	5.02	2.78	0.00	0.00
S17-30+B	Basin 17	10YR-8HR	4.04	2.93	5.31	0.0039	113	0.00	0.00	0.00	0.00
S17-30+C	Basin 17	10YR-8HR	4.00	1.45	5.31	-0.0001	198	0.00	0.00	1.16	0.19
S17-30A	Basin 17	10YR-8HR	4.00	1.45	6.60	-0.0009	496	1.16	0.19	1.16	0.96
S17-30C	Basin 17	10YR-8HR	4.04	2.93	5.38	0.0005	115	4.00	0.92	4.27	1.55
S17-31	Basin 17	10YR-8HR	4.04	2.91	4.75	-0.0004	113	4.00	0.70	4.00	0.49
S17-33A	Basin 17	10YR-8HR	4.06	3.89	6.86	0.0028	143	4.08	8.58	4.07	7.57
S17-36	Basin 17	10YR-8HR	4.06	3.85	7.50	0.0003	336	4.00	1.42	4.04	1.38
S17-37	Basin 17	10YR-8HR	4.00	5.62	10.95	0.0001	294	4.00	0.88	4.00	0.88
S17-3A	Basin 17	10YR-8HR	4.03	2.89	5.32	0.0003	118	4.00	0.32	4.42	0.34
S17-4	Basin 17	10YR-8HR	4.03	3.04	5.42	0.0003	187	4.01	3.55	4.03	3.54
S17-44	Basin 17	10YR-8HR	4.00	1.45	5.96	0.0000	14524	0.00	0.00	0.00	0.00
S17-45	Basin 17	10YR-8HR	4.00	1.45	16.05	0.0000	29744	1.16	0.00	4.00	1.86
S17-49	Basin 17	10YR-8HR	4.06	4.08	15.63	-0.0058	253	3.97	2.95	3.89	5.77

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S17-5	Basin 17	10YR-8HR	4.03	3.07	4.74	0.0003	113	4.00	1.89	4.00	1.88
S17-6	Basin 17	10YR-8HR	4.04	2.98	5.28	0.0003	140	4.03	5.01	4.04	5.01
S17-7	Basin 17	10YR-8HR	4.03	2.88	4.94	-0.0004	149	4.01	6.19	4.02	6.19
S17-8	Basin 17	10YR-8HR	4.04	2.99	5.35	0.0003	126	4.00	3.25	4.04	3.24
S17-9	Basin 17	10YR-8HR	4.03	3.02	4.74	0.0003	113	4.00	1.88	4.00	1.87
S17FW-11	Basin 17	10YR-8HR	4.04	2.77	5.07	0.0003	114	4.00	0.27	0.00	0.00
S17FW-12	Basin 17	10YR-8HR	4.04	2.76	5.27	-0.0003	114	4.00	0.29	4.08	0.28
S17FW-13	Basin 17	10YR-8HR	4.04	2.78	5.69	-0.0005	114	4.00	0.78	4.00	0.77
S17FW-14	Basin 17	10YR-8HR	4.04	2.74	6.41	0.0002	114	4.00	1.05	4.00	1.04
EX17-114	Basin 17	25YR-72HR	60.05	1.49	6.52	-0.0038	680	60.04	6.88	60.04	10.37
EX17-116	Basin 17	25YR-72HR	60.07	6.66	6.00	0.0015	116	60.02	2.05	60.06	1.92
EX17-120	Basin 17	25YR-72HR	60.07	6.60	4.73	0.0015	120	60.03	5.48	60.05	5.36
EX17-121	Basin 17	25YR-72HR	60.08	6.17	4.97	0.0013	120	60.05	5.36	60.06	5.28
EX17-124	Basin 17	25YR-72HR	60.04	1.49	6.49	-0.0049	492	60.04	10.37	60.04	11.58
EX17-139	Basin 17	25YR-72HR	60.04	3.78	5.41	0.0015	114	60.02	2.23	60.02	2.22
EX17-145	Basin 17	25YR-72HR	60.04	3.70	5.14	0.0013	115	60.02	0.62	60.06	0.62
EX17-148	Basin 17	25YR-72HR	60.05	3.29	7.46	0.0007	114	60.02	1.36	60.02	1.35
EX17-150	Basin 17	25YR-72HR	60.04	3.69	9.39	0.0002	119	60.02	0.35	60.04	0.34
EX17-151	Basin 17	25YR-72HR	60.04	3.95	9.18	0.0002	295	60.02	0.90	60.04	0.89
EX17-152	Basin 17	25YR-72HR	60.09	7.22	16.96	0.0030	360	60.02	6.81	60.07	6.26
EX17-153	Basin 17	25YR-72HR	60.03	4.34	6.13	0.0002	283	60.02	0.99	60.03	0.99
EX17-36	Basin 17	25YR-72HR	60.04	22.60	26.10	0.0006	573	60.03	8.86	60.04	8.84
EX17-47	Basin 17	25YR-72HR	60.04	26.60	30.65	0.0005	320	60.03	4.44	60.04	4.43
GWT-17	Basin 17	25YR-72HR	72.00	2.20	99.00	0.0001	0	60.04	157.74	0.00	0.00
L_RIVER_CANAL	Basin 17	25YR-72HR	0.00	1.45	99.00	0.0000	560	60.07	13.58	0.00	0.00
NODE-17B	Basin 17	25YR-72HR	60.02	3.48	6.95	0.0010	113	60.02	5.93	60.02	5.93
NODE-17D	Basin 17	25YR-72HR	60.02	3.41	4.69	0.0008	113	60.02	26.14	60.02	26.14
NODE-17F	Basin 17	25YR-72HR	60.02	3.09	5.96	0.0007	113	60.02	8.55	60.02	8.55
S17-1	Basin 17	25YR-72HR	60.05	4.67	4.74	0.0014	116	60.02	3.96	60.03	3.91
S17-11	Basin 17	25YR-72HR	60.05	4.10	5.24	0.0011	123	60.11	4.08	60.13	4.20
S17-12	Basin 17	25YR-72HR	60.05	4.18	5.41	0.0011	119	60.05	5.60	60.08	5.63
S17-12A	Basin 17	25YR-72HR	60.04	3.68	4.49	0.0008	116	60.02	0.93	60.06	0.92
S17-13	Basin 17	25YR-72HR	60.05	4.32	5.57	0.0011	125	60.05	9.87	60.05	9.86
S17-14	Basin 17	25YR-72HR	60.05	4.46	4.74	0.0012	113	60.02	4.39	60.02	4.34
S17-15	Basin 17	25YR-72HR	60.06	4.54	5.44	0.0012	129	60.05	12.04	60.07	12.04
S17-16	Basin 17	25YR-72HR	60.05	4.72	4.80	0.0013	113	60.02	5.01	60.02	4.95
S17-17	Basin 17	25YR-72HR	60.06	4.83	6.11	0.0013	123	60.07	11.53	60.09	11.57
S17-18	Basin 17	25YR-72HR	60.07	5.50	6.40	0.0019	128	60.06	20.62	60.07	20.62
S17-19	Basin 17	25YR-72HR	60.07	7.65	11.63	-0.0118	256	60.05	13.64	60.09	13.61
S17-1A	Basin 17	25YR-72HR	60.04	3.83	5.40	0.0009	114	60.02	0.50	60.09	0.52
S17-2	Basin 17	25YR-72HR	60.05	4.46	5.35	0.0018	124	60.03	3.91	60.05	3.89
S17-20	Basin 17	25YR-72HR	60.07	7.20	10.87	0.0246	124	60.07	16.87	60.08	16.88
S17-201	Basin 17	25YR-72HR	60.04	3.66	4.79	0.0008	139	60.03	9.62	60.04	9.61
S17-202	Basin 17	25YR-72HR	60.04	3.60	4.82	0.0010	128	60.02	5.52	60.03	5.50
S17-203	Basin 17	25YR-72HR	60.04	3.58	5.11	0.0009	121	60.01	3.23	60.02	3.21
S17-204	Basin 17	25YR-72HR	60.04	3.58	5.22	0.0010	124	60.01	4.55	60.02	4.52
S17-205	Basin 17	25YR-72HR	60.04	3.56	6.30	0.0015	134	60.01	3.97	60.02	4.03
S17-206	Basin 17	25YR-72HR	60.02	4.27	8.53	0.0003	231	60.02	2.17	60.02	2.17
S17-208	Basin 17	25YR-72HR	60.03	4.07	12.59	0.0008	245	60.02	3.90	60.03	3.89
S17-208A	Basin 17	25YR-72HR	60.05	3.57	4.94	-0.0022	133	60.02	4.00	59.74	4.51
S17-209	Basin 17	25YR-72HR	60.05	3.72	13.18	-0.0049	129	60.03	3.89	60.15	4.33

Qpost = 13.58 cfs < Qpre = 14.12 cfs

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S17-21	Basin 17	25YR-72HR	60.05	14.21	17.13	0.0050	327	60.05	13.65	60.05	13.64
S17-210	Basin 17	25YR-72HR	60.02	12.06	16.57	0.0003	151	60.02	1.74	60.02	1.73
S17-210A	Basin 17	25YR-72HR	60.05	3.58	5.26	-0.0019	118	59.74	2.00	60.33	0.94
S17-210B	Basin 17	25YR-72HR	60.05	3.59	5.29	0.0019	152	68.24	0.82	58.70	0.29
S17-211	Basin 17	25YR-72HR	60.05	3.74	6.50	0.0016	121	60.04	6.70	60.05	6.69
S17-211A	Basin 17	25YR-72HR	60.05	3.64	6.26	0.0009	121	58.70	0.60	62.68	1.34
S17-212	Basin 17	25YR-72HR	60.05	4.19	19.65	0.0010	381	60.03	12.84	60.05	12.77
S17-212A	Basin 17	25YR-72HR	60.05	3.57	7.09	0.0007	133	60.05	6.69	60.06	6.70
S17-216	Basin 17	25YR-72HR	60.04	26.70	29.86	0.0005	187	60.02	3.96	60.03	3.95
S17-22	Basin 17	25YR-72HR	60.05	14.30	16.60	-0.0131	113	60.02	3.47	62.09	5.73
S17-222	Basin 17	25YR-72HR	60.03	27.03	30.37	0.0004	216	60.02	2.97	60.03	2.97
S17-224	Basin 17	25YR-72HR	60.02	27.20	30.77	0.0003	159	60.02	2.29	60.02	2.29
S17-225	Basin 17	25YR-72HR	60.09	6.13	6.10	-0.0054	130	60.02	2.95	60.04	2.80
S17-226	Basin 17	25YR-72HR	60.02	25.65	30.38	0.0037	125	60.02	2.42	60.02	2.42
S17-227	Basin 17	25YR-72HR	60.02	24.03	28.70	0.0036	120	60.02	1.55	60.02	1.55
S17-227A	Basin 17	25YR-72HR	60.09	6.44	8.05	-0.0035	143	60.10	12.73	60.10	12.68
S17-228	Basin 17	25YR-72HR	60.09	6.87	17.04	-0.0083	126	60.10	8.60	60.12	8.68
S17-229	Basin 17	25YR-72HR	0.00	16.00	231.00	-0.0440	114	60.02	2.92	0.00	10.08
S17-230	Basin 17	25YR-72HR	60.09	6.72	13.91	0.0350	144	60.08	11.24	60.10	11.31
S17-231	Basin 17	25YR-72HR	60.09	6.94	18.13	0.0516	119	59.88	24.63	60.10	8.60
S17-232	Basin 17	25YR-72HR	60.05	17.04	22.00	0.0047	158	60.04	9.79	60.05	9.78
S17-233	Basin 17	25YR-72HR	60.04	18.55	23.18	0.0077	332	60.03	9.81	60.04	9.79
S17-234	Basin 17	25YR-72HR	60.09	7.00	16.26	-0.0840	119	60.33	22.51	60.34	22.27
S17-235	Basin 17	25YR-72HR	60.03	22.16	26.24	0.0125	321	0.00	8.41	60.03	7.71
S17-237	Basin 17	25YR-72HR	0.00	24.24	29.33	0.0177	285	0.00	11.47	0.00	8.41
S17-239	Basin 17	25YR-72HR	0.00	28.00	33.27	-0.0461	124	60.02	1.80	0.00	11.47
S17-240	Basin 17	25YR-72HR	60.02	25.89	30.48	0.0004	219	60.02	2.79	60.02	2.79
S17-241	Basin 17	25YR-72HR	60.04	3.69	5.75	0.0013	136	51.00	0.34	0.00	0.00
S17-241A	Basin 17	25YR-72HR	60.04	3.89	28.95	0.0010	217	60.02	4.52	60.03	4.50
S17-241B	Basin 17	25YR-72HR	60.02	3.70	5.06	0.0037	124	60.02	1.53	60.06	2.35
S17-242	Basin 17	25YR-72HR	60.03	20.39	23.77	0.0004	387	60.02	3.35	60.02	3.34
S17-243	Basin 17	25YR-72HR	60.05	3.45	7.99	0.0009	129	72.44	2.38	0.02	0.16
S17-244	Basin 17	25YR-72HR	60.05	3.46	9.50	0.0013	134	60.04	1.24	60.06	1.24
S17-245	Basin 17	25YR-72HR	60.05	3.28	7.84	0.0008	119	60.02	1.35	72.00	2.57
S17-246	Basin 17	25YR-72HR	60.05	3.11	8.58	0.0007	130	60.03	2.54	60.05	2.54
S17-247	Basin 17	25YR-72HR	60.05	3.01	6.67	0.0006	124	0.00	0.00	64.02	0.36
S17-248	Basin 17	25YR-72HR	60.09	5.10	6.31	0.0026	118	60.08	24.79	60.09	24.79
S17-249	Basin 17	25YR-72HR	60.09	4.71	6.36	-0.0026	117	60.09	18.03	60.09	18.03
S17-25	Basin 17	25YR-72HR	60.05	16.74	19.85	0.0047	252	60.05	10.26	60.05	10.25
S17-250A+A	Basin 17	25YR-72HR	60.09	4.69	6.49	-0.0025	114	60.09	3.76	60.09	3.76
S17-250B	Basin 17	25YR-72HR	60.05	1.48	6.49	-0.0041	379	60.04	15.05	60.05	10.02
S17-254	Basin 17	25YR-72HR	60.06	1.49	6.32	-0.0033	801	60.05	4.93	3.64	5.68
S17-255	Basin 17	25YR-72HR	60.09	5.78	6.10	0.0033	125	60.08	24.81	60.08	24.79
S17-26	Basin 17	25YR-72HR	60.05	16.75	19.40	0.0089	113	60.02	0.50	60.07	0.49
S17-27A+A	Basin 17	25YR-72HR	60.05	3.50	6.58	-0.0011	127	60.03	3.63	60.05	3.19
S17-27A+B	Basin 17	25YR-72HR	60.05	1.49	6.58	0.0002	950	0.00	0.00	72.34	0.20
S17-3	Basin 17	25YR-72HR	60.04	3.83	4.78	0.0009	133	60.03	5.34	60.04	5.32
S17-30+A	Basin 17	25YR-72HR	60.04	3.69	5.31	-0.0039	115	60.02	4.69	60.04	4.01
S17-30+B	Basin 17	25YR-72HR	60.05	3.69	5.31	-0.0039	113	60.04	4.01	60.05	3.71
S17-30+C	Basin 17	25YR-72HR	60.05	1.66	5.31	0.0004	197	60.05	3.71	60.05	3.69
S17-30A	Basin 17	25YR-72HR	60.06	1.50	6.60	-0.0009	494	60.05	3.69	60.05	3.71

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S17-30C	Basin 17	25YR-72HR	60.04	3.74	5.38	0.0012	115	60.02	2.22	60.02	2.35
S17-31	Basin 17	25YR-72HR	60.04	3.72	4.75	0.0010	113	60.02	1.61	60.02	1.62
S17-33A	Basin 17	25YR-72HR	60.09	6.12	6.86	0.0027	128	60.08	16.59	60.09	16.58
S17-36	Basin 17	25YR-72HR	60.09	5.91	7.50	0.0014	174	60.00	3.25	60.10	2.98
S17-37	Basin 17	25YR-72HR	60.09	6.05	10.95	0.0007	265	60.02	2.05	60.00	2.01
S17-3A	Basin 17	25YR-72HR	60.04	3.84	5.32	0.0009	118	60.02	0.74	60.08	0.75
S17-4	Basin 17	25YR-72HR	60.05	4.38	5.42	0.0013	127	60.04	8.22	60.05	8.20
S17-44	Basin 17	25YR-72HR	60.09	1.48	5.96	0.0001	14524	60.02	1.50	60.10	0.95
S17-45	Basin 17	25YR-72HR	60.07	1.46	16.05	-0.0001	29735	60.05	13.91	60.07	13.58
S17-49	Basin 17	25YR-72HR	60.09	7.04	15.63	0.0433	120	60.07	6.26	60.33	22.51
S17-5	Basin 17	25YR-72HR	60.05	4.53	4.74	0.0013	113	60.02	4.40	60.03	4.34
S17-6	Basin 17	25YR-72HR	60.05	4.10	5.28	0.0012	135	60.06	9.12	60.07	9.15
S17-7	Basin 17	25YR-72HR	60.04	3.82	4.94	0.0009	149	60.04	11.87	60.05	11.87
S17-8	Basin 17	25YR-72HR	60.05	4.10	5.35	0.0011	126	60.05	5.09	60.08	5.11
S17-9	Basin 17	25YR-72HR	60.05	4.24	4.74	0.0011	113	60.02	4.39	60.02	4.35
S17FW-11	Basin 17	25YR-72HR	60.05	3.57	5.07	0.0019	114	60.02	0.62	60.04	1.19
S17FW-12	Basin 17	25YR-72HR	60.05	3.55	5.27	0.0010	114	60.02	0.68	60.06	0.67
S17FW-13	Basin 17	25YR-72HR	60.05	3.67	5.69	0.0009	114	60.02	1.80	60.03	1.77
S17FW-14	Basin 17	25YR-72HR	60.05	3.50	6.41	0.0014	114	60.02	2.47	60.02	2.87

```
================================================================================
==== Basins ====================================================================
================================================================================

         Name: B-17B                   Node: NODE-17B              Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.960                 Time Shift(hrs): 0.00
          Curve Number: 93.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------
         Name: B-17D                   Node: NODE-17D              Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 4.220                 Time Shift(hrs): 0.00
          Curve Number: 95.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------
         Name: B-17F                   Node: NODE-17F              Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 1.390                 Time Shift(hrs): 0.00
          Curve Number: 91.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------
         Name: B17-1                   Node: S17-1                 Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.640                 Time Shift(hrs): 0.00
          Curve Number: 95.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------
         Name: B17-12A                 Node: S17-12A               Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.150                 Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------
         Name: B17-14                  Node: S17-14                Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
```

```
    Rainfall Amount(in): 0.000                Time of Conc(min): 10.00
                Area(ac): 0.710                  Time Shift(hrs): 0.00
            Curve Number: 94.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00


------------------------------------------------------------------------------------------------
            Name: B17-16                  Node: S17-16                Status: Onsite
           Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                    Peaking Factor: 256.0
          Rainfall File:                       Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                Time of Conc(min): 10.00
                Area(ac): 0.810                  Time Shift(hrs): 0.00
            Curve Number: 94.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00


------------------------------------------------------------------------------------------------
            Name: B17-18                  Node: S17-18                Status: Onsite
           Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                    Peaking Factor: 256.0
          Rainfall File:                       Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                Time of Conc(min): 10.00
                Area(ac): 0.640                  Time Shift(hrs): 0.00
            Curve Number: 94.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00


------------------------------------------------------------------------------------------------
            Name: B17-1A                  Node: S17-1A                Status: Onsite
           Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                    Peaking Factor: 256.0
          Rainfall File:                       Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                Time of Conc(min): 10.00
                Area(ac): 0.080                  Time Shift(hrs): 0.00
            Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00


------------------------------------------------------------------------------------------------
            Name: B17-20                  Node: S17-20                Status: Onsite
           Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                    Peaking Factor: 256.0
          Rainfall File:                       Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                Time of Conc(min): 10.00
                Area(ac): 0.570                  Time Shift(hrs): 0.00
            Curve Number: 93.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00


------------------------------------------------------------------------------------------------
            Name: B17-201                 Node: S17-201               Status: Onsite
           Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                    Peaking Factor: 256.0
          Rainfall File:                       Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                Time of Conc(min): 10.00
                Area(ac): 0.690                  Time Shift(hrs): 0.00
            Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00


------------------------------------------------------------------------------------------------
            Name: B17-202                 Node: S17-202               Status: Onsite
           Group: Basin 17                Type: SCS Unit Hydrograph CN
```

```
        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.350                  Time Shift(hrs): 0.00
           Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00
```

```
         Name: B17-203                 Node: S17-203               Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.210                  Time Shift(hrs): 0.00
           Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00
```

```
         Name: B17-204                 Node: S17-204               Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.490                  Time Shift(hrs): 0.00
           Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00
```

```
         Name: B17-205                 Node: S17-205               Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.320                  Time Shift(hrs): 0.00
           Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00
```

```
         Name: B17-206                 Node: S17-206               Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.350                  Time Shift(hrs): 0.00
           Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00
```

```
         Name: B17-208                 Node: S17-208               Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.280                  Time Shift(hrs): 0.00
           Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00
```

Name: B17-208A Node: S17-208A Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.130 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-210 Node: S17-210 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.280 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-210A Node: S17-210A Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.070 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-212 Node: S17-212 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.650 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-216 Node: S17-216 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.160 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-22 Node: S17-22 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.560 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-222 Node: S17-222 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.110 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-224 Node: S17-224 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.370 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-225 Node: S17-225 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.090 Time Shift(hrs): 0.00
Curve Number: 80.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-226 Node: S17-226 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.390 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-227 Node: S17-227 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.250 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17-229 Node: S17-229 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00

```
            Area(ac): 0.470                 Time Shift(hrs): 0.00
        Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B17-231                Node: S17-231               Status: Onsite
        Group: Basin 17               Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                    Storm Duration(hrs): 0.00
  Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
            Area(ac): 0.430                 Time Shift(hrs): 0.00
        Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B17-233                Node: S17-233               Status: Onsite
        Group: Basin 17               Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                    Storm Duration(hrs): 0.00
  Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
            Area(ac): 0.340                 Time Shift(hrs): 0.00
        Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B17-235                Node: S17-235               Status: Onsite
        Group: Basin 17               Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                    Storm Duration(hrs): 0.00
  Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
            Area(ac): 0.640                 Time Shift(hrs): 0.00
        Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B17-237                Node: S17-237               Status: Onsite
        Group: Basin 17               Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                    Storm Duration(hrs): 0.00
  Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
            Area(ac): 0.320                 Time Shift(hrs): 0.00
        Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B17-239                Node: S17-239               Status: Onsite
        Group: Basin 17               Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                    Storm Duration(hrs): 0.00
  Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
            Area(ac): 0.290                 Time Shift(hrs): 0.00
        Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B17-240                Node: S17-240               Status: Onsite
        Group: Basin 17               Type: SCS Unit Hydrograph CN
```

```
        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.450                  Time Shift(hrs): 0.00
            Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B17-241A                Node: S17-241A               Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.280                  Time Shift(hrs): 0.00
            Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B17-242                 Node: S17-242                Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.540                  Time Shift(hrs): 0.00
            Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B17-243                 Node: S17-243                Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.080                  Time Shift(hrs): 0.00
            Curve Number: 79.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B17-254                 Node: S17-254                Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.190                  Time Shift(hrs): 0.00
            Curve Number: 90.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B17-26                  Node: S17-26                 Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.080                  Time Shift(hrs): 0.00
            Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
                 DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
```

```
        Name: B17-3                 Node: S17-3                 Status: Onsite
       Group: Basin 17              Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                Peaking Factor: 256.0
         Rainfall File:                   Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
            Area(ac): 0.670                   Time Shift(hrs): 0.00
        Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00
```

```
        Name: B17-31                Node: S17-31                Status: Onsite
       Group: Basin 17              Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                Peaking Factor: 256.0
         Rainfall File:                   Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
            Area(ac): 0.260                   Time Shift(hrs): 0.00
        Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00
```

```
        Name: B17-33A               Node: S17-33A               Status: Onsite
       Group: Basin 17              Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                Peaking Factor: 256.0
         Rainfall File:                   Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
            Area(ac): 0.220                   Time Shift(hrs): 0.00
        Curve Number: 88.00              Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00
```

```
        Name: B17-36                Node: S17-36                Status: Onsite
       Group: Basin 17              Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                Peaking Factor: 256.0
         Rainfall File:                   Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
            Area(ac): 0.200                   Time Shift(hrs): 0.00
        Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00
```

```
        Name: B17-37                Node: S17-37                Status: Onsite
       Group: Basin 17              Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                Peaking Factor: 256.0
         Rainfall File:                   Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
            Area(ac): 0.330                   Time Shift(hrs): 0.00
        Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00
```

```
        Name: B17-3A                Node: S17-3A                Status: Onsite
       Group: Basin 17              Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                Peaking Factor: 256.0
         Rainfall File:                   Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
            Area(ac): 0.120                   Time Shift(hrs): 0.00
        Curve Number: 96.00              Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00
```

```
-------------------------------------------------------------------------------------------------
         Name: B17-44                  Node: S17-45                Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                 Peaking Factor: 256.0
          Rainfall File:                    Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.500                 Time Shift(hrs): 0.00
          Curve Number: 89.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B17-5                   Node: S17-5                 Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                 Peaking Factor: 256.0
          Rainfall File:                    Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.710                 Time Shift(hrs): 0.00
          Curve Number: 95.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B17-7                   Node: S17-7                 Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                 Peaking Factor: 256.0
          Rainfall File:                    Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.610                 Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B17-9                   Node: S17-9                 Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                 Peaking Factor: 256.0
          Rainfall File:                    Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.710                 Time Shift(hrs): 0.00
          Curve Number: 94.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B17FW-11                Node: S17FW-11              Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                 Peaking Factor: 256.0
          Rainfall File:                    Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.100                 Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B17FW-12                Node: S17FW-12              Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                 Peaking Factor: 256.0
          Rainfall File:                    Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.110                 Time Shift(hrs): 0.00
```

Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17FW-13 Node: S17FW-13 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.290 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B17FW-14 Node: S17FW-14 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.400 Time Shift(hrs): 0.00
Curve Number: 93.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-117 Node: EX17-116 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.040 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-118 Node: EX17-116 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.290 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-119 Node: EX17-120 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.280 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX17-120 Node: EX17-120 Status: Onsite
Group: Basin 17 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0

```
         Rainfall File:                    Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
              Area(ac): 0.300                  Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
          Name: BX17-139                Node: EX17-139              Status: Onsite
         Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                 Peaking Factor: 256.0
          Rainfall File:                    Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
              Area(ac): 0.360                  Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
          Name: BX17-145                Node: EX17-145              Status: Onsite
         Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                 Peaking Factor: 256.0
          Rainfall File:                    Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
              Area(ac): 0.100                  Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
          Name: BX17-147                Node: EX17-151              Status: Onsite
         Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                 Peaking Factor: 256.0
          Rainfall File:                    Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
              Area(ac): 0.090                  Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
          Name: BX17-148                Node: EX17-148              Status: Onsite
         Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                 Peaking Factor: 256.0
          Rainfall File:                    Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
              Area(ac): 0.220                  Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
          Name: BX17-150                Node: EX17-150              Status: Onsite
         Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                 Peaking Factor: 256.0
          Rainfall File:                    Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
              Area(ac): 0.070                  Time Shift(hrs): 0.00
          Curve Number: 61.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
          Name: BX17-152                Node: EX17-152              Status: Onsite
```

```
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.560                 Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: BX17-153                Node: EX17-153              Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.160                 Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: BX17-36                 Node: EX17-36               Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.720                 Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: BX17-47                 Node: EX17-47               Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.080                 Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: S17-241B                Node: S17-241B              Status: Onsite
        Group: Basin 17                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.180                 Time Shift(hrs): 0.00
          Curve Number: 90.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


=================================================================================================
==== Nodes ======================================================================================
=================================================================================================

      Name: EX17-114           Base Flow(cfs): 0.000          Init Stage(ft): 1.450
     Group: Basin 17                                          Warn Stage(ft): 6.520
      Type: Stage/Area


      Stage(ft)        Area(ac)
--------------- ---------------
```

1.450	0.0004
5.450	0.0004

Name: EX17-116 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.000
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.000	0.0004

Name: EX17-120 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.730
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.730	0.0004

Name: EX17-121 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.970
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.970	0.0004

Name: EX17-124 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.490
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.450	0.0004

Name: EX17-139 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.410
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.410	0.0004

Name: EX17-145 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.140
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.140	0.0004

Name: EX17-148 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 7.460
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
7.460	0.0004

Name: EX17-150 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 9.390
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
9.390	0.0004

Name: EX17-151 Base Flow(cfs): 0.000 Init Stage(ft): 3.340
Group: Basin 17 Warn Stage(ft): 9.180
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
9.180	0.0004

Name: EX17-152 Base Flow(cfs): 0.000 Init Stage(ft): 3.340
Group: Basin 17 Warn Stage(ft): 16.960
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
16.960	0.0004

Name: EX17-153 Base Flow(cfs): 0.000 Init Stage(ft): 3.840
Group: Basin 17 Warn Stage(ft): 6.130
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.130	0.0004

Name: EX17-36 Base Flow(cfs): 0.000 Init Stage(ft): 21.060
Group: Basin 17 Warn Stage(ft): 26.100
Type: Stage/Area

Stage(ft)	Area(ac)
19.060	0.0004
26.100	0.0004

Name: EX17-47 Base Flow(cfs): 0.000 Init Stage(ft): 25.420
Group: Basin 17 Warn Stage(ft): 30.650

Type: Stage/Area

Stage(ft)	Area(ac)
23.420	0.0004
30.650	0.0004

Name: GWT-17 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	1.450
108.00	1.450

Name: L_RIVER_CANAL Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	1.450
108.00	1.450

Name: NODE-17B Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.950
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.450	0.0004
4.950	0.0040

Name: NODE-17D Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.690
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.450	0.0004
4.950	0.0040

Name: NODE-17F Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.960
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.450	0.0004
4.950	0.0040

Name: S17-1 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.740

Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.740	0.0004

Name: S17-11 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.240
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.240	0.0004

Name: S17-12 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.410
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.410	0.0004

Name: S17-12A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.490
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.490	0.0004

Name: S17-13 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.570
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.570	0.0004

Name: S17-14 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.740
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.740	0.0004

Name: S17-15 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.440
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.440	0.0004

Name: S17-16 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.800
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.800	0.0004

Name: S17-17 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.110
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.110	0.0004

Name: S17-18 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.400
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.400	0.0004

Name: S17-19 Base Flow(cfs): 0.000 Init Stage(ft): 2.000
Group: Basin 17 Warn Stage(ft): 11.630
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
11.630	0.0004

Name: S17-1A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.400
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.400	0.0004

Name: S17-2 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.350
Type: Stage/Area

Stage(ft)	Area(ac)

1.450	0.0004
5.350	0.0004

Name: S17-20 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 10.870
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
10.870	0.0004

Name: S17-201 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.790
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.790	0.0004

Name: S17-202 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.820
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.820	0.0004

Name: S17-203 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.110
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.110	0.0004

Name: S17-204 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.220
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.220	0.0004

Name: S17-205 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.300
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.300	0.0004

Name: S17-206 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 8.530
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
8.530	0.0004

Name: S17-208 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 12.590
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
12.590	0.0004

Name: S17-208A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.940
Type: Stage/Area

Stage(ft)	Area(ac)
-1.240	0.0004
4.940	0.0004

Name: S17-209 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 13.180
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
13.180	0.0004

Name: S17-21 Base Flow(cfs): 0.000 Init Stage(ft): 11.100
Group: Basin 17 Warn Stage(ft): 17.130
Type: Stage/Area

Stage(ft)	Area(ac)
9.100	0.0004
17.130	0.0004

Name: S17-210 Base Flow(cfs): 0.000 Init Stage(ft): 11.500
Group: Basin 17 Warn Stage(ft): 16.570
Type: Stage/Area

Stage(ft)	Area(ac)
9.500	0.0004
16.570	0.0004

Name: S17-210A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.260

Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.260	0.0004

Name: S17-210B Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.290
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.290	0.0004

Name: S17-211 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.500
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.500	0.0004

Name: S17-211A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.260
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.260	0.0004

Name: S17-212 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 19.650
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
19.650	0.0004

Name: S17-212A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 7.090
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
7.090	0.0004

Name: S17-216 Base Flow(cfs): 0.000 Init Stage(ft): 23.500
Group: Basin 17 Warn Stage(ft): 29.860
Type: Stage/Area

Stage(ft)	Area(ac)
23.500	0.0004
29.860	0.0004

Name: S17-22 Base Flow(cfs): 0.000 Init Stage(ft): 11.200
Group: Basin 17 Warn Stage(ft): 16.600
Type: Stage/Area

Stage(ft)	Area(ac)
7.200	0.0004
16.600	0.0004

Name: S17-222 Base Flow(cfs): 0.000 Init Stage(ft): 24.100
Group: Basin 17 Warn Stage(ft): 30.370
Type: Stage/Area

Stage(ft)	Area(ac)
24.100	0.0004
30.370	0.0004

Name: S17-224 Base Flow(cfs): 0.000 Init Stage(ft): 24.400
Group: Basin 17 Warn Stage(ft): 30.770
Type: Stage/Area

Stage(ft)	Area(ac)
24.400	0.0004
30.770	0.0004

Name: S17-225 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.100
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.100	0.0004

Name: S17-226 Base Flow(cfs): 0.000 Init Stage(ft): 23.500
Group: Basin 17 Warn Stage(ft): 30.380
Type: Stage/Area

Stage(ft)	Area(ac)
23.500	0.0004
30.380	0.0004

Name: S17-227 Base Flow(cfs): 0.000 Init Stage(ft): 22.000
Group: Basin 17 Warn Stage(ft): 28.700
Type: Stage/Area

Stage(ft)	Area(ac)

22.000	0.0004
28.700	0.0004

Name: S17-227A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 8.050
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
8.050	0.0004

Name: S17-228 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 17.040
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
17.040	0.0004

Name: S17-229 Base Flow(cfs): 0.000 Init Stage(ft): 16.000
Group: Basin 17 Warn Stage(ft): 23.100
Type: Stage/Area

Stage(ft)	Area(ac)
16.000	0.0004
23.100	0.0004

Name: S17-230 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 13.910
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
13.910	0.0004

Name: S17-231 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 18.130
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
18.130	0.0004

Name: S17-232 Base Flow(cfs): 0.000 Init Stage(ft): 14.600
Group: Basin 17 Warn Stage(ft): 22.000
Type: Stage/Area

Stage(ft)	Area(ac)
12.600	0.0004
22.000	0.0004

Name: S17-233 Base Flow(cfs): 0.000 Init Stage(ft): 16.000
Group: Basin 17 Warn Stage(ft): 23.180
Type: Stage/Area

Stage(ft)	Area(ac)
16.000	0.0004
23.180	0.0004

Name: S17-234 Base Flow(cfs): 0.000 Init Stage(ft): 2.840
Group: Basin 17 Warn Stage(ft): 16.260
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
16.260	0.0004

Name: S17-235 Base Flow(cfs): 0.000 Init Stage(ft): 21.000
Group: Basin 17 Warn Stage(ft): 26.240
Type: Stage/Area

Stage(ft)	Area(ac)
19.000	0.0004
26.240	0.0004

Name: S17-237 Base Flow(cfs): 0.000 Init Stage(ft): 24.000
Group: Basin 17 Warn Stage(ft): 29.330
Type: Stage/Area

Stage(ft)	Area(ac)
22.000	0.0004
29.330	0.0004

Name: S17-239 Base Flow(cfs): 0.000 Init Stage(ft): 28.000
Group: Basin 17 Warn Stage(ft): 33.270
Type: Stage/Area

Stage(ft)	Area(ac)
26.000	0.0004
33.270	0.0004

Name: S17-240 Base Flow(cfs): 0.000 Init Stage(ft): 25.000
Group: Basin 17 Warn Stage(ft): 30.480
Type: Stage/Area

Stage(ft)	Area(ac)
23.000	0.0004
30.480	0.0004

Name: S17-241 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.750

Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.750	0.0004

Name: S17-241A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 28.950
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
28.950	0.0004

Name: S17-241B Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.060
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.060	0.0004

Name: S17-242 Base Flow(cfs): 0.000 Init Stage(ft): 18.500
Group: Basin 17 Warn Stage(ft): 23.770
Type: Stage/Area

Stage(ft)	Area(ac)
16.500	0.0004
23.770	0.0004

Name: S17-243 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 7.990
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
7.990	0.0004

Name: S17-244 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 9.500
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
9.500	0.0004

Name: S17-245 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 7.840
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
7.840	0.0004

Name: S17-246 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 8.580
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
8.580	0.0004

Name: S17-247 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.670
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.670	0.0004

Name: S17-248 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.310
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.450	0.0004

Name: S17-249 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.360
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.450	0.0004

Name: S17-25 Base Flow(cfs): 0.000 Init Stage(ft): 14.150
Group: Basin 17 Warn Stage(ft): 19.850
Type: Stage/Area

Stage(ft)	Area(ac)
12.150	0.0004
19.850	0.0004

Name: S17-250A+A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.490
Type: Stage/Area

Stage(ft)	Area(ac)

1.450	0.0004
5.450	0.0004

Name: S17-250B Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.490
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.450	0.0004

Name: S17-254 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.320
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.450	0.0004

Name: S17-255 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.100
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0003
6.100	0.0003

Name: S17-26 Base Flow(cfs): 0.000 Init Stage(ft): 14.150
Group: Basin 17 Warn Stage(ft): 19.400
Type: Stage/Area

Stage(ft)	Area(ac)
10.150	0.0004
19.400	0.0004

Name: S17-27A+A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.580
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.580	0.0004

Name: S17-27A+B Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.580
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.580	0.0004

Name: S17-3 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.780
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.780	0.0004

Name: S17-30+A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.310
Type: Stage/Area

Stage(ft)	Area(ac)
-2.950	0.0004
1.450	0.0004
5.310	0.0004

Name: S17-30+B Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.310
Type: Stage/Area

Stage(ft)	Area(ac)
-2.950	0.0004
1.450	0.0004
5.310	0.0004

Name: S17-30+C Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.310
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.310	0.0004

Name: S17-30A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.600
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.600	0.0004

Name: S17-30C Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.380
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.380	0.0004

Name: S17-31 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.750
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.750	0.0004

Name: S17-33A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.860
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.860	0.0004

Name: S17-36 Base Flow(cfs): 0.000 Init Stage(ft): 2.350
Group: Basin 17 Warn Stage(ft): 7.500
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
7.500	0.0004

Name: S17-37 Base Flow(cfs): 0.000 Init Stage(ft): 5.150
Group: Basin 17 Warn Stage(ft): 10.950
Type: Stage/Area

Stage(ft)	Area(ac)
3.150	0.0004
10.950	0.0004

Name: S17-3A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.320
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.320	0.0004

Name: S17-4 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.420
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.420	0.0004

Name: S17-44 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.960
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.3333
5.960	0.3333

Name: S17-45 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 16.050
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.6667
16.050	0.6667

Name: S17-49 Base Flow(cfs): 0.000 Init Stage(ft): 2.940
Group: Basin 17 Warn Stage(ft): 15.630
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
15.630	0.0004

Name: S17-5 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.740
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.740	0.0004

Name: S17-6 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.280
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.280	0.0004

Name: S17-7 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.940
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.940	0.0004

Name: S17-8 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.350
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.350	0.0004

Name: S17-9 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 4.740
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
4.740	0.0004

Name: S17FW-11 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.070
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.070	0.0004

Name: S17FW-12 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.270
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.270	0.0004

Name: S17FW-13 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.690
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.690	0.0004

Name: S17FW-14 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 6.410
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.410	0.0004

==========
==== Operating Tables ==========
==========

Name: E_OPT-17A Group: Basin 17
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.450	1.45	0.00
1.450	2.20	0.01
1.450	3.45	0.04
1.450	5.45	0.07
2.200	2.20	0.00
2.200	3.45	0.02
2.200	5.45	0.06

Name: E_OPT-17B Group: Basin 17
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.450	1.45	0.00
1.450	2.20	0.01
1.450	3.45	0.03
1.450	5.45	0.07
2.200	2.20	0.00
2.200	3.45	0.02
2.200	5.45	0.06

Name: E_OPT-17C Group: Basin 17
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.450	1.45	0.00
1.450	2.20	0.01
1.450	3.45	0.04
1.450	5.45	0.08
2.200	2.20	0.00
2.200	3.45	0.03
2.200	5.45	0.07

Name: E_OPT-17D Group: Basin 17
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.450	1.45	0.00
1.450	2.20	0.01
1.450	3.45	0.03
1.450	5.45	0.07
2.200	2.20	0.00
2.200	3.45	0.02
2.200	5.45	0.06

Name: E_OPT-17E Group: Basin 17
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.450	1.45	0.00
1.450	2.20	0.01
1.450	3.45	0.03
1.450	5.45	0.07
2.200	2.20	0.00

2.200	3.45	0.02
2.200	5.45	0.06

Name: E_OPT-17F Group: Basin 17
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.450	1.45	0.00
1.450	2.20	0.01
1.450	3.45	0.03
1.450	5.45	0.07
2.200	2.20	0.00
2.200	3.45	0.02
2.200	5.45	0.06

==========
==== Pipes ====
==========

Name: EX17-114_EX17-1 From Node: EX17-114 Length(ft): 243.00
Group: Basin 17 To Node: EX17-124 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	54.00	54.00	Flow:	Both
Rise(in):	54.00	54.00	Entrance Loss Coef:	0.50
Invert(ft):	-0.740	-2.730	Exit Loss Coef:	0.10
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: EX17-115_EX17-1 From Node: S17-254 Length(ft): 41.00
Group: Basin 17 To Node: EX17-114 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	54.00	54.00	Flow:	Both
Rise(in):	54.00	54.00	Entrance Loss Coef:	0.50
Invert(ft):	-1.740	-0.740	Exit Loss Coef:	0.10
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: EX17-116_EX17-1 From Node: EX17-116 Length(ft): 88.00
Group: Basin 17 To Node: EX17-120 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
			Flow:	Both

Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	0.10
Invert(ft):	0.740	0.640	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-120_EX17-1	From Node: EX17-120	Length(ft):	106.00
Group:	Basin 17	To Node: EX17-121	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	0.140	-0.160	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-121_EX17-1	From Node: EX17-121	Length(ft):	87.00
Group:	Basin 17	To Node: S17-255	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	-0.160	-0.360	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-124_S17-45	From Node: EX17-124	Length(ft):	43.00
Group:	Basin 17	To Node: S17-250B	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	54.00	54.00	Entrance Loss Coef:	1.46
Rise(in):	54.00	54.00	Exit Loss Coef:	0.10
Invert(ft):	-2.730	-2.900	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-139_17-30C	From Node:	EX17-139	Length(ft): 34.00
Group:	Basin 17	To Node:	S17-30C	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	18.00	18.00		Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00		Exit Loss Coef: 0.10
Invert(ft):	1.140	1.040		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-145_S17-35	From Node:	EX17-145	Length(ft): 42.00
Group:	Basin 17	To Node:	S17-241	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	18.00	18.00		Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00		Exit Loss Coef: 1.46
Invert(ft):	1.140	0.980		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-148_S17-38	From Node:	EX17-148	Length(ft): 14.00
Group:	Basin 17	To Node:	S17-245	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	18.00	18.00		Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00		Exit Loss Coef: 1.46
Invert(ft):	1.340	1.290		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-150_S17-43	From Node:	EX17-150	Length(ft):	9.00
Group:	Basin 17	To Node:	S17-244	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	1.46
Invert(ft):	3.290	3.290		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-151_S17-43	From Node:	EX17-151	Length(ft):	18.00
Group:	Basin 17	To Node:	S17-244	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	1.46
Invert(ft):	3.340	3.290		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-152_S17-49	From Node:	EX17-152	Length(ft):	135.00
Group:	Basin 17	To Node:	S17-49	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00		Exit Loss Coef:	0.10
Invert(ft):	3.340	2.940		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

```
         Name: EX17-153_EX17-1     From Node: EX17-153          Length(ft): 242.00
        Group: Basin 17              To Node: EX17-151               Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                            Flow: Both
     Span(in): 18.00          18.00                     Entrance Loss Coef: 0.50
     Rise(in): 18.00          18.00                         Exit Loss Coef: 1.46
   Invert(ft): 3.840          3.340                         Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: EX17-205_S17-20     From Node: S17-205           Length(ft): 292.00
        Group: Basin 17              To Node: S17-208A               Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Automatic
     Geometry: Circular       Circular                            Flow: Both
     Span(in): 24.00          24.00                     Entrance Loss Coef: 0.50
     Rise(in): 24.00          24.00                         Exit Loss Coef: 0.10
   Invert(ft): 0.940          0.940                         Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: EX17-250B-S17-4     From Node: S17-250B          Length(ft): 404.00
        Group: Basin 17              To Node: S17-45                 Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Automatic
     Geometry: Circular       Circular                            Flow: Both
     Span(in): 54.00          54.00                     Entrance Loss Coef: 1.46
     Rise(in): 54.00          54.00                         Exit Loss Coef: 0.50
   Invert(ft): -2.900         -3.320                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dc
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: EX17-32_EX17-27     From Node: S17-212A          Length(ft): 268.00
        Group: Basin 17              To Node: S17-27A+A              Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                            Flow: Both
     Span(in): 24.00          24.00                     Entrance Loss Coef: 0.50
```

Rise(in):	24.00	24.00	Exit Loss Coef:	0.10
Invert(ft):	0.940	0.940	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-36_S17-212	From Node: EX17-36	Length(ft):	290.00
Group:	Basin 17	To Node: S17-212	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	0.10
Invert(ft):	21.060	14.850	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-39_EX17-27	From Node: S17FW-14	Length(ft):	29.00
Group:	Basin 17	To Node: S17-27A+A	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	-0.110	-0.160	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17-47_EX17-36	From Node: EX17-47	Length(ft):	297.00
Group:	Basin 17	To Node: EX17-36	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	0.10
Invert(ft):	25.420	21.060	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17FW-11_S1720	From Node:	S17FW-11	Length(ft):	20.00
Group:	Basin 17	To Node:	S17-208A	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	0.10
Invert(ft):	-0.710	-0.760		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17FW-12_S17-2	From Node:	S17FW-12	Length(ft):	19.00
Group:	Basin 17	To Node:	S17-210B	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	1.46
Invert(ft):	-0.960	-0.980		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX17FW-13_S17-2	From Node:	S17FW-13	Length(ft):	15.00
Group:	Basin 17	To Node:	S17-211A	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	0.10
Invert(ft):	-0.510	-0.530		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:

Circular Concrete: Square edge w/ headwall

Name: EXS17	From Node: S17-243	Length(ft): 222.00	
Group: Basin 17	To Node: S17-241	Count: 1	
		Friction Equation: Automatic	
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 1.46
Invert(ft):	0.350	-0.050	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: S17-11_S17-8	From Node: S17-11	Length(ft): 126.00	
Group: Basin 17	To Node: S17-8	Count: 1	
		Friction Equation: Automatic	
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 1.35
Rise(in):	24.00	24.00	Exit Loss Coef: 0.10
Invert(ft):	0.940	0.940	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: S17-12_S17-11	From Node: S17-12	Length(ft): 76.00	
Group: Basin 17	To Node: S17-11	Count: 1	
		Friction Equation: Automatic	
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 1.35
Rise(in):	24.00	24.00	Exit Loss Coef: 0.10
Invert(ft):	0.940	0.940	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: S17-12A_S17-201 From Node: S17-12A Length(ft): 78.00

Group:	Basin 17	To Node: S17-201	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	1.35
Rise(in):	18.00	18.00	Exit Loss Coef:	0.10
Invert(ft):	0.940	0.800	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-13_S17-12	From Node: S17-13	Length(ft):	37.00
Group:	Basin 17	To Node: S17-12	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	1.35
Rise(in):	24.00	24.00	Exit Loss Coef:	0.10
Invert(ft):	0.940	0.940	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-14_S17-13	From Node: S17-14	Length(ft):	4.00
Group:	Basin 17	To Node: S17-13	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	-0.450	-0.550	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-15_S17-13	From Node: S17-15	Length(ft):	196.00
Group:	Basin 17	To Node: S17-13	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	1.35
Rise(in):	24.00	24.00	Exit Loss Coef:	0.10

Invert(ft):	0.940	0.940	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-16_S17-15	From Node: S17-16	Length(ft):	4.00
Group:	Basin 17	To Node: S17-15	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	-0.350	-0.450	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-17_S17-15	From Node: S17-17	Length(ft):	115.00
Group:	Basin 17	To Node: S17-15	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	1.35
Rise(in):	24.00	24.00	Exit Loss Coef:	0.10
Invert(ft):	0.940	0.940	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-18_S17-17	From Node: S17-18	Length(ft):	85.00
Group:	Basin 17	To Node: S17-17	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	1.35
Rise(in):	24.00	24.00	Exit Loss Coef:	0.10
Invert(ft):	0.940	0.940	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-19_S17-20	From Node: S17-19	Length(ft):	5.00
Group:	Basin 17	To Node: S17-20	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Always Inlet
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	1.46
Invert(ft):	2.000	1.950	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-1_S17-2	From Node: S17-1	Length(ft):	79.00
Group:	Basin 17	To Node: S17-2	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	0.10
Invert(ft):	-0.300	-0.400	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-1A_S17-3	From Node: S17-1A	Length(ft):	33.00
Group:	Basin 17	To Node: S17-3	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	-0.100	-0.150	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-201_S17-202	From Node:	S17-201	Length(ft):	222.00
Group:	Basin 17	To Node:	S17-202	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00		Exit Loss Coef:	0.10
Invert(ft):	-0.250	-0.250		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-202_S17-203	From Node:	S17-202	Length(ft):	72.00
Group:	Basin 17	To Node:	S17-203	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00		Exit Loss Coef:	0.10
Invert(ft):	-0.250	-0.250		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-203_S17-204	From Node:	S17-203	Length(ft):	85.00
Group:	Basin 17	To Node:	S17-204	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00		Exit Loss Coef:	0.10
Invert(ft):	-0.250	-0.250		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-204_S17-205	From Node:	S17-204	Length(ft):	136.00
Group:	Basin 17	To Node:	S17-205	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Friction Equation:	Automatic
Span(in):	24.00	24.00	Solution Algorithm:	Most Restrictive
Rise(in):	24.00	24.00	Flow:	Both
Invert(ft):	0.940	0.940	Entrance Loss Coef:	0.50
Manning's N:	0.012000	0.012000	Exit Loss Coef:	0.10
Top Clip(in):	0.000	0.000	Bend Loss Coef:	0.00
Bot Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
			Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-206_17-208	From Node:	S17-206	Length(ft):	158.00
Group:	Basin 17	To Node:	S17-208	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Friction Equation:	Automatic
Span(in):	18.00	18.00	Solution Algorithm:	Most Restrictive
Rise(in):	18.00	18.00	Flow:	Both
Invert(ft):	3.500	3.000	Entrance Loss Coef:	0.50
Manning's N:	0.012000	0.012000	Exit Loss Coef:	0.10
Top Clip(in):	0.000	0.000	Bend Loss Coef:	0.00
Bot Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
			Inlet Ctrl Spec:	Use dc
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-208_S17-209	From Node:	S17-208	Length(ft):	23.00
Group:	Basin 17	To Node:	S17-209	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Friction Equation:	Automatic
Span(in):	18.00	18.00	Solution Algorithm:	Most Restrictive
Rise(in):	18.00	18.00	Flow:	Both
Invert(ft):	3.000	2.000	Entrance Loss Coef:	0.50
Manning's N:	0.012000	0.012000	Exit Loss Coef:	1.46
Top Clip(in):	0.000	0.000	Bend Loss Coef:	0.00
Bot Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
			Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-208A_S17-21	From Node:	S17-208A	Length(ft):	80.00
Group:	Basin 17	To Node:	S17-210A	Count:	1

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Friction Equation:	Automatic
Span(in):	24.00	24.00	Solution Algorithm:	Always Inlet
Rise(in):	24.00	24.00	Flow:	Both
Invert(ft):	0.940	0.940	Entrance Loss Coef:	0.50
			Exit Loss Coef:	0.10
			Bend Loss Coef:	0.00

Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: S17-209_S17-208 From Node: S17-209 Length(ft): 27.00
Group: Basin 17 To Node: S17-208A Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	18.00	18.00	Flow:	Both
Rise(in):	18.00	18.00	Entrance Loss Coef:	0.50
Invert(ft):	2.000	-0.100	Exit Loss Coef:	0.10
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dc
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: S17-20_S17-18 From Node: S17-20 Length(ft): 216.00
Group: Basin 17 To Node: S17-18 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	24.00	24.00	Flow:	Both
Rise(in):	24.00	24.00	Entrance Loss Coef:	0.50
Invert(ft):	0.940	0.940	Exit Loss Coef:	0.10
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: S17-210_S17-210 From Node: S17-210 Length(ft): 56.00
Group: Basin 17 To Node: S17-210B Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	18.00	18.00	Flow:	Both
Rise(in):	18.00	18.00	Entrance Loss Coef:	0.50
Invert(ft):	11.500	2.000	Exit Loss Coef:	1.46
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-210A_S17-21	From Node:	S17-210A	Length(ft):	16.00
Group:	Basin 17	To Node:	S17-210B	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	0.10
Rise(in):	24.00	24.00		Exit Loss Coef:	1.46
Invert(ft):	0.940	0.900		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-210B_S17-21	From Node:	S17-210B	Length(ft):	122.00
Group:	Basin 17	To Node:	S17-211A	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00		Exit Loss Coef:	1.46
Invert(ft):	0.940	0.940		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-211_S17-21A	From Node:	S17-211	Length(ft):	122.00
Group:	Basin 17	To Node:	S17-212A	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	0.10
Rise(in):	24.00	24.00		Exit Loss Coef:	1.46
Invert(ft):	-0.600	-0.800		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-211A_S17-21	From Node:	S17-211A	Length(ft): 19.00
Group:	Basin 17	To Node:	S17-211	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	24.00	24.00		Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00		Exit Loss Coef: 1.46
Invert(ft):	-0.530	-0.560		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dc
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-212_S17-210	From Node:	S17-212	Length(ft): 24.00
Group:	Basin 17	To Node:	S17-211	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	24.00	24.00		Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00		Exit Loss Coef: 1.46
Invert(ft):	0.200	0.100		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-216_EX17-47	From Node:	S17-216	Length(ft): 26.00
Group:	Basin 17	To Node:	EX17-47	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	18.00	18.00		Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00		Exit Loss Coef: 0.10
Invert(ft):	25.540	25.420		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-216_S17-222	From Node:	S17-222	Length(ft): 79.00
Group:	Basin 17	To Node:	S17-216	Count: 1
				Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Always Inlet
Span(in):	18.00	18.00	Flow:	Both
Rise(in):	18.00	18.00	Entrance Loss Coef:	0.50
Invert(ft):	26.100	25.550	Exit Loss Coef:	0.10
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-21_S17-19	From Node:	S17-21	Length(ft):	192.00
Group:	Basin 17	To Node:	S17-19	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM			
Geometry:	Circular	Circular	Solution Algorithm:		Most Restrictive
Span(in):	24.00	24.00	Flow:		Both
Rise(in):	24.00	24.00	Entrance Loss Coef:		0.50
Invert(ft):	12.140	6.690	Exit Loss Coef:		1.46
Manning's N:	0.012000	0.012000	Bend Loss Coef:		0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:		Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:		Use dn
			Stabilizer Option:		None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-224_S17-222	From Node:	S17-224	Length(ft):	62.00
Group:	Basin 17	To Node:	S17-222	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM			
Geometry:	Circular	Circular	Solution Algorithm:		Always Inlet
Span(in):	18.00	18.00	Flow:		Both
Rise(in):	18.00	18.00	Entrance Loss Coef:		0.50
Invert(ft):	26.400	26.100	Exit Loss Coef:		0.10
Manning's N:	0.012000	0.012000	Bend Loss Coef:		0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:		Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:		Use dn
			Stabilizer Option:		None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-225_S17-33	From Node:	S17-225	Length(ft):	93.00
Group:	Basin 17	To Node:	S17-33A	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM			
Geometry:	Circular	Circular	Solution Algorithm:		Most Restrictive
Span(in):	30.00	30.00	Flow:		Both
Rise(in):	30.00	30.00	Entrance Loss Coef:		0.50
Invert(ft):	-0.360	-0.500	Exit Loss Coef:		1.46
Manning's N:	0.012000	0.012000	Bend Loss Coef:		0.00
			Outlet Ctrl Spec:		Use dc or tw

Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-226_S17-227	From Node:	S17-226	Length(ft):	26.00
Group:	Basin 17	To Node:	S17-225	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	0.10
Invert(ft):	25.500	2.130		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-227_S17-227	From Node:	S17-227	Length(ft):	27.00
Group:	Basin 17	To Node:	S17-227A	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	1.46
Invert(ft):	24.000	2.000		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-227A_S17-33	From Node:	S17-227A	Length(ft):	96.00
Group:	Basin 17	To Node:	S17-33A	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	30.00	30.00		Entrance Loss Coef:	1.35
Rise(in):	30.00	30.00		Exit Loss Coef:	0.10
Invert(ft):	1.600	1.400		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:

Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-229_S17-230	From Node:	S17-229	Length(ft):	5.00
Group:	Basin 17	To Node:	S17-230	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	1.35
Rise(in):	18.00	18.00		Exit Loss Coef:	1.46
Invert(ft):	14.000	12.000		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-22_S17-21	From Node:	S17-22	Length(ft):	4.00
Group:	Basin 17	To Node:	S17-21	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Always Inlet
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	1.46
Invert(ft):	11.200	11.100		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-230_S17-236	From Node:	S17-230	Length(ft):	246.00
Group:	Basin 17	To Node:	S17-227A	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	30.00	30.00		Entrance Loss Coef:	0.50
Rise(in):	30.00	30.00		Exit Loss Coef:	1.36
Invert(ft):	2.000	1.600		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

```
-------------------------------------------------------------------------------------------------
         Name: S17-231_S17-228     From Node: S17-231           Length(ft): 6.00
        Group: Basin 17              To Node: S17-228                Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Automatic
     Geometry: Circular       Circular                             Flow: Both
     Span(in): 30.00          30.00                    Entrance Loss Coef: 0.50
     Rise(in): 30.00          30.00                        Exit Loss Coef: 1.46
   Invert(ft): 2.640          2.440                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dc
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: S17-231_S17-230     From Node: S17-228           Length(ft): 203.00
        Group: Basin 17              To Node: S17-230                Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                             Flow: Both
     Span(in): 30.00          30.00                    Entrance Loss Coef: 0.50
     Rise(in): 30.00          30.00                        Exit Loss Coef: 1.46
   Invert(ft): 2.440          2.000                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dc
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: S17-232_S17-25      From Node: S17-232           Length(ft): 42.00
        Group: Basin 17              To Node: S17-25                 Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                             Flow: Both
     Span(in): 24.00          24.00                    Entrance Loss Coef: 0.50
     Rise(in): 24.00          24.00                        Exit Loss Coef: 1.46
   Invert(ft): 14.600         14.500                       Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: S17-233_S17-232     From Node: S17-233           Length(ft): 57.00
        Group: Basin 17              To Node: S17-232                Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
```

Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	1.46
Invert(ft):	16.450	16.250	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-234_S17-231	From Node: S17-234	Length(ft):	93.00
Group:	Basin 17	To Node: S17-231	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Always Inlet
Geometry:	Circular	Circular	Flow:	Both
Span(in):	30.00	30.00	Entrance Loss Coef:	0.50
Rise(in):	30.00	30.00	Exit Loss Coef:	0.50
Invert(ft):	2.840	2.640	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-240_S17-241	From Node: S17-240	Length(ft):	146.00
Group:	Basin 17	To Node: S17-241A	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	25.000	23.000	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-241A_S17-24	From Node: S17-241A	Length(ft):	30.00
Group:	Basin 17	To Node: S17-241	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	1.000	0.750	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn

Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-241B_S17-30	From Node: S17-241B	Length(ft): 36.00
Group:	Basin 17	To Node: S17-30+A	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 1.46
Invert(ft):	-0.350	0.250	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-245_S17-243	From Node: S17-245	Length(ft): 23.00
Group:	Basin 17	To Node: S17-243	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 0.10
Invert(ft):	0.450	0.350	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-245_S17-246	From Node: S17-245	Length(ft): 78.00
Group:	Basin 17	To Node: S17-246	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 0.10
Invert(ft):	0.450	0.450	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-246_EX17-15	From Node:	S17-246	Length(ft): 3.00
Group:	Basin 17	To Node:	EX17-151	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Automatic
Geometry:	Circular	Circular		Flow: Both
Span(in):	18.00	18.00		Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00		Exit Loss Coef: 1.46
Invert(ft):	3.400	3.340		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dc
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-247_S17-246	From Node:	S17-247	Length(ft): 216.00
Group:	Basin 17	To Node:	S17-246	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Automatic
Geometry:	Circular	Circular		Flow: Both
Span(in):	24.00	24.00		Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00		Exit Loss Coef: 1.46
Invert(ft):	0.450	0.450		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dc
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-248_S249	From Node:	S17-248	Length(ft): 47.00
Group:	Basin 17	To Node:	S17-249	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Automatic
Geometry:	Circular	Circular		Flow: Both
Span(in):	30.00	30.00		Entrance Loss Coef: 0.50
Rise(in):	30.00	30.00		Exit Loss Coef: 1.46
Invert(ft):	0.440	0.440		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dc
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-249_S17-250	From Node:	S17-249	Length(ft):	12.00
Group:	Basin 17	To Node:	S17-250A+A	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	30.00	30.00		Entrance Loss Coef:	0.50
Rise(in):	30.00	30.00		Exit Loss Coef:	1.46
Invert(ft):	0.440	0.440		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-255_S17-248	From Node:	S17-255	Length(ft):	27.00
Group:	Basin 17	To Node:	S17-248	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	30.00	30.00		Entrance Loss Coef:	0.50
Rise(in):	30.00	30.00		Exit Loss Coef:	1.46
Invert(ft):	-2.500	-2.730		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-25_S17-21	From Node:	S17-25	Length(ft):	176.00
Group:	Basin 17	To Node:	S17-21	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00		Exit Loss Coef:	0.10
Invert(ft):	15.040	12.140		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-26_S17-25	From Node:	S17-26	Length(ft):	3.00
Group:	Basin 17	To Node:	S17-25	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both

Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	1.46
Invert(ft):	14.150	14.150	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-26A_S17-24A	From Node: S17-235	Length(ft):	218.00
Group:	Basin 17	To Node: S17-233	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	1.46
Invert(ft):	20.750	16.450	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-27_S17-26A	From Node: S17-237	Length(ft):	9.00
Group:	Basin 17	To Node: S17-235	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	1.46
Invert(ft):	22.340	22.240	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-27A_EX17-11	From Node: S17-27A+B	Length(ft):	544.00
Group:	Basin 17	To Node: S17-254	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Horz Ellipse	Horz Ellipse	Flow:	Both
Span(in):	60.00	60.00	Entrance Loss Coef:	0.50
Rise(in):	38.00	38.00	Exit Loss Coef:	0.10
Invert(ft):	0.950	-1.740	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

Downstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

Name:	S17-28_S17-27	From Node:	S17-239	Length(ft):	297.00
Group:	Basin 17	To Node:	S17-237	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	1.46
Invert(ft):	24.950	21.250		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-2_S17-4	From Node:	S17-2	Length(ft):	164.00
Group:	Basin 17	To Node:	S17-4	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00		Exit Loss Coef:	0.10
Invert(ft):	1.240	1.070		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-30_S17-30A	From Node:	S17-30+C	Length(ft):	85.00
Group:	Basin 17	To Node:	S17-30A	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00		Exit Loss Coef:	1.46
Invert(ft):	0.550	0.330		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-30A_17-115	From Node:	S17-30A	Length(ft):	205.00
Group:	Basin 17	To Node:	S17-254	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	36.00	36.00		Entrance Loss Coef:	0.50
Rise(in):	36.00	36.00		Exit Loss Coef:	0.10
Invert(ft):	-0.060	-0.740		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-30C_S17-30	From Node:	S17-30C	Length(ft):	17.00
Group:	Basin 17	To Node:	S17-30+A	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	1.46
Invert(ft):	1.040	1.000		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-31_S17-32	From Node:	S17-31	Length(ft):	9.00
Group:	Basin 17	To Node:	S17-241B	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	1.46
Invert(ft):	1.200	1.100		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

```
         Name: S17-33A_E17-248     From Node: S17-33A           Length(ft): 58.00
        Group: Basin 17              To Node: S17-255                Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 30.00          30.00                     Entrance Loss Coef: 0.50
     Rise(in): 30.00          30.00                         Exit Loss Coef: 1.46
   Invert(ft): -0.500         -2.500                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: S17-35_S17-32       From Node: S17-241           Length(ft): 185.00
        Group: Basin 17              To Node: S17-241B               Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 24.00          24.00                     Entrance Loss Coef: 0.50
     Rise(in): 24.00          24.00                         Exit Loss Coef: 1.46
   Invert(ft): -0.050         -0.350                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: S17-36_EX17-255     From Node: S17-36            Length(ft): 97.00
        Group: Basin 17              To Node: S17-255                Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 18.00          18.00                     Entrance Loss Coef: 0.50
     Rise(in): 18.00          18.00                         Exit Loss Coef: 1.46
   Invert(ft): 2.740          2.440                         Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: S17-37_S17-36       From Node: S17-37            Length(ft): 271.00
        Group: Basin 17              To Node: S17-36                 Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 18.00          18.00                     Entrance Loss Coef: 0.50
```

Rise(in):	18.00	18.00	Exit Loss Coef: 1.46
Invert(ft):	5.150	2.350	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: S17-3_S17-7 From Node: S17-3 Length(ft): 276.00
Group: Basin 17 To Node: S17-7 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM	
Geometry:	Circular	Circular	Solution Algorithm: Most Restrictive
Span(in):	24.00	24.00	Flow: Both
Rise(in):	24.00	24.00	Entrance Loss Coef: 1.35
Invert(ft):	-0.250	-0.250	Exit Loss Coef: 0.10
Manning's N:	0.012000	0.012000	Bend Loss Coef: 0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec: Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
			Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: S17-3A_S17-3 From Node: S17-3A Length(ft): 138.00
Group: Basin 17 To Node: S17-3 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM	
Geometry:	Circular	Circular	Solution Algorithm: Most Restrictive
Span(in):	18.00	18.00	Flow: Both
Rise(in):	18.00	18.00	Entrance Loss Coef: 0.50
Invert(ft):	-0.100	-0.150	Exit Loss Coef: 1.46
Manning's N:	0.012000	0.012000	Bend Loss Coef: 0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec: Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
			Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: S17-42_EX17-152 From Node: S17-242 Length(ft): 293.00
Group: Basin 17 To Node: EX17-152 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM	
Geometry:	Circular	Circular	Solution Algorithm: Most Restrictive
Span(in):	24.00	24.00	Flow: Both
Rise(in):	24.00	24.00	Entrance Loss Coef: 0.50
Invert(ft):	19.540	9.540	Exit Loss Coef: 0.10
Manning's N:	0.012000	0.012000	Bend Loss Coef: 0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec: Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
			Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-43_S17-38	From Node:	S17-244	Length(ft):	76.00
Group:	Basin 17	To Node:	S17-243	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00		Exit Loss Coef:	0.10
Invert(ft):	0.550	0.350		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-44_S17-45	From Node:	S17-44	Length(ft):	6.00
Group:	Basin 17	To Node:	S17-45	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	1.46
Invert(ft):	0.590	0.590		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-45_OUT	From Node:	S17-45	Length(ft):	246.00
Group:	Basin 17	To Node:	L_RIVER_CANAL	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	72.00	72.00		Entrance Loss Coef:	0.50
Rise(in):	72.00	72.00		Exit Loss Coef:	1.00
Invert(ft):	-3.320	-3.560		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:

Circular Concrete: Square edge w/ headwall

Name:	S17-49_S17-48	From Node:	S17-49
Group:	Basin 17	To Node:	S17-234
	UPSTREAM	DOWNSTREAM	
Geometry:	Circular	Circular	
Span(in):	30.00	30.00	
Rise(in):	30.00	30.00	
Invert(ft):	2.940	2.840	
Manning's N:	0.012000	0.012000	
Top Clip(in):	0.000	0.000	
Bot Clip(in):	0.000	0.000	

Length(ft):	5.00
Count:	1
Friction Equation:	Automatic
Solution Algorithm:	Always Inlet
Flow:	Both
Entrance Loss Coef:	0.50
Exit Loss Coef:	1.46
Bend Loss Coef:	0.00
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-4_S17-6	From Node:	S17-4
Group:	Basin 17	To Node:	S17-6
	UPSTREAM	DOWNSTREAM	
Geometry:	Circular	Circular	
Span(in):	24.00	24.00	
Rise(in):	24.00	24.00	
Invert(ft):	1.070	0.940	
Manning's N:	0.012000	0.012000	
Top Clip(in):	0.000	0.000	
Bot Clip(in):	0.000	0.000	

Length(ft):	116.00
Count:	1
Friction Equation:	Automatic
Solution Algorithm:	Most Restrictive
Flow:	Both
Entrance Loss Coef:	0.50
Exit Loss Coef:	1.46
Bend Loss Coef:	0.00
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-5_S17-4	From Node:	S17-5
Group:	Basin 17	To Node:	S17-4
	UPSTREAM	DOWNSTREAM	
Geometry:	Circular	Circular	
Span(in):	18.00	18.00	
Rise(in):	18.00	18.00	
Invert(ft):	-0.400	-0.500	
Manning's N:	0.012000	0.012000	
Top Clip(in):	0.000	0.000	
Bot Clip(in):	0.000	0.000	

Length(ft):	4.00
Count:	1
Friction Equation:	Automatic
Solution Algorithm:	Most Restrictive
Flow:	Both
Entrance Loss Coef:	0.50
Exit Loss Coef:	1.46
Bend Loss Coef:	0.00
Outlet Ctrl Spec:	Use dc or tw
Inlet Ctrl Spec:	Use dn
Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S17-6_S17-7	From Node:	S17-6

Length(ft):	193.00

```
       Group: Basin 17             To Node: S17-7                  Count: 1
                                                          Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
    Geometry: Circular       Circular                             Flow: Both
    Span(in): 24.00          24.00                   Entrance Loss Coef: 0.50
    Rise(in): 24.00          24.00                       Exit Loss Coef: 1.46
   Invert(ft): -1.730        -1.730                      Bend Loss Coef: 0.00
  Manning's N: 0.012000      0.012000                 Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                     Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000         0.000                   Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


--------------------------------------------------------------------------------------------------
         Name: S17-7_S17-10        From Node: S17-7            Length(ft): 244.00
       Group: Basin 17               To Node: S17-201               Count: 1
                                                          Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
    Geometry: Circular       Circular                             Flow: Both
    Span(in): 24.00          24.00                   Entrance Loss Coef: 1.35
    Rise(in): 24.00          24.00                       Exit Loss Coef: 0.10
   Invert(ft): -0.250        -0.250                      Bend Loss Coef: 0.00
  Manning's N: 0.012000      0.012000                 Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                     Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000         0.000                   Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


--------------------------------------------------------------------------------------------------
         Name: S17-8_S17-6         From Node: S17-8            Length(ft): 126.00
       Group: Basin 17               To Node: S17-6                 Count: 1
                                                          Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
    Geometry: Circular       Circular                             Flow: Both
    Span(in): 24.00          24.00                   Entrance Loss Coef: 1.35
    Rise(in): 24.00          24.00                       Exit Loss Coef: 1.46
   Invert(ft): 0.940         0.940                       Bend Loss Coef: 0.00
  Manning's N: 0.012000      0.012000                 Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                     Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000         0.000                   Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


--------------------------------------------------------------------------------------------------
         Name: S17-9_S17-8         From Node: S17-9            Length(ft): 4.00
       Group: Basin 17               To Node: S17-8                 Count: 1
                                                          Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
    Geometry: Circular       Circular                             Flow: Both
    Span(in): 18.00          18.00                   Entrance Loss Coef: 0.50
    Rise(in): 18.00          18.00                       Exit Loss Coef: 1.46
```

```
   Invert(ft): 0.000          -0.100                      Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                      Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                    Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


================================================================================================
==== Drop Structures ===========================================================================
================================================================================================

         Name: DS17-29A            From Node: NODE-17D          Length(ft): 122.00
        Group: Basin 17              To Node: S17-30A               Count: 1

               UPSTREAM       DOWNSTREAM                Friction Equation: Automatic
     Geometry: Circular       Circular                 Solution Algorithm: Most Restrictive
     Span(in): 30.00          30.00                                Flow: Both
     Rise(in): 30.00          30.00                   Entrance Loss Coef: 0.500
   Invert(ft): 0.950          0.450                       Exit Loss Coef: 0.100
  Manning's N: 0.012000       0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                      Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                        Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


*** Weir 1 of 1 for Drop Structure DS17-29A ***
                                                                                    TABLE
                  Count: 1                        Bottom Clip(in): 0.000
                   Type: Vertical: Mavis             Top Clip(in): 0.000
                   Flow: Both                     Weir Disc Coef: 3.200
               Geometry: Rectangular           Orifice Disc Coef: 0.600

               Span(in): 42.00                          Invert(ft): 4.150
               Rise(in): 6.00                  Control Elev(ft): 4.150


------------------------------------------------------------------------------------------------
         Name: DSEX17-113          From Node: NODE-17B          Length(ft): 134.00
        Group: Basin 17              To Node: EX17-114              Count: 1

               UPSTREAM       DOWNSTREAM                Friction Equation: Automatic
     Geometry: Circular       Circular                 Solution Algorithm: Most Restrictive
     Span(in): 24.00          24.00                                Flow: Both
     Rise(in): 24.00          24.00                   Entrance Loss Coef: 0.500
   Invert(ft): 0.950          -0.740                      Exit Loss Coef: 0.100
  Manning's N: 0.012000       0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                      Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                        Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


*** Weir 1 of 1 for Drop Structure DSEX17-113 ***
                                                                                    TABLE
                  Count: 1                        Bottom Clip(in): 0.000
                   Type: Vertical: Mavis             Top Clip(in): 0.000
```

```
                Flow: Both                    Weir Disc Coef: 3.200
            Geometry: Rectangular           Orifice Disc Coef: 0.600

            Span(in): 48.00                       Invert(ft): 3.250
            Rise(in): 6.00                  Control Elev(ft): 3.250


------------------------------------------------------------------------------------------------
        Name: DSEX17-67          From Node: NODE-17F          Length(ft): 271.00
       Group: Basin 17             To Node: S17-44                Count: 1

              UPSTREAM       DOWNSTREAM                 Friction Equation: Automatic
    Geometry: Circular       Circular                  Solution Algorithm: Most Restrictive
    Span(in): 18.00          18.00                                Flow: Both
    Rise(in): 18.00          18.00                    Entrance Loss Coef: 0.500
  Invert(ft): 0.950          0.590                        Exit Loss Coef: 0.100
 Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000          0.000                       Inlet Ctrl Spec: Use dn
Bot Clip(in): 0.000          0.000                          Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall



*** Weir 1 of 1 for Drop Structure DSEX17-67 ***
                                                                                    TABLE
               Count: 1                      Bottom Clip(in): 0.000
                Type: Horizontal                Top Clip(in): 0.000
                Flow: Both                    Weir Disc Coef: 3.200
            Geometry: Rectangular           Orifice Disc Coef: 0.600

            Span(in): 48.00                       Invert(ft): 2.950
            Rise(in): 6.00                  Control Elev(ft): 2.950


================================================================================================
==== Weirs =====================================================================================
================================================================================================

        Name: S17-250_WEIR        From Node: S17-250A+A
       Group: Basin 17              To Node: S17-250B
        Flow: Both                    Count: 1
        Type: Vertical: Mavis      Geometry: Rectangular

                  Span(in): 48.00
                  Rise(in): 8.40
                Invert(ft): 4.250
      Control Elevation(ft): 4.250
                                          TABLE
           Bottom Clip(in): 0.000
              Top Clip(in): 0.000
        Weir Discharge Coef: 3.200
     Orifice Discharge Coef: 0.600



------------------------------------------------------------------------------------------------
        Name: S17-27A_WEIR        From Node: S17-27A+A
       Group: Basin 17              To Node: S17-27A+B
        Flow: Both                    Count: 1
        Type: Vertical: Mavis      Geometry: Rectangular

                  Span(in): 96.00
                  Rise(in): 9.60
                Invert(ft): 3.650
      Control Elevation(ft): 3.650
                                          TABLE
           Bottom Clip(in): 0.000
              Top Clip(in): 0.000
        Weir Discharge Coef: 3.200
     Orifice Discharge Coef: 0.600
```

```
------------------------------------------------------------------------------------------------------
        Name: S17-30_BAFFLE       From Node: S17-30+A
       Group: Basin 17              To Node: S17-30+B
        Flow: Both                    Count: 1
        Type: Vertical: Mavis      Geometry: Rectangular

                  Span(in): 60.00
                  Rise(in): 24.00
                Invert(ft): -2.950
      Control Elevation(ft): -2.950
                                        TABLE
            Bottom Clip(in): 0.000
               Top Clip(in): 0.000
         Weir Discharge Coef: 3.200
      Orifice Discharge Coef: 0.600


------------------------------------------------------------------------------------------------------
        Name: S17-30_WEIR         From Node: S17-30+B
       Group: Basin 17              To Node: S17-30+C
        Flow: Both                    Count: 1
        Type: Vertical: Mavis      Geometry: Rectangular

                  Span(in): 48.00
                  Rise(in): 6.40
                Invert(ft): 3.250
      Control Elevation(ft): 3.250
                                        TABLE
            Bottom Clip(in): 0.000
               Top Clip(in): 0.000
         Weir Discharge Coef: 3.200
      Orifice Discharge Coef: 0.600


==========================================================================================
==== Rating Curves ======================================================================
==========================================================================================

        Name: E_OPT_17B           From Node: NODE-17B               Count: 190
       Group: Basin 17              To Node: GWT-17                  Flow: Both

             TABLE           ELEV ON(ft)     ELEV OFF(ft)
        #1: E_OPT-17B        1.450           1.450
        #2:                  0.000           0.000
        #3:                  0.000           0.000
        #4:                  0.000           0.000


------------------------------------------------------------------------------------------------------
        Name: E_OPT_17D           From Node: NODE-17D               Count: 1174
       Group: Basin 17              To Node: GWT-17                  Flow: Both

             TABLE           ELEV ON(ft)     ELEV OFF(ft)
        #1: E_OPT-17D        1.450           1.450
        #2:                  0.000           0.000
        #3:                  0.000           0.000
        #4:                  0.000           0.000


------------------------------------------------------------------------------------------------------
        Name: E_OPT_17F           From Node: NODE-17F               Count: 421
       Group: Basin 17              To Node: GWT-17                  Flow: Both

             TABLE           ELEV ON(ft)     ELEV OFF(ft)
        #1: E_OPT-17F        1.450           1.450
        #2:                  0.000           0.000
        #3:                  0.000           0.000
        #4:                  0.000           0.000
```

Name: EX17-205_EXF From Node: S17-205 Count: 198
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: EX17-208A_EXF From Node: S17-208A Count: 170
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-11_EXF From Node: S17-11 Count: 85
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-12_EXF From Node: S17-12 Count: 40
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-13_EXF From Node: S17-13 Count: 101
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-15_EXF From Node: S17-15 Count: 140
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-17_EXF From Node: S17-17 Count: 84
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-18_EXF From Node: S17-18 Count: 142
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-201_EXF From Node: S17-201 Count: 217
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-202_EXF From Node: S17-202 Count: 131
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-203_EXF From Node: S17-203 Count: 63
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-204_EXF From Node: S17-204 Count: 95
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-210A_EXF From Node: S17-210A Count: 32
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-210B_EXF From Node: S17-210B Count: 53
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-211A_EXF From Node: S17-211A Count: 153
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-212A_EXF From Node: S17-212A Count: 126
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-245_EXF From Node: S17-245 Count: 92
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17C	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-246_EXF From Node: S17-246 Count: 131
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17C	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-247_EXF From Node: S17-247 Count: 192
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17C	1.450	1.450

#2:	0.000	0.000
#3:	0.000	0.000
#4:	0.000	0.000

Name: S17-248_EXF From Node: S17-248 Count: 122
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17E	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-249_EXF From Node: S17-249 Count: 300
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17E	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-27A_EXF From Node: S17-27A+A Count: 126
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-3_EXF From Node: S17-3 Count: 130
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-6_EXF From Node: S17-6 Count: 55
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17-7_EXF From Node: S17-7 Count: 231
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

```
------------------------------------------------------------------------------------------------------
         Name: S17-8_EXF           From Node: S17-8                  Count: 110
        Group: Basin 17              To Node: GWT-17                  Flow: Both

              TABLE           ELEV ON(ft)     ELEV OFF(ft)
           #1: E_OPT-17A      1.450           1.450
           #2:                0.000           0.000
           #3:                0.000           0.000
           #4:                0.000           0.000


------------------------------------------------------------------------------------------------------
         Name: S17FW-11_EXF        From Node: S17FW-11               Count: 25
        Group: Basin 17              To Node: GWT-17                  Flow: Both

              TABLE           ELEV ON(ft)     ELEV OFF(ft)
           #1: E_OPT-17A      1.450           1.450
           #2:                0.000           0.000
           #3:                0.000           0.000
           #4:                0.000           0.000


------------------------------------------------------------------------------------------------------
         Name: S17FW-12_EXF        From Node: S17FW-12               Count: 100
        Group: Basin 17              To Node: GWT-17                  Flow: Both

              TABLE           ELEV ON(ft)     ELEV OFF(ft)
           #1: E_OPT-17A      1.450           1.450
           #2:                0.000           0.000
           #3:                0.000           0.000
           #4:                0.000           0.000


------------------------------------------------------------------------------------------------------
         Name: S17FW-14            From Node: S17FW-14               Count: 100
        Group: Basin 17              To Node: GWT-17                  Flow: Both

              TABLE           ELEV ON(ft)     ELEV OFF(ft)
           #1: E_OPT-17A      1.450           1.450
           #2:                0.000           0.000
           #3:                0.000           0.000
           #4:                0.000           0.000


==============================================================================================
==== Hydrology Simulations ===================================================================
==============================================================================================

         Name: 100YR-1HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 1.00
          Rainfall File: Fdot-1
    Rainfall Amount(in): 5.00

Time(hrs)       Print Inc(min)
--------------- ---------------
1.000           1.00
1.330           1.00

------------------------------------------------------------------------------------------------------
         Name: 100YR-24HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Fdot-24
```

```
    Rainfall Amount(in): 13.44

Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.00
16.000          1.00
24.000          5.00
24.330          5.00

-------------------------------------------------------------------------------------------------------
         Name: 100YR-8HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 8.00
          Rainfall File: Fdot-8
    Rainfall Amount(in): 9.60

Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           5.00
6.000           1.00
8.000           5.00
8.330           5.00

-------------------------------------------------------------------------------------------------------
         Name: 10YR-1HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 1.00
          Rainfall File: Fdot-1
    Rainfall Amount(in): 3.50

Time(hrs)       Print Inc(min)
--------------- ---------------
1.000           1.00
1.330           1.00

-------------------------------------------------------------------------------------------------------
         Name: 10YR-24HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Fdot-24
    Rainfall Amount(in): 8.88

Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.00
16.000          1.00
24.000          5.00
24.330          5.00

-------------------------------------------------------------------------------------------------------
         Name: 10YR-8HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 8.00
          Rainfall File: Fdot-8
    Rainfall Amount(in): 6.40

Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           5.00
6.000           1.00
8.000           5.00
8.330           5.00

-------------------------------------------------------------------------------------------------------
         Name: 25YR-72HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP
```

```
      Override Defaults: Yes
    Storm Duration(hrs): 72.00
          Rainfall File: Sfwmd72
    Rainfall Amount(in): 14.00

Time(hrs)       Print Inc(min)
--------------- ---------------
48.000          15.00
56.000          5.00
64.000          1.00
72.000          5.00
72.330          5.00

================================================================================
==== Routing Simulations ======================================================
================================================================================

         Name: 100YR-1HR           Hydrology Sim: 100YR-1HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 25.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
1.000           1.000
25.000          15.000

Group           Run
--------------- -----
Basin 17        Yes


--------------------------------------------------------------------------------
         Name: 100YR-24HR          Hydrology Sim: 100YR-24HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 48.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages: 24HR                    Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.000
16.000          1.000
24.000          5.000
48.000          15.000

Group           Run
--------------- -----
Basin 17        Yes


--------------------------------------------------------------------------------
         Name: 100YR-8HR           Hydrology Sim: 100YR-8HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: Yes         Restart: No            Patch: No
  Alternative: No
```

```
        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 36.00
     Min Calc Time(sec): 0.5000               Max Calc Time(sec): 60.0000
        Boundary Stages: 8HR                     Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           5.000
6.000           1.000
8.000           5.000
36.000          15.000

Group           Run
--------------- -----
Basin 17        Yes


-------------------------------------------------------------------------------------------------
         Name: 10YR-1HR           Hydrology Sim: 10YR-1HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: Yes         Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.01000
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 25.00
     Min Calc Time(sec): 0.5000               Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
1.000           1.000
25.000          15.000

Group           Run
--------------- -----
Basin 17        Yes


-------------------------------------------------------------------------------------------------
         Name: 10YR-24HR          Hydrology Sim: 10YR-24HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: Yes         Restart: No           Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 48.00
     Min Calc Time(sec): 0.5000               Max Calc Time(sec): 60.0000
        Boundary Stages: 24HR                    Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.000
16.000          1.000
24.000          5.000
48.000          15.000

Group           Run
--------------- -----
Basin 17        Yes


-------------------------------------------------------------------------------------------------
         Name: 10YR-8HR           Hydrology Sim: 10YR-8HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP
```

```
     Execute: Yes         Restart: No            Patch: No
 Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
   Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 36.00
    Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
       Boundary Stages: 8HR                     Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           5.000
6.000           1.000
8.000           5.000
36.000          15.000

Group           Run
--------------- -----
Basin 17        Yes


-------------------------------------------------------------------------------------------------
         Name: 25YR-72HR           Hydrology Sim: 25YR-72HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

     Execute: Yes         Restart: No            Patch: No
 Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
   Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 96.00
    Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
       Boundary Stages: 72HR                    Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.000
16.000          1.000
24.000          5.000
96.000          15.000

Group           Run
--------------- -----
Basin 17        Yes


===============================================================================================
==== Boundary Conditions ======================================================================
===============================================================================================

     Name: 8HR                  Node: GWT-17               Type: Stage

     Time(hrs)       Stage(ft)
-------------- ---------------
         0.000           1.450
         1.000           1.470
         2.000           1.550
         3.000           1.660
         4.000           1.980
         5.000           2.100
         6.000           2.140
         7.000           2.180
         8.000           2.200
        12.000           1.450
        36.000           1.450

-------------------------------------------------------------------------------------------------
     Name: 24HR                 Node: GWT-17               Type: Stage

     Time(hrs)       Stage(ft)
```

0.000	1.450
1.000	1.460
2.000	1.470
3.000	1.500
4.000	1.520
5.000	1.540
6.000	1.570
7.000	1.600
8.000	1.630
9.000	1.680
10.000	1.720
11.000	1.780
12.000	1.860
13.000	1.910
14.000	1.950
15.000	2.000
16.000	2.040
17.000	2.070
18.000	2.100
19.000	2.130
20.000	2.150
21.000	2.170
22.000	2.190
23.000	2.190
24.000	2.200
36.000	1.450
48.000	1.450

Name: 72HR Node: GWT-17 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.450
24.000	1.530
36.000	1.590
48.000	1.650
49.000	1.650
50.000	1.660
51.000	1.670
52.000	1.670
53.000	1.680
54.000	1.690
55.000	1.710
56.000	1.720
57.000	1.740
57.500	1.750
58.000	1.770
58.500	1.780
59.000	1.800
59.500	1.820
60.000	2.010
60.500	2.050
61.000	2.070
61.500	2.090
62.000	2.100
62.500	2.110
63.000	2.120
64.000	2.130
65.000	2.140
66.000	2.150
68.000	2.170
70.000	2.190
72.000	2.200
96.000	1.450

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	0.00	0.0	0.0	0.0	0.0	0.00
25YR-72HR	0.08	0.0	1.6	-1.6	-0.0	0.00
25YR-72HR	0.17	0.0	14.9	-14.9	-0.0	0.00
25YR-72HR	0.25	0.0	33.4	-33.4	-0.0	0.00
25YR-72HR	0.33	0.0	67.1	-67.1	-0.0	0.00
25YR-72HR	0.42	0.0	125.5	-125.5	-0.0	0.00
25YR-72HR	0.50	0.0	182.8	-182.8	-0.0	0.00
25YR-72HR	0.58	0.0	227.0	-227.0	-0.0	0.00
25YR-72HR	0.67	0.0	258.1	-258.1	-0.0	0.00
25YR-72HR	0.75	0.0	279.1	-279.1	-0.0	0.00
25YR-72HR	0.83	0.0	293.4	-293.4	-0.0	0.00
25YR-72HR	0.92	0.0	303.1	-303.1	-0.0	0.00
25YR-72HR	1.00	0.0	309.7	-309.7	-0.0	0.00
25YR-72HR	1.08	0.0	314.0	-314.0	-0.0	0.00
25YR-72HR	1.17	0.0	316.7	-316.7	-0.0	0.00
25YR-72HR	1.25	0.0	318.2	-318.2	-0.0	0.00
25YR-72HR	1.33	0.4	318.8	-318.4	-0.0	0.00
25YR-72HR	1.42	1.7	319.1	-317.4	-0.0	0.00
25YR-72HR	1.50	3.8	319.2	-315.4	-0.0	0.00
25YR-72HR	1.58	8.6	319.7	-311.1	-0.0	0.00
25YR-72HR	1.67	17.9	321.3	-303.4	-0.0	0.00
25YR-72HR	1.75	31.8	324.8	-293.1	-0.0	0.00
25YR-72HR	1.83	51.2	331.0	-279.8	-0.0	0.00
25YR-72HR	1.92	77.2	341.1	-263.8	-0.0	0.00
25YR-72HR	2.00	109.8	355.1	-245.3	-0.0	0.00
25YR-72HR	2.08	149.5	373.5	-224.1	-0.0	0.00
25YR-72HR	2.17	196.6	396.7	-200.1	-0.0	0.00
25YR-72HR	2.25	251.2	424.8	-173.6	-0.0	0.00
25YR-72HR	2.33	313.4	458.0	-144.6	-0.0	0.00
25YR-72HR	2.42	383.2	496.8	-113.6	-0.0	0.00
25YR-72HR	2.50	460.7	541.3	-80.6	-0.0	0.00
25YR-72HR	2.58	545.7	591.8	-46.0	-0.0	0.00
25YR-72HR	2.67	638.4	648.6	-10.2	-0.0	0.00
25YR-72HR	2.75	738.4	711.7	26.7	-0.0	-0.00
25YR-72HR	2.83	845.7	781.3	64.4	0.0	0.00
25YR-72HR	2.92	960.0	857.2	102.8	0.0	0.00
25YR-72HR	3.00	1081.4	939.6	141.8	0.0	0.00
25YR-72HR	3.08	1209.6	1028.3	181.3	0.0	0.00
25YR-72HR	3.17	1344.3	1123.1	221.2	0.0	0.00
25YR-72HR	3.25	1485.6	1224.0	261.7	0.0	0.00
25YR-72HR	3.33	1633.3	1330.7	302.6	0.0	0.00
25YR-72HR	3.42	1787.2	1443.2	344.0	0.0	0.00
25YR-72HR	3.50	1947.2	1561.2	386.0	0.0	0.00
25YR-72HR	3.58	2113.3	1684.7	428.6	0.0	0.00
25YR-72HR	3.67	2285.1	1816.7	468.4	0.0	0.00
25YR-72HR	3.75	2462.8	1950.7	512.1	-0.0	-0.00
25YR-72HR	3.83	2646.1	2089.8	556.3	-0.0	-0.00
25YR-72HR	3.92	2834.9	2233.7	601.1	0.0	0.00
25YR-72HR	4.00	3029.1	2382.7	646.3	0.0	0.00
25YR-72HR	4.08	3228.5	2537.0	691.5	-0.0	-0.00
25YR-72HR	4.17	3433.1	2697.0	736.1	0.0	0.00
25YR-72HR	4.25	3642.8	2862.6	780.2	0.0	0.00
25YR-72HR	4.33	3857.5	3033.5	823.9	0.0	0.00
25YR-72HR	4.42	4076.9	3209.4	867.6	0.0	0.00
25YR-72HR	4.50	4301.1	3389.8	911.3	0.0	0.00
25YR-72HR	4.58	4530.0	3574.7	955.3	0.0	0.00
25YR-72HR	4.67	4763.0	3763.5	999.5	0.0	0.00
25YR-72HR	4.75	5000.9	3956.7	1044.2	0.0	0.00
25YR-72HR	4.83	5243.1	4154.0	1089.1	0.0	0.00
25YR-72HR	4.92	5489.6	4355.1	1134.4	0.0	0.00
25YR-72HR	5.00	5740.2	4560.1	1180.1	0.0	0.00
25YR-72HR	5.08	5995.0	4768.8	1226.1	0.0	0.00
25YR-72HR	5.17	6253.6	4981.2	1272.4	-0.0	-0.00
25YR-72HR	5.25	6516.3	5197.2	1319.1	0.0	0.00
25YR-72HR	5.33	6782.7	5416.7	1366.1	0.0	0.00
25YR-72HR	5.42	7052.9	5639.5	1413.3	0.0	0.00
25YR-72HR	5.50	7326.7	5865.8	1460.9	0.0	0.00
25YR-72HR	5.58	7604.2	6095.4	1508.8	0.0	0.00
25YR-72HR	5.67	7885.1	6329.1	1555.9	0.0	0.00
25YR-72HR	5.75	8169.5	6568.8	1600.7	0.0	0.00
25YR-72HR	5.83	8457.2	6815.5	1641.8	-0.0	-0.00
25YR-72HR	5.92	8748.2	7069.4	1678.9	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	6.00	9042.5	7329.6	1712.9	0.0	0.00
25YR-72HR	6.08	9340.0	7594.8	1745.1	0.0	0.00
25YR-72HR	6.17	9640.5	7863.7	1776.8	0.0	0.00
25YR-72HR	6.25	9944.1	8135.5	1808.5	0.0	0.00
25YR-72HR	6.33	10250.6	8410.1	1840.5	-0.0	-0.00
25YR-72HR	6.42	10560.1	8687.5	1872.7	-0.0	-0.00
25YR-72HR	6.50	10872.5	8967.5	1905.0	-0.0	-0.00
25YR-72HR	6.58	11187.7	9250.3	1937.3	-0.0	-0.00
25YR-72HR	6.67	11505.6	9535.8	1969.8	-0.0	-0.00
25YR-72HR	6.75	11826.2	9823.9	2002.3	-0.0	-0.00
25YR-72HR	6.83	12149.6	10114.6	2034.9	-0.0	-0.00
25YR-72HR	6.92	12475.4	10407.9	2067.6	-0.0	-0.00
25YR-72HR	7.00	12803.9	10703.5	2100.4	-0.0	-0.00
25YR-72HR	7.08	13134.9	11001.7	2133.2	0.0	0.00
25YR-72HR	7.17	13468.3	11302.2	2166.2	0.0	0.00
25YR-72HR	7.25	13804.2	11605.7	2198.5	0.0	0.00
25YR-72HR	7.33	14142.5	11914.2	2228.3	0.0	0.00
25YR-72HR	7.42	14483.0	12226.1	2256.9	0.0	0.00
25YR-72HR	7.50	14825.9	12540.8	2285.1	0.0	0.00
25YR-72HR	7.58	15171.0	12857.8	2313.2	0.0	0.00
25YR-72HR	7.67	15518.4	13177.1	2341.3	0.0	0.00
25YR-72HR	7.75	15867.9	13498.5	2369.4	0.0	0.00
25YR-72HR	7.83	16219.5	13822.0	2397.6	0.0	0.00
25YR-72HR	7.92	16573.3	14147.5	2425.7	0.0	0.00
25YR-72HR	8.00	16929.1	14475.2	2453.9	0.0	0.00
25YR-72HR	8.08	17286.9	14804.7	2482.2	0.0	0.00
25YR-72HR	8.10	17358.7	14870.9	2487.9	0.0	0.00
25YR-72HR	8.12	17430.6	14937.1	2493.5	0.0	0.00
25YR-72HR	8.13	17502.6	15003.4	2499.2	0.0	0.00
25YR-72HR	8.15	17574.6	15069.8	2504.8	0.0	0.00
25YR-72HR	8.17	17646.8	15136.3	2510.5	0.0	0.00
25YR-72HR	8.18	17719.0	15202.8	2516.2	0.0	0.00
25YR-72HR	8.20	17791.3	15269.4	2521.8	0.0	0.00
25YR-72HR	8.22	17863.6	15336.1	2527.5	0.0	0.00
25YR-72HR	8.23	17936.1	15402.9	2533.2	0.0	0.00
25YR-72HR	8.25	18008.6	15469.7	2538.9	0.0	0.00
25YR-72HR	8.27	18081.2	15536.6	2544.5	0.0	0.00
25YR-72HR	8.28	18153.8	15603.6	2550.2	0.0	0.00
25YR-72HR	8.30	18226.6	15670.7	2555.9	0.0	0.00
25YR-72HR	8.32	18299.4	15737.9	2561.6	0.0	0.00
25YR-72HR	8.33	18372.9	15805.7	2567.3	0.0	0.00
25YR-72HR	8.35	18445.9	15872.9	2572.9	0.0	0.00
25YR-72HR	8.37	18518.9	15940.3	2578.6	0.0	0.00
25YR-72HR	8.38	18592.1	16007.8	2584.3	0.0	0.00
25YR-72HR	8.40	18665.3	16075.3	2590.0	0.0	0.00
25YR-72HR	8.42	18738.6	16142.9	2595.7	0.0	0.00
25YR-72HR	8.43	18811.9	16210.5	2601.4	0.0	0.00
25YR-72HR	8.45	18885.3	16278.3	2607.1	0.0	0.00
25YR-72HR	8.47	18958.8	16346.1	2612.8	0.0	0.00
25YR-72HR	8.48	19032.4	16414.0	2618.5	0.0	0.00
25YR-72HR	8.50	19106.1	16481.9	2624.2	0.0	0.00
25YR-72HR	8.52	19179.8	16549.9	2629.9	0.0	0.00
25YR-72HR	8.53	19253.6	16618.0	2635.6	0.0	0.00
25YR-72HR	8.55	19327.5	16686.2	2641.3	0.0	0.00
25YR-72HR	8.57	19401.4	16754.4	2647.0	0.0	0.00
25YR-72HR	8.58	19475.4	16822.8	2652.6	0.0	0.00
25YR-72HR	8.60	19549.5	16891.4	2658.1	0.0	0.00
25YR-72HR	8.62	19623.7	16960.4	2663.3	0.0	0.00
25YR-72HR	8.63	19697.9	17029.6	2668.3	0.0	0.00
25YR-72HR	8.65	19772.2	17099.0	2673.2	0.0	0.00
25YR-72HR	8.67	19846.6	17168.7	2677.8	0.0	0.00
25YR-72HR	8.68	19921.0	17238.6	2682.4	0.0	0.00
25YR-72HR	8.70	19995.5	17308.7	2686.9	0.0	0.00
25YR-72HR	8.72	20070.1	17378.9	2691.2	0.0	0.00
25YR-72HR	8.73	20144.8	17449.3	2695.5	0.0	0.00
25YR-72HR	8.75	20219.5	17519.8	2699.7	0.0	0.00
25YR-72HR	8.77	20294.3	17590.5	2703.9	0.0	0.00
25YR-72HR	8.78	20369.2	17661.2	2708.0	0.0	0.00
25YR-72HR	8.80	20444.1	17732.1	2712.0	0.0	0.00
25YR-72HR	8.82	20519.1	17803.1	2716.1	0.0	0.00
25YR-72HR	8.83	20594.2	17874.1	2720.1	0.0	0.00
25YR-72HR	8.85	20669.4	17945.3	2724.1	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	8.87	20744.6	18016.5	2728.1	0.0	0.00
25YR-72HR	8.88	20819.9	18087.8	2732.0	0.0	0.00
25YR-72HR	8.90	20895.2	18159.2	2736.0	0.0	0.00
25YR-72HR	8.92	20970.6	18230.7	2739.9	0.0	0.00
25YR-72HR	8.93	21046.1	18302.2	2743.9	0.0	0.00
25YR-72HR	8.95	21121.7	18373.9	2747.8	0.0	0.00
25YR-72HR	8.97	21197.3	18445.5	2751.8	0.0	0.00
25YR-72HR	8.98	21273.0	18517.3	2755.7	0.0	0.00
25YR-72HR	9.00	21348.8	18589.1	2759.6	0.0	0.00
25YR-72HR	9.02	21424.6	18661.0	2763.6	0.0	0.00
25YR-72HR	9.03	21500.5	18733.0	2767.5	0.0	0.00
25YR-72HR	9.05	21576.5	18805.1	2771.4	0.0	0.00
25YR-72HR	9.07	21652.5	18877.2	2775.3	0.0	0.00
25YR-72HR	9.08	21728.6	18949.3	2779.3	0.0	0.00
25YR-72HR	9.10	21804.7	19021.6	2783.2	0.0	0.00
25YR-72HR	9.12	21881.0	19093.9	2787.1	0.0	0.00
25YR-72HR	9.13	21957.3	19166.2	2791.0	0.0	0.00
25YR-72HR	9.15	22033.6	19238.7	2794.9	0.0	0.00
25YR-72HR	9.17	22110.0	19311.2	2798.8	0.0	0.00
25YR-72HR	9.18	22186.5	19383.9	2802.7	0.0	0.00
25YR-72HR	9.20	22263.1	19456.6	2806.4	0.0	0.00
25YR-72HR	9.22	22339.7	19529.5	2810.2	0.0	0.00
25YR-72HR	9.23	22416.4	19602.5	2813.8	0.0	0.00
25YR-72HR	9.25	22493.1	19675.7	2817.4	0.0	0.00
25YR-72HR	9.27	22569.9	19749.0	2821.0	0.0	0.00
25YR-72HR	9.28	22646.8	19822.4	2824.4	0.0	0.00
25YR-72HR	9.30	22723.7	19895.9	2827.9	0.0	0.00
25YR-72HR	9.32	22800.7	19969.5	2831.3	0.0	0.00
25YR-72HR	9.33	22877.8	20043.2	2834.6	0.0	0.00
25YR-72HR	9.35	22954.9	20117.0	2838.0	0.0	0.00
25YR-72HR	9.37	23032.1	20190.9	2841.3	0.0	0.00
25YR-72HR	9.38	23109.4	20264.8	2844.5	0.0	0.00
25YR-72HR	9.40	23186.7	20338.9	2847.8	0.0	0.00
25YR-72HR	9.42	23264.0	20413.0	2851.1	0.0	0.00
25YR-72HR	9.43	23341.5	20487.2	2854.3	0.0	0.00
25YR-72HR	9.45	23419.0	20561.5	2857.5	0.0	0.00
25YR-72HR	9.47	23496.5	20635.8	2860.7	0.0	0.00
25YR-72HR	9.48	23574.2	20710.2	2863.9	0.0	0.00
25YR-72HR	9.50	23651.9	20784.7	2867.1	0.0	0.00
25YR-72HR	9.52	23729.6	20859.3	2870.3	0.0	0.00
25YR-72HR	9.53	23807.4	20933.9	2873.5	0.0	0.00
25YR-72HR	9.55	23885.3	21008.6	2876.7	0.0	0.00
25YR-72HR	9.57	23963.2	21083.3	2879.9	0.0	0.00
25YR-72HR	9.58	24041.2	21158.1	2883.1	0.0	0.00
25YR-72HR	9.60	24119.2	21233.0	2886.3	0.0	0.00
25YR-72HR	9.62	24197.3	21307.9	2889.5	0.0	0.00
25YR-72HR	9.63	24275.5	21382.9	2892.6	0.0	0.00
25YR-72HR	9.65	24353.7	21457.9	2895.8	0.0	0.00
25YR-72HR	9.67	24432.0	21533.0	2899.0	0.0	0.00
25YR-72HR	9.68	24510.4	21608.2	2902.2	0.0	0.00
25YR-72HR	9.70	24588.8	21683.4	2905.4	0.0	0.00
25YR-72HR	9.72	24667.2	21758.7	2908.5	0.0	0.00
25YR-72HR	9.73	24745.7	21834.0	2911.7	0.0	0.00
25YR-72HR	9.75	24824.3	21909.4	2914.9	0.0	0.00
25YR-72HR	9.77	24903.0	21984.9	2918.1	0.0	0.00
25YR-72HR	9.78	24981.7	22060.4	2921.2	0.0	0.00
25YR-72HR	9.80	25060.4	22136.0	2924.4	0.0	0.00
25YR-72HR	9.82	25139.2	22211.6	2927.6	0.0	0.00
25YR-72HR	9.83	25218.1	22287.3	2930.8	0.0	0.00
25YR-72HR	9.85	25297.0	22363.1	2933.9	0.0	0.00
25YR-72HR	9.87	25376.0	22438.9	2937.1	0.0	0.00
25YR-72HR	9.88	25455.1	22514.8	2940.3	0.0	0.00
25YR-72HR	9.90	25534.1	22590.7	2943.4	0.0	0.00
25YR-72HR	9.92	25613.3	22666.7	2946.6	0.0	0.00
25YR-72HR	9.93	25692.5	22742.7	2949.8	0.0	0.00
25YR-72HR	9.95	25771.8	22818.8	2953.0	0.0	0.00
25YR-72HR	9.97	25851.1	22895.0	2956.1	0.0	0.00
25YR-72HR	9.98	25930.5	22971.2	2959.3	0.0	0.00
25YR-72HR	10.00	26009.9	23047.5	2962.5	0.0	0.00
25YR-72HR	10.02	26089.4	23123.8	2965.6	0.0	0.00
25YR-72HR	10.03	26169.0	23200.2	2968.8	0.0	0.00
25YR-72HR	10.05	26248.6	23276.6	2972.0	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	10.07	26328.2	23353.1	2975.2	0.0	0.00
25YR-72HR	10.08	26407.9	23429.6	2978.3	0.0	0.00
25YR-72HR	10.10	26487.7	23506.2	2981.5	0.0	0.00
25YR-72HR	10.12	26567.5	23582.9	2984.7	0.0	0.00
25YR-72HR	10.13	26647.4	23659.6	2987.8	0.0	0.00
25YR-72HR	10.15	26727.3	23736.4	2991.0	0.0	0.00
25YR-72HR	10.17	26807.3	23813.2	2994.2	0.0	0.00
25YR-72HR	10.18	26887.4	23890.1	2997.3	0.0	0.00
25YR-72HR	10.20	26967.5	23967.0	3000.5	0.0	0.00
25YR-72HR	10.22	27047.6	24044.0	3003.7	0.0	0.00
25YR-72HR	10.23	27127.8	24121.0	3006.8	0.0	0.00
25YR-72HR	10.25	27208.1	24198.1	3010.0	0.0	0.00
25YR-72HR	10.27	27288.4	24275.2	3013.2	0.0	0.00
25YR-72HR	10.28	27368.8	24352.4	3016.3	0.0	0.00
25YR-72HR	10.30	27449.2	24429.7	3019.5	0.0	0.00
25YR-72HR	10.32	27529.6	24506.9	3022.7	0.0	0.00
25YR-72HR	10.33	27610.2	24584.3	3025.9	0.0	0.00
25YR-72HR	10.35	27690.7	24661.7	3029.0	0.0	0.00
25YR-72HR	10.37	27771.4	24739.2	3032.2	0.0	0.00
25YR-72HR	10.38	27852.0	24816.7	3035.4	0.0	0.00
25YR-72HR	10.40	27932.8	24894.2	3038.5	0.0	0.00
25YR-72HR	10.42	28013.6	24971.8	3041.7	0.0	0.00
25YR-72HR	10.43	28094.4	25049.5	3044.9	0.0	0.00
25YR-72HR	10.45	28175.3	25127.2	3048.1	0.0	0.00
25YR-72HR	10.47	28256.2	25205.0	3051.2	0.0	0.00
25YR-72HR	10.48	28337.2	25282.8	3054.4	0.0	0.00
25YR-72HR	10.50	28418.2	25360.7	3057.6	0.0	0.00
25YR-72HR	10.52	28499.3	25438.6	3060.8	0.0	0.00
25YR-72HR	10.53	28580.5	25516.6	3063.9	0.0	0.00
25YR-72HR	10.55	28661.7	25594.6	3067.1	0.0	0.00
25YR-72HR	10.57	28742.9	25672.6	3070.3	0.0	0.00
25YR-72HR	10.58	28824.2	25750.8	3073.4	0.0	0.00
25YR-72HR	10.60	28905.6	25828.9	3076.6	0.0	0.00
25YR-72HR	10.62	28987.0	25907.2	3079.8	0.0	0.00
25YR-72HR	10.63	29068.4	25985.4	3083.0	0.0	0.00
25YR-72HR	10.65	29149.9	26063.8	3086.1	0.0	0.00
25YR-72HR	10.67	29231.4	26142.1	3089.3	0.0	0.00
25YR-72HR	10.68	29313.0	26220.6	3092.5	0.0	0.00
25YR-72HR	10.70	29394.7	26299.0	3095.6	0.0	0.00
25YR-72HR	10.72	29476.4	26377.6	3098.8	0.0	0.00
25YR-72HR	10.73	29558.1	26456.2	3102.0	0.0	0.00
25YR-72HR	10.75	29639.9	26534.8	3105.1	0.0	0.00
25YR-72HR	10.77	29721.7	26613.5	3108.2	0.0	0.00
25YR-72HR	10.78	29803.6	26692.3	3111.4	0.0	0.00
25YR-72HR	10.80	29885.6	26771.1	3114.4	0.0	0.00
25YR-72HR	10.82	29967.6	26850.1	3117.5	0.0	0.00
25YR-72HR	10.83	30049.6	26929.1	3120.5	0.0	0.00
25YR-72HR	10.85	30131.7	27008.3	3123.4	0.0	0.00
25YR-72HR	10.87	30213.8	27087.6	3126.2	0.0	0.00
25YR-72HR	10.88	30296.0	27167.0	3129.0	0.0	0.00
25YR-72HR	10.90	30378.2	27246.5	3131.7	0.0	0.00
25YR-72HR	10.92	30460.5	27326.2	3134.3	0.0	0.00
25YR-72HR	10.93	30542.8	27406.0	3136.8	0.0	0.00
25YR-72HR	10.95	30625.2	27486.0	3139.2	0.0	0.00
25YR-72HR	10.97	30707.6	27566.1	3141.5	0.0	0.00
25YR-72HR	10.98	30790.1	27646.4	3143.7	0.0	0.00
25YR-72HR	11.00	30872.6	27726.8	3145.8	0.0	0.00
25YR-72HR	11.02	30955.1	27807.3	3147.8	0.0	0.00
25YR-72HR	11.03	31037.7	27888.0	3149.7	0.0	0.00
25YR-72HR	11.05	31120.4	27968.8	3151.6	0.0	0.00
25YR-72HR	11.07	31203.1	28049.7	3153.4	0.0	0.00
25YR-72HR	11.08	31285.8	28130.8	3155.1	0.0	0.00
25YR-72HR	11.10	31368.6	28211.9	3156.7	0.0	0.00
25YR-72HR	11.12	31451.5	28293.2	3158.3	0.0	0.00
25YR-72HR	11.13	31534.4	28374.5	3159.8	0.0	0.00
25YR-72HR	11.15	31617.3	28456.0	3161.3	0.0	0.00
25YR-72HR	11.17	31700.3	28537.5	3162.8	0.0	0.00
25YR-72HR	11.18	31783.3	28619.1	3164.2	0.0	0.00
25YR-72HR	11.20	31866.3	28700.8	3165.6	0.0	0.00
25YR-72HR	11.22	31949.5	28782.5	3166.9	0.0	0.00
25YR-72HR	11.23	32032.6	28864.4	3168.2	0.0	0.00
25YR-72HR	11.25	32115.8	28946.3	3169.5	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	11.27	32199.1	29028.2	3170.8	0.0	0.00
25YR-72HR	11.28	32282.4	29110.3	3172.1	0.0	0.00
25YR-72HR	11.30	32365.7	29192.4	3173.3	0.0	0.00
25YR-72HR	11.32	32449.1	29274.5	3174.6	0.0	0.00
25YR-72HR	11.33	32532.5	29356.7	3175.8	0.0	0.00
25YR-72HR	11.35	32616.0	29439.0	3177.0	0.0	0.00
25YR-72HR	11.37	32699.5	29521.3	3178.2	0.0	0.00
25YR-72HR	11.38	32783.0	29603.7	3179.4	0.0	0.00
25YR-72HR	11.40	32866.6	29686.1	3180.6	0.0	0.00
25YR-72HR	11.42	32950.3	29768.6	3181.7	0.0	0.00
25YR-72HR	11.43	33034.0	29851.1	3182.9	0.0	0.00
25YR-72HR	11.45	33117.7	29933.6	3184.1	0.0	0.00
25YR-72HR	11.47	33201.5	30016.2	3185.3	0.0	0.00
25YR-72HR	11.48	33285.3	30098.9	3186.4	0.0	0.00
25YR-72HR	11.50	33369.2	30181.6	3187.6	0.0	0.00
25YR-72HR	11.52	33453.1	30264.4	3188.7	0.0	0.00
25YR-72HR	11.53	33537.0	30347.1	3189.9	0.0	0.00
25YR-72HR	11.55	33621.0	30430.0	3191.0	0.0	0.00
25YR-72HR	11.57	33705.1	30512.9	3192.2	0.0	0.00
25YR-72HR	11.58	33789.2	30595.8	3193.4	0.0	0.00
25YR-72HR	11.60	33873.3	30678.8	3194.5	0.0	0.00
25YR-72HR	11.62	33957.4	30761.8	3195.6	0.0	0.00
25YR-72HR	11.63	34041.6	30844.9	3196.8	0.0	0.00
25YR-72HR	11.65	34125.9	30928.0	3197.9	0.0	0.00
25YR-72HR	11.67	34210.2	31011.1	3199.1	0.0	0.00
25YR-72HR	11.68	34294.5	31094.3	3200.2	0.0	0.00
25YR-72HR	11.70	34378.9	31177.6	3201.3	0.0	0.00
25YR-72HR	11.72	34463.3	31260.8	3202.5	0.0	0.00
25YR-72HR	11.73	34547.8	31344.2	3203.6	0.0	0.00
25YR-72HR	11.75	34632.3	31427.5	3204.8	0.0	0.00
25YR-72HR	11.77	34716.8	31510.9	3205.9	0.0	0.00
25YR-72HR	11.78	34801.4	31594.4	3207.0	0.0	0.00
25YR-72HR	11.80	34886.0	31677.9	3208.2	0.0	0.00
25YR-72HR	11.82	34970.7	31761.4	3209.3	0.0	0.00
25YR-72HR	11.83	35055.4	31845.0	3210.4	0.0	0.00
25YR-72HR	11.85	35140.2	31928.6	3211.6	0.0	0.00
25YR-72HR	11.87	35224.9	32012.3	3212.7	0.0	0.00
25YR-72HR	11.88	35309.8	32096.0	3213.8	0.0	0.00
25YR-72HR	11.90	35394.6	32179.7	3214.9	0.0	0.00
25YR-72HR	11.92	35479.6	32263.5	3216.1	0.0	0.00
25YR-72HR	11.93	35564.5	32347.3	3217.2	0.0	0.00
25YR-72HR	11.95	35649.5	32431.2	3218.3	0.0	0.00
25YR-72HR	11.97	35734.5	32515.1	3219.4	0.0	0.00
25YR-72HR	11.98	35819.6	32599.0	3220.6	0.0	0.00
25YR-72HR	12.00	35904.7	32683.0	3221.7	0.0	0.00
25YR-72HR	12.02	35989.9	32767.1	3222.8	0.0	0.00
25YR-72HR	12.03	36075.1	32851.1	3223.9	0.0	0.00
25YR-72HR	12.05	36160.3	32935.3	3225.0	0.0	0.00
25YR-72HR	12.07	36245.6	33019.4	3226.2	0.0	0.00
25YR-72HR	12.08	36330.9	33103.6	3227.3	0.0	0.00
25YR-72HR	12.10	36416.2	33187.8	3228.4	0.0	0.00
25YR-72HR	12.12	36501.6	33272.1	3229.5	0.0	0.00
25YR-72HR	12.13	36587.0	33356.4	3230.6	0.0	0.00
25YR-72HR	12.15	36672.5	33440.8	3231.7	0.0	0.00
25YR-72HR	12.17	36758.0	33525.2	3232.8	0.0	0.00
25YR-72HR	12.18	36843.6	33609.6	3234.0	0.0	0.00
25YR-72HR	12.20	36929.1	33694.1	3235.1	0.0	0.00
25YR-72HR	12.22	37014.8	33778.6	3236.2	0.0	0.00
25YR-72HR	12.23	37100.4	33863.1	3237.3	0.0	0.00
25YR-72HR	12.25	37186.1	33947.7	3238.4	0.0	0.00
25YR-72HR	12.27	37271.9	34032.3	3239.5	0.0	0.00
25YR-72HR	12.28	37357.6	34117.0	3240.7	0.0	0.00
25YR-72HR	12.30	37443.5	34201.7	3241.8	0.0	0.00
25YR-72HR	12.32	37529.3	34286.4	3242.9	0.0	0.00
25YR-72HR	12.33	37615.2	34371.2	3244.0	0.0	0.00
25YR-72HR	12.35	37701.1	34456.0	3245.1	0.0	0.00
25YR-72HR	12.37	37787.1	34540.9	3246.2	0.0	0.00
25YR-72HR	12.38	37873.1	34625.8	3247.3	0.0	0.00
25YR-72HR	12.40	37959.1	34710.7	3248.4	0.0	0.00
25YR-72HR	12.42	38045.2	34795.7	3249.5	0.0	0.00
25YR-72HR	12.43	38131.3	34880.7	3250.6	0.0	0.00
25YR-72HR	12.45	38217.5	34965.7	3251.7	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	12.47	38303.7	35050.8	3252.9	0.0	0.00
25YR-72HR	12.48	38389.9	35135.9	3254.0	0.0	0.00
25YR-72HR	12.50	38476.2	35221.1	3255.1	0.0	0.00
25YR-72HR	12.52	38562.5	35306.3	3256.2	0.0	0.00
25YR-72HR	12.53	38648.8	35391.5	3257.3	0.0	0.00
25YR-72HR	12.55	38735.2	35476.8	3258.4	-0.0	-0.00
25YR-72HR	12.57	38821.6	35562.1	3259.5	-0.0	-0.00
25YR-72HR	12.58	38908.1	35647.5	3260.6	0.0	0.00
25YR-72HR	12.60	38994.5	35732.9	3261.7	-0.0	-0.00
25YR-72HR	12.62	39081.1	35818.3	3262.8	-0.0	-0.00
25YR-72HR	12.63	39167.6	35903.7	3263.9	0.0	0.00
25YR-72HR	12.65	39254.2	35989.2	3265.0	0.0	0.00
25YR-72HR	12.67	39340.8	36074.8	3266.1	-0.0	-0.00
25YR-72HR	12.68	39427.5	36160.3	3267.2	0.0	0.00
25YR-72HR	12.70	39514.2	36245.9	3268.3	-0.0	-0.00
25YR-72HR	12.72	39600.9	36331.6	3269.4	-0.0	-0.00
25YR-72HR	12.73	39687.7	36417.3	3270.4	-0.0	-0.00
25YR-72HR	12.75	39774.5	36503.0	3271.5	-0.0	-0.00
25YR-72HR	12.77	39861.4	36588.7	3272.6	0.0	0.00
25YR-72HR	12.78	39948.3	36674.5	3273.7	0.0	0.00
25YR-72HR	12.80	40035.2	36760.4	3274.8	0.0	0.00
25YR-72HR	12.82	40122.1	36846.2	3275.9	0.0	0.00
25YR-72HR	12.83	40209.1	36932.1	3277.0	0.0	0.00
25YR-72HR	12.85	40296.1	37018.0	3278.1	0.0	0.00
25YR-72HR	12.87	40383.2	37104.0	3279.2	0.0	0.00
25YR-72HR	12.88	40470.3	37190.0	3280.3	0.0	0.00
25YR-72HR	12.90	40557.4	37276.1	3281.3	0.0	0.00
25YR-72HR	12.92	40644.5	37362.1	3282.4	0.0	0.00
25YR-72HR	12.93	40731.7	37448.2	3283.5	0.0	0.00
25YR-72HR	12.95	40819.0	37534.4	3284.6	0.0	0.00
25YR-72HR	12.97	40906.2	37620.6	3285.7	0.0	0.00
25YR-72HR	12.98	40993.5	37706.8	3286.7	0.0	0.00
25YR-72HR	13.00	41080.9	37793.0	3287.8	0.0	0.00
25YR-72HR	13.02	41168.2	37879.3	3288.9	0.0	0.00
25YR-72HR	13.03	41255.6	37965.7	3290.0	0.0	0.00
25YR-72HR	13.05	41343.1	38052.0	3291.1	0.0	0.00
25YR-72HR	13.07	41430.5	38138.4	3292.1	0.0	0.00
25YR-72HR	13.08	41518.0	38224.8	3293.2	0.0	0.00
25YR-72HR	13.10	41605.6	38311.3	3294.3	0.0	0.00
25YR-72HR	13.12	41693.2	38397.8	3295.4	0.0	0.00
25YR-72HR	13.13	41780.8	38484.3	3296.4	0.0	0.00
25YR-72HR	13.15	41868.4	38570.9	3297.5	0.0	0.00
25YR-72HR	13.17	41956.1	38657.5	3298.6	0.0	0.00
25YR-72HR	13.18	42043.8	38744.1	3299.7	0.0	0.00
25YR-72HR	13.20	42131.5	38830.8	3300.7	0.0	0.00
25YR-72HR	13.22	42219.3	38917.5	3301.8	0.0	0.00
25YR-72HR	13.23	42307.1	39004.2	3302.9	0.0	0.00
25YR-72HR	13.25	42394.9	39091.0	3303.9	0.0	0.00
25YR-72HR	13.27	42482.8	39177.8	3305.0	0.0	0.00
25YR-72HR	13.28	42570.7	39264.6	3306.1	0.0	0.00
25YR-72HR	13.30	42658.6	39351.5	3307.1	0.0	0.00
25YR-72HR	13.32	42746.6	39438.4	3308.2	0.0	0.00
25YR-72HR	13.33	42834.6	39525.3	3309.3	0.0	0.00
25YR-72HR	13.35	42922.6	39612.3	3310.3	0.0	0.00
25YR-72HR	13.37	43010.7	39699.3	3311.4	0.0	0.00
25YR-72HR	13.38	43098.8	39786.3	3312.5	0.0	0.00
25YR-72HR	13.40	43186.9	39873.4	3313.5	0.0	0.00
25YR-72HR	13.42	43275.1	39960.5	3314.6	0.0	0.00
25YR-72HR	13.43	43363.3	40047.6	3315.6	0.0	0.00
25YR-72HR	13.45	43451.5	40134.8	3316.7	0.0	0.00
25YR-72HR	13.47	43539.8	40222.0	3317.8	0.0	0.00
25YR-72HR	13.48	43628.1	40309.2	3318.8	0.0	0.00
25YR-72HR	13.50	43716.4	40396.5	3319.9	0.0	0.00
25YR-72HR	13.52	43804.7	40483.8	3320.9	0.0	0.00
25YR-72HR	13.53	43893.1	40571.1	3322.0	0.0	0.00
25YR-72HR	13.55	43981.5	40658.5	3323.1	0.0	0.00
25YR-72HR	13.57	44070.0	40745.9	3324.1	0.0	0.00
25YR-72HR	13.58	44158.5	40833.3	3325.2	0.0	0.00
25YR-72HR	13.60	44247.0	40920.7	3326.2	0.0	0.00
25YR-72HR	13.62	44335.5	41008.2	3327.3	0.0	0.00
25YR-72HR	13.63	44424.1	41095.7	3328.4	0.0	0.00
25YR-72HR	13.65	44512.7	41183.3	3329.4	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	13.67	44601.3	41270.9	3330.5	0.0	0.00
25YR-72HR	13.68	44690.0	41358.5	3331.6	0.0	0.00
25YR-72HR	13.70	44778.7	41446.1	3332.6	0.0	0.00
25YR-72HR	13.72	44867.4	41533.8	3333.7	0.0	0.00
25YR-72HR	13.73	44956.2	41621.5	3334.7	0.0	0.00
25YR-72HR	13.75	45045.0	41709.2	3335.8	0.0	0.00
25YR-72HR	13.77	45133.8	41796.9	3336.9	0.0	0.00
25YR-72HR	13.78	45222.7	41884.7	3337.9	0.0	0.00
25YR-72HR	13.80	45311.6	41972.6	3339.0	0.0	0.00
25YR-72HR	13.82	45400.5	42060.4	3340.1	0.0	0.00
25YR-72HR	13.83	45489.4	42148.3	3341.1	0.0	0.00
25YR-72HR	13.85	45578.4	42236.2	3342.2	0.0	0.00
25YR-72HR	13.87	45667.4	42324.2	3343.2	0.0	0.00
25YR-72HR	13.88	45756.4	42412.2	3344.3	0.0	0.00
25YR-72HR	13.90	45845.5	42500.2	3345.3	0.0	0.00
25YR-72HR	13.92	45934.6	42588.2	3346.4	0.0	0.00
25YR-72HR	13.93	46023.7	42676.3	3347.4	0.0	0.00
25YR-72HR	13.95	46112.9	42764.4	3348.5	0.0	0.00
25YR-72HR	13.97	46202.1	42852.5	3349.5	0.0	0.00
25YR-72HR	13.98	46291.3	42940.7	3350.6	0.0	0.00
25YR-72HR	14.00	46380.5	43028.9	3351.6	0.0	0.00
25YR-72HR	14.02	46469.8	43117.1	3352.7	0.0	0.00
25YR-72HR	14.03	46559.1	43205.4	3353.7	0.0	0.00
25YR-72HR	14.05	46648.4	43293.7	3354.8	0.0	0.00
25YR-72HR	14.07	46737.8	43382.0	3355.8	0.0	0.00
25YR-72HR	14.08	46827.2	43470.3	3356.9	0.0	0.00
25YR-72HR	14.10	46916.6	43558.7	3357.9	0.0	0.00
25YR-72HR	14.12	47006.1	43647.1	3359.0	0.0	0.00
25YR-72HR	14.13	47095.5	43735.5	3360.0	0.0	0.00
25YR-72HR	14.15	47185.0	43824.0	3361.0	0.0	0.00
25YR-72HR	14.17	47274.6	43912.5	3362.1	0.0	0.00
25YR-72HR	14.18	47364.1	44001.0	3363.1	0.0	0.00
25YR-72HR	14.20	47453.7	44089.6	3364.2	0.0	0.00
25YR-72HR	14.22	47543.4	44178.2	3365.2	0.0	0.00
25YR-72HR	14.23	47633.0	44266.8	3366.2	0.0	0.00
25YR-72HR	14.25	47722.7	44355.4	3367.3	0.0	0.00
25YR-72HR	14.27	47812.4	44444.1	3368.3	0.0	0.00
25YR-72HR	14.28	47902.1	44532.8	3369.4	0.0	0.00
25YR-72HR	14.30	47991.9	44621.5	3370.4	0.0	0.00
25YR-72HR	14.32	48081.7	44710.3	3371.5	0.0	0.00
25YR-72HR	14.33	48171.5	44799.0	3372.5	0.0	0.00
25YR-72HR	14.35	48261.4	44887.8	3373.5	0.0	0.00
25YR-72HR	14.37	48351.3	44976.7	3374.6	0.0	0.00
25YR-72HR	14.38	48441.2	45065.6	3375.6	0.0	0.00
25YR-72HR	14.40	48531.1	45154.5	3376.7	0.0	0.00
25YR-72HR	14.42	48621.1	45243.4	3377.7	0.0	0.00
25YR-72HR	14.43	48711.1	45332.3	3378.7	0.0	0.00
25YR-72HR	14.45	48801.1	45421.3	3379.7	0.0	0.00
25YR-72HR	14.47	48891.1	45510.3	3380.8	0.0	0.00
25YR-72HR	14.48	48981.2	45599.4	3381.8	0.0	0.00
25YR-72HR	14.50	49071.3	45688.5	3382.8	0.0	0.00
25YR-72HR	14.52	49161.4	45777.6	3383.9	0.0	0.00
25YR-72HR	14.53	49251.6	45866.7	3384.9	0.0	0.00
25YR-72HR	14.55	49341.8	45955.8	3385.9	0.0	0.00
25YR-72HR	14.57	49432.0	46045.0	3387.0	0.0	0.00
25YR-72HR	14.58	49522.2	46134.2	3388.0	0.0	0.00
25YR-72HR	14.60	49612.5	46223.5	3389.0	0.0	0.00
25YR-72HR	14.62	49702.8	46312.7	3390.1	0.0	0.00
25YR-72HR	14.63	49793.1	46402.0	3391.1	0.0	0.00
25YR-72HR	14.65	49883.5	46491.3	3392.1	0.0	0.00
25YR-72HR	14.67	49973.8	46580.7	3393.1	0.0	0.00
25YR-72HR	14.68	50064.2	46670.1	3394.2	0.0	0.00
25YR-72HR	14.70	50154.7	46759.5	3395.2	0.0	0.00
25YR-72HR	14.72	50245.1	46848.9	3396.2	0.0	0.00
25YR-72HR	14.73	50335.6	46938.4	3397.2	0.0	0.00
25YR-72HR	14.75	50426.1	47027.9	3398.2	0.0	0.00
25YR-72HR	14.77	50516.7	47117.4	3399.3	0.0	0.00
25YR-72HR	14.78	50607.2	47206.9	3400.3	0.0	0.00
25YR-72HR	14.80	50697.8	47296.5	3401.3	0.0	0.00
25YR-72HR	14.82	50788.4	47386.1	3402.3	0.0	0.00
25YR-72HR	14.83	50879.1	47475.7	3403.4	0.0	0.00
25YR-72HR	14.85	50969.7	47565.3	3404.4	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	14.87	51060.4	47655.0	3405.4	0.0	0.00
25YR-72HR	14.88	51151.1	47744.7	3406.4	0.0	0.00
25YR-72HR	14.90	51241.9	47834.4	3407.5	0.0	0.00
25YR-72HR	14.92	51332.7	47924.2	3408.5	0.0	0.00
25YR-72HR	14.93	51423.5	48014.0	3409.5	0.0	0.00
25YR-72HR	14.95	51514.3	48103.8	3410.5	0.0	0.00
25YR-72HR	14.97	51605.1	48193.6	3411.5	0.0	0.00
25YR-72HR	14.98	51696.0	48283.5	3412.6	0.0	0.00
25YR-72HR	15.00	51786.9	48373.3	3413.6	0.0	0.00
25YR-72HR	15.02	51877.9	48463.3	3414.6	0.0	0.00
25YR-72HR	15.03	51968.8	48553.2	3415.6	0.0	0.00
25YR-72HR	15.05	52059.8	48643.2	3416.6	0.0	0.00
25YR-72HR	15.07	52150.8	48733.2	3417.6	0.0	0.00
25YR-72HR	15.08	52241.8	48823.2	3418.7	0.0	0.00
25YR-72HR	15.10	52332.9	48913.2	3419.7	0.0	0.00
25YR-72HR	15.12	52424.0	49003.3	3420.7	0.0	0.00
25YR-72HR	15.13	52515.1	49093.4	3421.7	0.0	0.00
25YR-72HR	15.15	52606.2	49183.5	3422.7	0.0	0.00
25YR-72HR	15.17	52697.4	49273.6	3423.7	0.0	0.00
25YR-72HR	15.18	52788.5	49363.8	3424.7	0.0	0.00
25YR-72HR	15.20	52879.8	49454.0	3425.7	0.0	0.00
25YR-72HR	15.22	52971.0	49544.2	3426.8	0.0	0.00
25YR-72HR	15.23	53062.3	49634.5	3427.8	0.0	0.00
25YR-72HR	15.25	53153.5	49724.8	3428.8	0.0	0.00
25YR-72HR	15.27	53244.8	49815.1	3429.8	0.0	0.00
25YR-72HR	15.28	53336.2	49905.4	3430.8	0.0	0.00
25YR-72HR	15.30	53427.5	49995.8	3431.8	0.0	0.00
25YR-72HR	15.32	53518.9	50086.1	3432.8	0.0	0.00
25YR-72HR	15.33	53610.3	50176.5	3433.8	0.0	0.00
25YR-72HR	15.35	53701.8	50267.0	3434.8	0.0	0.00
25YR-72HR	15.37	53793.2	50357.4	3435.8	0.0	0.00
25YR-72HR	15.38	53884.7	50447.9	3436.8	0.0	0.00
25YR-72HR	15.40	53976.2	50538.4	3437.8	0.0	0.00
25YR-72HR	15.42	54067.7	50628.9	3438.8	0.0	0.00
25YR-72HR	15.43	54159.3	50719.5	3439.8	0.0	0.00
25YR-72HR	15.45	54250.9	50810.0	3440.8	0.0	0.00
25YR-72HR	15.47	54342.5	50900.6	3441.8	0.0	0.00
25YR-72HR	15.48	54434.1	50991.2	3442.9	0.0	0.00
25YR-72HR	15.50	54525.8	51081.9	3443.9	0.0	0.00
25YR-72HR	15.52	54617.4	51172.6	3444.9	0.0	0.00
25YR-72HR	15.53	54709.1	51263.2	3445.9	0.0	0.00
25YR-72HR	15.55	54800.9	51354.0	3446.9	0.0	0.00
25YR-72HR	15.57	54892.6	51444.7	3447.9	0.0	0.00
25YR-72HR	15.58	54984.4	51535.5	3448.9	0.0	0.00
25YR-72HR	15.60	55076.2	51626.2	3449.9	0.0	0.00
25YR-72HR	15.62	55168.0	51717.0	3450.9	0.0	0.00
25YR-72HR	15.63	55259.8	51807.9	3452.0	0.0	0.00
25YR-72HR	15.65	55351.7	51898.7	3453.0	0.0	0.00
25YR-72HR	15.67	55443.6	51989.6	3454.0	0.0	0.00
25YR-72HR	15.68	55535.5	52080.5	3455.0	0.0	0.00
25YR-72HR	15.70	55627.4	52171.4	3456.0	0.0	0.00
25YR-72HR	15.72	55719.4	52262.4	3457.0	0.0	0.00
25YR-72HR	15.73	55811.4	52353.3	3458.0	0.0	0.00
25YR-72HR	15.75	55903.4	52444.3	3459.0	0.0	0.00
25YR-72HR	15.77	55995.4	52535.4	3460.1	0.0	0.00
25YR-72HR	15.78	56087.5	52626.4	3461.1	0.0	0.00
25YR-72HR	15.80	56179.6	52717.5	3462.1	0.0	0.00
25YR-72HR	15.82	56271.7	52808.6	3463.1	0.0	0.00
25YR-72HR	15.83	56363.8	52899.7	3464.1	0.0	0.00
25YR-72HR	15.85	56455.9	52990.8	3465.1	0.0	0.00
25YR-72HR	15.87	56548.1	53082.0	3466.1	0.0	0.00
25YR-72HR	15.88	56640.3	53173.2	3467.1	0.0	0.00
25YR-72HR	15.90	56732.5	53264.4	3468.1	0.0	0.00
25YR-72HR	15.92	56824.7	53355.6	3469.1	0.0	0.00
25YR-72HR	15.93	56917.0	53446.9	3470.1	0.0	0.00
25YR-72HR	15.95	57009.3	53538.2	3471.1	0.0	0.00
25YR-72HR	15.97	57101.6	53629.5	3472.1	0.0	0.00
25YR-72HR	15.98	57193.9	53720.8	3473.1	0.0	0.00
25YR-72HR	16.00	57286.3	53812.1	3474.2	0.0	0.00
25YR-72HR	16.08	57748.4	54269.2	3479.2	0.0	0.00
25YR-72HR	16.17	58211.0	54726.8	3484.2	0.0	0.00
25YR-72HR	16.25	58674.3	55185.0	3489.2	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	16.33	59138.0	55643.8	3494.2	0.0	0.00
25YR-72HR	16.42	59602.3	56103.1	3499.2	0.0	0.00
25YR-72HR	16.50	60067.2	56563.0	3504.2	0.0	0.00
25YR-72HR	16.58	60532.5	57023.3	3509.2	0.0	0.00
25YR-72HR	16.67	60998.4	57484.3	3514.1	0.0	0.00
25YR-72HR	16.75	61464.8	57945.8	3519.1	0.0	0.00
25YR-72HR	16.83	61931.7	58407.7	3524.0	0.0	0.00
25YR-72HR	16.92	62399.2	58870.2	3528.9	0.0	0.00
25YR-72HR	17.00	62867.1	59333.2	3533.9	0.0	0.00
25YR-72HR	17.08	63335.5	59796.8	3538.7	0.0	0.00
25YR-72HR	17.17	63804.5	60260.9	3543.6	0.0	0.00
25YR-72HR	17.25	64273.9	60725.4	3548.5	0.0	0.00
25YR-72HR	17.33	64743.8	61190.4	3553.3	0.0	0.00
25YR-72HR	17.42	65214.1	61655.9	3558.2	0.0	0.00
25YR-72HR	17.50	65685.0	62121.9	3563.0	0.0	0.00
25YR-72HR	17.58	66156.3	62588.4	3567.9	0.0	0.00
25YR-72HR	17.67	66628.1	63055.4	3572.7	0.0	0.00
25YR-72HR	17.75	67100.3	63522.8	3577.5	0.0	0.00
25YR-72HR	17.83	67573.0	63990.7	3582.3	0.0	0.00
25YR-72HR	17.92	68046.2	64459.0	3587.1	0.0	0.00
25YR-72HR	18.00	68519.7	64927.8	3591.9	0.0	0.00
25YR-72HR	18.08	68993.8	65397.1	3596.7	0.0	0.00
25YR-72HR	18.17	69468.2	65866.8	3601.5	0.0	0.00
25YR-72HR	18.25	69943.1	66336.9	3606.2	0.0	0.00
25YR-72HR	18.33	70418.5	66807.5	3611.0	0.0	0.00
25YR-72HR	18.42	70894.2	67278.4	3615.8	0.0	0.00
25YR-72HR	18.50	71370.4	67749.8	3620.6	0.0	0.00
25YR-72HR	18.58	71847.0	68221.6	3625.4	0.0	0.00
25YR-72HR	18.67	72324.0	68693.8	3630.2	0.0	0.00
25YR-72HR	18.75	72801.4	69166.4	3635.0	0.0	0.00
25YR-72HR	18.83	73279.2	69639.4	3639.8	0.0	0.00
25YR-72HR	18.92	73757.4	70112.9	3644.6	0.0	0.00
25YR-72HR	19.00	74236.1	70586.7	3649.3	0.0	0.00
25YR-72HR	19.08	74715.1	71061.0	3654.1	0.0	0.00
25YR-72HR	19.17	75194.5	71535.6	3658.8	0.0	0.00
25YR-72HR	19.25	75674.2	72010.7	3663.6	0.0	0.00
25YR-72HR	19.33	76154.4	72486.1	3668.3	0.0	0.00
25YR-72HR	19.42	76634.9	72961.9	3673.0	0.0	0.00
25YR-72HR	19.50	77115.9	73438.1	3677.8	0.0	0.00
25YR-72HR	19.58	77597.2	73914.7	3682.5	0.0	0.00
25YR-72HR	19.67	78078.8	74391.7	3687.2	0.0	0.00
25YR-72HR	19.75	78560.8	74869.0	3691.9	0.0	0.00
25YR-72HR	19.83	79043.2	75346.6	3696.6	0.0	0.00
25YR-72HR	19.92	79526.0	75824.7	3701.3	0.0	0.00
25YR-72HR	20.00	80009.1	76303.1	3706.0	0.0	0.00
25YR-72HR	20.08	80492.5	76781.8	3710.7	0.0	0.00
25YR-72HR	20.17	80976.3	77260.9	3715.4	0.0	0.00
25YR-72HR	20.25	81460.5	77740.4	3720.1	0.0	0.00
25YR-72HR	20.33	81945.0	78220.2	3724.7	0.0	0.00
25YR-72HR	20.42	82429.8	78700.4	3729.4	0.0	0.00
25YR-72HR	20.50	82915.0	79180.9	3734.1	0.0	0.00
25YR-72HR	20.58	83400.5	79661.7	3738.7	0.0	0.00
25YR-72HR	20.67	83886.3	80142.9	3743.4	0.0	0.00
25YR-72HR	20.75	84372.4	80624.4	3748.1	0.0	0.00
25YR-72HR	20.83	84858.9	81106.2	3752.7	0.0	0.00
25YR-72HR	20.92	85345.7	81588.4	3757.3	0.0	0.00
25YR-72HR	21.00	85832.9	82070.9	3762.0	0.0	0.00
25YR-72HR	21.08	86320.3	82553.7	3766.6	0.0	0.00
25YR-72HR	21.17	86808.1	83036.8	3771.3	0.0	0.00
25YR-72HR	21.25	87296.2	83520.2	3775.9	0.0	0.00
25YR-72HR	21.33	87784.5	84004.0	3780.6	0.0	0.00
25YR-72HR	21.42	88273.2	84488.0	3785.2	0.0	0.00
25YR-72HR	21.50	88762.2	84972.4	3789.9	0.0	0.00
25YR-72HR	21.58	89251.5	85457.1	3794.5	0.0	0.00
25YR-72HR	21.67	89741.1	85942.0	3799.1	0.0	0.00
25YR-72HR	21.75	90231.0	86427.3	3803.7	0.0	0.00
25YR-72HR	21.83	90721.2	86912.9	3808.4	0.0	0.00
25YR-72HR	21.92	91211.7	87398.8	3813.0	0.0	0.00
25YR-72HR	22.00	91702.5	87884.9	3817.6	0.0	0.00
25YR-72HR	22.08	92193.6	88371.4	3822.2	0.0	0.00
25YR-72HR	22.17	92684.9	88858.1	3826.8	0.0	0.00
25YR-72HR	22.25	93176.5	89345.1	3831.5	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	22.33	93668.5	89832.4	3836.1	0.0	0.00
25YR-72HR	22.42	94160.6	90320.0	3840.7	0.0	0.00
25YR-72HR	22.50	94653.1	90807.8	3845.3	0.0	0.00
25YR-72HR	22.58	95145.9	91296.0	3849.9	0.0	0.00
25YR-72HR	22.67	95638.9	91784.4	3854.5	0.0	0.00
25YR-72HR	22.75	96132.1	92273.1	3859.1	0.0	0.00
25YR-72HR	22.83	96625.7	92762.0	3863.7	0.0	0.00
25YR-72HR	22.92	97119.5	93251.2	3868.3	0.0	0.00
25YR-72HR	23.00	97613.6	93740.6	3872.9	0.0	0.00
25YR-72HR	23.08	98107.9	94230.3	3877.6	0.0	0.00
25YR-72HR	23.17	98602.5	94720.3	3882.2	0.0	0.00
25YR-72HR	23.25	99097.4	95210.5	3886.9	0.0	0.00
25YR-72HR	23.33	99592.5	95701.0	3891.5	0.0	0.00
25YR-72HR	23.42	100087.8	96191.7	3896.2	0.0	0.00
25YR-72HR	23.50	100583.4	96682.6	3900.8	0.0	0.00
25YR-72HR	23.58	101079.3	97173.8	3905.5	0.0	0.00
25YR-72HR	23.67	101575.4	97665.2	3910.1	0.0	0.00
25YR-72HR	23.75	102071.7	98156.9	3914.8	0.0	0.00
25YR-72HR	23.83	102568.4	98648.9	3919.5	0.0	0.00
25YR-72HR	23.92	103065.3	99141.1	3924.2	0.0	0.00
25YR-72HR	24.00	103562.6	99633.6	3929.0	0.0	0.00
25YR-72HR	24.25	105259.7	101216.3	4043.4	0.0	0.00
25YR-72HR	24.50	107250.9	103063.7	4187.2	0.0	0.00
25YR-72HR	24.75	109371.0	105091.9	4279.2	0.0	0.00
25YR-72HR	25.00	111541.3	107211.8	4329.5	0.0	0.00
25YR-72HR	25.25	113724.6	109365.8	4358.8	0.0	0.00
25YR-72HR	25.50	115911.8	111530.4	4381.4	0.0	0.00
25YR-72HR	25.75	118102.7	113699.8	4402.9	0.0	0.00
25YR-72HR	26.00	120297.2	115873.0	4424.2	0.0	0.00
25YR-72HR	26.25	122495.3	118049.8	4445.5	0.0	0.00
25YR-72HR	26.50	124696.7	120230.0	4466.7	0.0	0.00
25YR-72HR	26.75	126901.4	122413.5	4487.9	0.0	0.00
25YR-72HR	27.00	129109.3	124600.1	4509.2	0.0	0.00
25YR-72HR	27.25	131320.3	126789.9	4530.4	0.0	0.00
25YR-72HR	27.50	133534.3	128982.7	4551.5	0.0	0.00
25YR-72HR	27.75	135751.2	131178.5	4572.7	0.0	0.00
25YR-72HR	28.00	137971.0	133377.0	4594.0	0.0	0.00
25YR-72HR	28.25	140193.5	135578.3	4615.2	0.0	0.00
25YR-72HR	28.50	142418.7	137782.4	4636.3	0.0	0.00
25YR-72HR	28.75	144646.5	139989.0	4657.5	0.0	0.00
25YR-72HR	29.00	146876.8	142198.2	4678.6	0.0	0.00
25YR-72HR	29.25	149109.6	144409.8	4699.8	0.0	0.00
25YR-72HR	29.50	151344.8	146623.8	4721.0	0.0	0.00
25YR-72HR	29.75	153582.3	148840.2	4742.2	0.0	0.00
25YR-72HR	30.00	155822.1	151058.8	4763.4	0.0	0.00
25YR-72HR	30.25	158064.2	153279.6	4784.5	-0.0	-0.00
25YR-72HR	30.50	160308.3	155502.6	4805.7	-0.0	-0.00
25YR-72HR	30.75	162554.6	157727.7	4826.9	0.0	0.00
25YR-72HR	31.00	164802.9	159954.9	4848.0	0.0	0.00
25YR-72HR	31.25	167053.2	162184.1	4869.1	0.0	0.00
25YR-72HR	31.50	169305.4	164415.3	4890.2	0.0	0.00
25YR-72HR	31.75	171559.6	166648.4	4911.2	0.0	0.00
25YR-72HR	32.00	173815.6	168883.3	4932.3	0.0	0.00
25YR-72HR	32.25	176073.4	171120.0	4953.3	0.0	0.00
25YR-72HR	32.50	178332.9	173358.5	4974.4	0.0	0.00
25YR-72HR	32.75	180594.2	175598.7	4995.4	0.0	0.00
25YR-72HR	33.00	182857.1	177840.6	5016.6	0.0	0.00
25YR-72HR	33.25	185121.7	180083.9	5037.8	0.0	0.00
25YR-72HR	33.50	187387.9	182328.8	5059.1	0.0	0.00
25YR-72HR	33.75	189655.6	184575.2	5080.4	0.0	0.00
25YR-72HR	34.00	191924.9	186823.1	5101.8	0.0	0.00
25YR-72HR	34.25	194195.7	189072.4	5123.3	0.0	0.00
25YR-72HR	34.50	196467.9	191323.1	5144.8	0.0	0.00
25YR-72HR	34.75	198741.5	193575.1	5166.4	0.0	0.00
25YR-72HR	35.00	201016.5	195828.7	5187.8	0.0	0.00
25YR-72HR	35.25	203292.9	198083.6	5209.3	0.0	0.00
25YR-72HR	35.50	205570.6	200339.8	5230.9	0.0	0.00
25YR-72HR	35.75	207849.7	202597.3	5252.4	0.0	0.00
25YR-72HR	36.00	210130.0	204856.0	5273.9	0.0	0.00
25YR-72HR	36.25	212418.5	207119.9	5298.6	0.0	0.00
25YR-72HR	36.50	214718.4	209394.3	5324.1	0.0	0.00
25YR-72HR	36.75	217023.9	211676.2	5347.7	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	37.00	219332.1	213962.1	5370.0	0.0	0.00
25YR-72HR	37.25	221641.9	216250.2	5391.7	0.0	0.00
25YR-72HR	37.50	223952.8	218539.6	5413.2	0.0	0.00
25YR-72HR	37.75	226264.8	220830.2	5434.7	0.0	0.00
25YR-72HR	38.00	228578.0	223121.8	5456.2	0.0	0.00
25YR-72HR	38.25	230892.2	225414.5	5477.7	0.0	0.00
25YR-72HR	38.50	233207.4	227708.2	5499.2	0.0	0.00
25YR-72HR	38.75	235523.7	230003.0	5520.7	0.0	0.00
25YR-72HR	39.00	237841.0	232298.8	5542.2	0.0	0.00
25YR-72HR	39.25	240159.3	234595.6	5563.6	0.0	0.00
25YR-72HR	39.50	242478.5	236893.4	5585.2	0.0	0.00
25YR-72HR	39.75	244798.7	239192.0	5606.7	0.0	0.00
25YR-72HR	40.00	247119.9	241491.6	5628.3	0.0	0.00
25YR-72HR	40.25	249441.9	243792.1	5649.8	0.0	0.00
25YR-72HR	40.50	251764.9	246093.5	5671.4	0.0	0.00
25YR-72HR	40.75	254088.7	248395.7	5693.0	0.0	0.00
25YR-72HR	41.00	256413.4	250698.9	5714.5	0.0	0.00
25YR-72HR	41.25	258738.9	253002.9	5736.0	-0.0	-0.00
25YR-72HR	41.50	261065.3	255307.8	5757.6	-0.0	-0.00
25YR-72HR	41.75	263392.5	257613.4	5779.1	-0.0	-0.00
25YR-72HR	42.00	265720.5	259919.8	5800.7	-0.0	-0.00
25YR-72HR	42.25	268049.3	262227.0	5822.3	-0.0	-0.00
25YR-72HR	42.50	270378.8	264534.9	5843.9	-0.0	-0.00
25YR-72HR	42.75	272709.1	266843.6	5865.5	-0.0	-0.00
25YR-72HR	43.00	275040.2	269153.0	5887.2	-0.0	-0.00
25YR-72HR	43.25	277372.0	271463.2	5908.8	-0.0	-0.00
25YR-72HR	43.50	279704.5	273774.0	5930.5	-0.0	-0.00
25YR-72HR	43.75	282037.7	276085.5	5952.2	-0.0	-0.00
25YR-72HR	44.00	284371.6	278397.7	5973.9	-0.0	-0.00
25YR-72HR	44.25	286706.2	280710.5	5995.7	-0.0	-0.00
25YR-72HR	44.50	289041.5	283023.9	6017.5	-0.0	-0.00
25YR-72HR	44.75	291377.4	285338.0	6039.4	-0.0	-0.00
25YR-72HR	45.00	293713.9	287652.8	6061.2	-0.0	-0.00
25YR-72HR	45.25	296051.1	289968.1	6083.0	-0.0	-0.00
25YR-72HR	45.50	298389.0	292284.1	6104.8	-0.0	-0.00
25YR-72HR	45.75	300727.4	294600.7	6126.7	-0.0	-0.00
25YR-72HR	46.00	303066.4	296917.9	6148.5	-0.0	-0.00
25YR-72HR	46.25	305406.1	299235.7	6170.4	-0.0	-0.00
25YR-72HR	46.50	307746.3	301554.0	6192.3	-0.0	-0.00
25YR-72HR	46.75	310087.1	303872.9	6214.2	-0.0	-0.00
25YR-72HR	47.00	312428.5	306192.4	6236.1	0.0	0.00
25YR-72HR	47.25	314770.4	308512.4	6258.0	0.0	0.00
25YR-72HR	47.50	317112.8	310833.0	6279.8	-0.0	-0.00
25YR-72HR	47.75	319455.8	313154.1	6301.7	-0.0	-0.00
25YR-72HR	48.00	321799.5	315475.7	6323.7	-0.0	-0.00
25YR-72HR	48.25	324216.3	317849.0	6367.3	-0.0	-0.00
25YR-72HR	48.50	326755.7	320338.6	6417.1	-0.0	-0.00
25YR-72HR	48.75	329341.3	322896.9	6444.4	-0.0	-0.00
25YR-72HR	49.00	331944.8	325487.3	6457.5	-0.0	-0.00
25YR-72HR	49.25	334566.7	328071.2	6495.5	-0.0	-0.00
25YR-72HR	49.50	337215.0	330670.0	6545.0	-0.0	-0.00
25YR-72HR	49.75	339873.6	333283.3	6590.3	-0.0	-0.00
25YR-72HR	50.00	342536.6	335903.7	6632.8	-0.0	-0.00
25YR-72HR	50.25	345341.5	338602.8	6738.7	-0.0	-0.00
25YR-72HR	50.50	348369.2	341508.4	6860.8	-0.0	-0.00
25YR-72HR	50.75	351480.3	344538.7	6941.5	-0.0	-0.00
25YR-72HR	51.00	354623.3	347625.4	6997.8	-0.0	-0.00
25YR-72HR	51.25	357854.7	350799.1	7055.7	-0.0	-0.00
25YR-72HR	51.50	361219.4	354110.3	7109.1	-0.0	-0.00
25YR-72HR	51.75	364634.3	357498.9	7135.4	-0.0	-0.00
25YR-72HR	52.00	368068.7	360922.8	7145.9	-0.0	-0.00
25YR-72HR	52.25	371806.7	364495.8	7310.9	-0.0	-0.00
25YR-72HR	52.50	376027.4	368507.6	7519.7	-0.0	-0.00
25YR-72HR	52.75	380428.7	372787.4	7641.3	-0.0	-0.00
25YR-72HR	53.00	384899.0	377190.7	7708.3	-0.0	-0.00
25YR-72HR	53.25	389679.0	381795.0	7884.0	-0.0	-0.00
25YR-72HR	53.50	394943.7	386862.0	8081.8	-0.0	-0.00
25YR-72HR	53.75	400390.3	392198.9	8191.4	-0.0	-0.00
25YR-72HR	54.00	405906.7	397651.5	8255.2	-0.0	-0.00
25YR-72HR	54.25	411742.0	403284.8	8457.2	-0.0	-0.00
25YR-72HR	54.50	418080.9	409392.2	8688.7	-0.0	-0.00
25YR-72HR	54.75	424609.1	415777.1	8832.0	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	55.00	431210.1	422280.7	8929.4	-0.0	-0.00
25YR-72HR	55.25	438129.5	429012.4	9117.1	-0.0	-0.00
25YR-72HR	55.50	445554.5	436241.1	9313.4	-0.0	-0.00
25YR-72HR	55.75	453170.0	443749.7	9420.2	-0.0	-0.00
25YR-72HR	56.00	460859.1	451376.9	9482.2	-0.0	-0.00
25YR-72HR	56.25	468921.9	459212.0	9709.9	0.0	0.00
25YR-72HR	56.50	477600.9	467633.1	9967.8	0.0	0.00
25YR-72HR	56.75	486507.4	476387.2	10120.2	0.0	0.00
25YR-72HR	57.00	495502.0	485281.5	10220.5	0.0	0.00
25YR-72HR	57.25	504971.3	494468.8	10502.5	0.0	0.00
25YR-72HR	57.50	515232.7	504424.4	10808.3	0.0	0.00
25YR-72HR	57.75	526048.3	514905.0	11143.2	0.0	0.00
25YR-72HR	58.00	537410.5	525968.2	11442.3	0.0	0.00
25YR-72HR	58.25	549296.3	537550.2	11746.1	0.0	0.00
25YR-72HR	58.50	561844.9	549836.4	12008.5	0.0	0.00
25YR-72HR	58.75	575816.6	563092.6	12724.0	0.0	0.00
25YR-72HR	59.00	591865.0	578418.4	13446.6	0.0	0.00
25YR-72HR	59.25	611353.2	596361.6	14991.6	0.0	0.00
25YR-72HR	59.50	635485.5	619075.8	16409.6	0.0	0.00
25YR-72HR	59.75	704550.0	669954.1	34595.9	0.0	0.00
25YR-72HR	60.00	847211.0	798383.1	48828.0	0.0	0.00
25YR-72HR	60.25	975870.1	934599.9	41270.2	0.0	0.00
25YR-72HR	60.50	1047947.7	1015577.7	32370.0	0.0	0.00
25YR-72HR	60.75	1092068.3	1067020.0	25048.3	0.0	0.00
25YR-72HR	61.00	1118368.3	1097882.2	20486.1	0.0	0.00
25YR-72HR	61.25	1138625.7	1120056.8	18568.9	0.0	0.00
25YR-72HR	61.50	1155039.3	1137405.3	17633.9	0.0	0.00
25YR-72HR	61.75	1169629.0	1152537.2	17091.8	0.0	0.00
25YR-72HR	62.00	1182672.7	1165926.1	16746.6	0.0	0.00
25YR-72HR	62.25	1194282.1	1178014.3	16267.8	0.0	0.00
25YR-72HR	62.50	1204150.1	1188277.7	15872.4	0.0	0.00
25YR-72HR	62.75	1213153.6	1197509.0	15644.6	0.0	0.00
25YR-72HR	63.00	1221479.8	1205954.8	15525.0	0.0	0.00
25YR-72HR	63.25	1229601.0	1214096.7	15504.2	0.0	0.00
25YR-72HR	63.50	1237648.0	1222131.6	15516.4	0.0	0.00
25YR-72HR	63.75	1245682.2	1230136.0	15546.2	0.0	0.00
25YR-72HR	64.00	1253715.1	1238136.1	15579.0	0.0	0.00
25YR-72HR	64.25	1260831.7	1245599.5	15232.2	0.0	0.00
25YR-72HR	64.50	1266438.8	1251591.8	14847.0	0.0	0.00
25YR-72HR	64.75	1271482.0	1256789.4	14692.6	0.0	0.00
25YR-72HR	65.00	1276312.1	1261658.4	14653.7	0.0	0.00
25YR-72HR	65.25	1281120.7	1266443.8	14676.9	0.0	0.00
25YR-72HR	65.50	1285946.3	1271234.0	14712.3	0.0	0.00
25YR-72HR	65.75	1290778.4	1276032.5	14745.9	0.0	0.00
25YR-72HR	66.00	1295612.9	1280834.8	14778.2	0.0	0.00
25YR-72HR	66.25	1300447.7	1285638.0	14809.7	0.0	0.00
25YR-72HR	66.50	1305282.2	1290441.1	14841.1	0.0	0.00
25YR-72HR	66.75	1310116.6	1295244.0	14872.6	0.0	0.00
25YR-72HR	67.00	1314951.0	1300046.9	14904.1	0.0	0.00
25YR-72HR	67.25	1319785.4	1304849.8	14935.6	0.0	0.00
25YR-72HR	67.50	1324620.0	1309652.9	14967.1	0.0	0.00
25YR-72HR	67.75	1329454.6	1314456.1	14998.5	0.0	0.00
25YR-72HR	68.00	1334288.8	1319259.1	15029.7	0.0	0.00
25YR-72HR	68.25	1338644.8	1323783.1	14861.7	0.0	0.00
25YR-72HR	68.50	1342246.2	1327578.4	14667.8	0.0	0.00
25YR-72HR	68.75	1345566.7	1330978.1	14588.5	0.0	0.00
25YR-72HR	69.00	1348781.6	1334206.3	14575.3	0.0	0.00
25YR-72HR	69.25	1351981.1	1337384.0	14597.2	0.0	0.00
25YR-72HR	69.50	1355180.7	1340553.9	14626.8	0.0	0.00
25YR-72HR	69.75	1358380.4	1343723.1	14657.2	0.0	0.00
25YR-72HR	70.00	1361580.0	1346892.4	14687.6	0.0	0.00
25YR-72HR	70.25	1364784.9	1350077.8	14707.2	0.0	0.00
25YR-72HR	70.50	1367998.3	1353275.6	14722.7	0.0	0.00
25YR-72HR	70.75	1371214.9	1356478.2	14736.7	0.0	0.00
25YR-72HR	71.00	1374432.6	1359682.7	14750.0	0.0	0.00
25YR-72HR	71.25	1377650.6	1362887.8	14762.8	0.0	0.00
25YR-72HR	71.50	1380868.6	1366093.0	14775.6	0.0	0.00
25YR-72HR	71.75	1384086.6	1369298.2	14788.4	0.0	0.00
25YR-72HR	72.00	1387304.1	1372503.3	14800.8	0.0	0.00
25YR-72HR	72.25	1389591.1	1375264.2	14326.8	0.0	0.00
25YR-72HR	72.50	1389953.6	1376379.3	13574.3	0.0	0.00
25YR-72HR	72.75	1389953.6	1376710.3	13243.3	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	73.00	1389953.6	1376903.5	13050.1	0.0	0.00
25YR-72HR	73.25	1389953.6	1377055.3	12898.4	0.0	0.00
25YR-72HR	73.50	1389953.6	1377191.4	12762.3	0.0	0.00
25YR-72HR	73.75	1389953.6	1377322.6	12631.0	0.0	0.00
25YR-72HR	74.00	1389953.6	1377452.5	12501.1	0.0	0.00
25YR-72HR	74.25	1389953.6	1377581.2	12372.4	0.0	0.00
25YR-72HR	74.50	1389953.6	1377708.9	12244.8	0.0	0.00
25YR-72HR	74.75	1389953.6	1377836.0	12117.6	0.0	0.00
25YR-72HR	75.00	1389953.6	1377962.9	11990.7	0.0	0.00
25YR-72HR	75.25	1389953.6	1378089.7	11864.0	0.0	0.00
25YR-72HR	75.50	1389953.6	1378216.3	11737.3	0.0	0.00
25YR-72HR	75.75	1389953.6	1378342.9	11610.7	0.0	0.00
25YR-72HR	76.00	1389953.6	1378469.5	11484.2	0.0	0.00
25YR-72HR	76.25	1389953.6	1378596.0	11357.6	0.0	0.00
25YR-72HR	76.50	1389953.6	1378722.5	11231.1	0.0	0.00
25YR-72HR	76.75	1389953.6	1378849.0	11104.7	0.0	0.00
25YR-72HR	77.00	1389953.6	1378975.3	10978.3	0.0	0.00
25YR-72HR	77.25	1389953.6	1379101.6	10852.0	0.0	0.00
25YR-72HR	77.50	1389953.6	1379227.6	10726.0	0.0	0.00
25YR-72HR	77.75	1389953.6	1379352.7	10601.0	0.0	0.00
25YR-72HR	78.00	1389953.6	1379477.2	10476.4	0.0	0.00
25YR-72HR	78.25	1389953.6	1379601.4	10352.2	0.0	0.00
25YR-72HR	78.50	1389953.6	1379725.4	10228.2	0.0	0.00
25YR-72HR	78.75	1389953.6	1379848.6	10105.0	0.0	0.00
25YR-72HR	79.00	1389953.6	1379972.3	9981.3	0.0	0.00
25YR-72HR	79.25	1389953.6	1380096.1	9857.5	0.0	0.00
25YR-72HR	79.50	1389953.6	1380219.9	9733.8	0.0	0.00
25YR-72HR	79.75	1389953.6	1380343.6	9610.0	0.0	0.00
25YR-72HR	80.00	1389953.6	1380467.4	9486.2	0.0	0.00
25YR-72HR	80.25	1389953.6	1380591.2	9362.4	0.0	0.00
25YR-72HR	80.50	1389953.6	1380715.1	9238.5	0.0	0.00
25YR-72HR	80.75	1389953.6	1380839.1	9114.5	0.0	0.00
25YR-72HR	81.00	1389953.6	1380963.3	8990.4	0.0	0.00
25YR-72HR	81.25	1389953.6	1381086.6	8867.0	0.0	0.00
25YR-72HR	81.50	1389953.6	1381210.0	8743.6	0.0	0.00
25YR-72HR	81.75	1389953.6	1381333.5	8620.1	0.0	0.00
25YR-72HR	82.00	1389953.6	1381457.1	8496.5	0.0	0.00
25YR-72HR	82.25	1389953.6	1381580.9	8372.8	0.0	0.00
25YR-72HR	82.50	1389953.6	1381704.7	8248.9	0.0	0.00
25YR-72HR	82.75	1389953.6	1381828.7	8125.0	0.0	0.00
25YR-72HR	83.00	1389953.6	1381952.7	8001.0	0.0	0.00
25YR-72HR	83.25	1389953.6	1382076.8	7876.9	0.0	0.00
25YR-72HR	83.50	1389953.6	1382200.9	7752.7	0.0	0.00
25YR-72HR	83.75	1389953.6	1382325.2	7628.5	0.0	0.00
25YR-72HR	84.00	1389953.6	1382449.4	7504.2	0.0	0.00
25YR-72HR	84.25	1389953.6	1382573.8	7379.8	0.0	0.00
25YR-72HR	84.50	1389953.6	1382698.2	7255.4	0.0	0.00
25YR-72HR	84.75	1389953.6	1382822.7	7131.0	0.0	0.00
25YR-72HR	85.00	1389953.6	1382947.2	7006.5	0.0	0.00
25YR-72HR	85.25	1389953.6	1383071.7	6881.9	0.0	0.00
25YR-72HR	85.50	1389953.6	1383196.4	6757.3	0.0	0.00
25YR-72HR	85.75	1389953.6	1383321.0	6632.6	0.0	0.00
25YR-72HR	86.00	1389953.6	1383445.7	6508.0	0.0	0.00
25YR-72HR	86.25	1389953.6	1383570.3	6383.3	0.0	0.00
25YR-72HR	86.50	1389953.6	1383694.9	6258.7	0.0	0.00
25YR-72HR	86.75	1389953.6	1383820.2	6133.4	0.0	0.00
25YR-72HR	87.00	1389953.6	1383946.0	6007.7	0.0	0.00
25YR-72HR	87.25	1389953.6	1384072.5	5881.1	0.0	0.00
25YR-72HR	87.50	1389953.6	1384199.6	5754.0	0.0	0.00
25YR-72HR	87.75	1389953.6	1384327.1	5626.5	0.0	0.00
25YR-72HR	88.00	1389953.6	1384455.0	5498.6	0.0	0.00
25YR-72HR	88.25	1389953.6	1384583.2	5370.4	0.0	0.00
25YR-72HR	88.50	1389953.6	1384711.7	5241.9	0.0	0.00
25YR-72HR	88.75	1389953.6	1384840.5	5113.2	0.0	0.00
25YR-72HR	89.00	1389953.6	1384969.5	4984.1	0.0	0.00
25YR-72HR	89.25	1389953.6	1385098.7	4854.9	0.0	0.00
25YR-72HR	89.50	1389953.6	1385228.2	4725.4	0.0	0.00
25YR-72HR	89.75	1389953.6	1385357.8	4595.8	0.0	0.00
25YR-72HR	90.00	1389953.6	1385487.5	4466.1	0.0	0.00
25YR-72HR	90.25	1389953.6	1385617.3	4336.3	0.0	0.00
25YR-72HR	90.50	1389953.6	1385747.3	4206.3	0.0	0.00
25YR-72HR	90.75	1389953.6	1385877.4	4076.2	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	91.00	1389953.6	1386007.7	3945.9	0.0	0.00
25YR-72HR	91.25	1389953.6	1386138.0	3815.6	0.0	0.00
25YR-72HR	91.50	1389953.6	1386268.5	3685.2	0.0	0.00
25YR-72HR	91.75	1389953.6	1386399.0	3554.7	0.0	0.00
25YR-72HR	92.00	1389953.6	1386529.5	3424.1	0.0	0.00
25YR-72HR	92.25	1389953.6	1386660.1	3293.5	0.0	0.00
25YR-72HR	92.50	1389953.6	1386790.7	3163.0	0.0	0.00
25YR-72HR	92.75	1389953.6	1386921.0	3032.6	0.0	0.00
25YR-72HR	93.00	1389953.6	1387051.4	2902.2	0.0	0.00
25YR-72HR	93.25	1389953.6	1387182.1	2771.5	0.0	0.00
25YR-72HR	93.50	1389953.6	1387313.1	2640.5	0.0	0.00
25YR-72HR	93.75	1389953.6	1387444.2	2509.5	0.0	0.00
25YR-72HR	94.00	1389953.6	1387575.2	2378.4	0.0	0.00
25YR-72HR	94.25	1389953.6	1387706.0	2247.6	0.0	0.00
25YR-72HR	94.50	1389953.6	1387836.9	2116.7	0.0	0.00
25YR-72HR	94.75	1389953.6	1387967.8	1985.8	0.0	0.00
25YR-72HR	95.00	1389953.6	1388098.7	1854.9	0.0	0.00
25YR-72HR	95.25	1389953.6	1388229.6	1724.0	0.0	0.00
25YR-72HR	95.50	1389953.6	1388360.6	1593.1	0.0	0.00
25YR-72HR	95.75	1389953.6	1388491.5	1462.1	0.0	0.00
25YR-72HR	96.00	1389953.6	1388622.5	1331.1	0.0	0.00
25YR-72HR	96.00	1389953.6	1388622.5	1331.1	0.0	0.00

Basin 18

T 52S / R 40E SECTION 03 | T 52S / R 40E SECTION 34

T 52S / R 40E SECTION 02 | T 52S / R 40E SECTION 35

MATCHLINE 532+40.00 NE

MATCHLINE 560+40.00 NE

BASIN 17
28.47 AC

BASIN 18
15.88 AC

0 50 200
Feet

R/W LINE

LITTLE RIVER CANAL

NW 106TH ST.

W 54TH ST.

W 56TH ST.

W 20TH AVE WEST

W 20TH AVE. EAST

PETER'S PIKE CANAL

SR 826 SB

SR 826 NB

OUTFALL TO THE LITTLE RIVER CANAL BEGIN BRIDGE #870758 540+84.16

END BRIDGE #870758 541+69.16

LA R/W LINE

EX-25 EX-26 EX-27 EX-28 EX-29 EX-30 Y-221 R-1581 P-48 P-51 P-51A

S17-225 S17-226 S17-227 S17-228 S17-229 S17-230 S17-231 S17-234 S17-240 S17-241A S17-241B S17-242 S17-243 S17-245 S17-247 S17-248 S17-249 S17-250 S17-251 S17-255 S17-240A S17-240B S17-227A

S17FW-14A S17FW-15

S18FW-01 S18FW-02 S18FW-03 S18FW-04 S18FW-05 S18FW-06 S18FW-07 S18FW-1A S18FW-11 S18FW-12 S18FW-13 S18FW-14

S17FE-01 S18FE-01 S18FE-02 S18FE-03 S18FE-05 S18FE-06 S18FE-07

B17FW-3 0.17 AC

B18FW-1 0.82 AC

B18FW-2 0.38 AC

B18FW-4 1.42 AC

B17-229 0.47 AC

B17-225 0.09 AC

B17-227 0.25 AC

B17-241 0.18 AC

B17-241A 0.28 AC

B17-241B 0.06 AC

B17-242 0.54 AC

B17-243 0.08 AC

B17FE-1 0.13 AC

B18FE-1 0.19 AC

B18FE-2 0.26 AC

B18FE-3 0.14 AC

B18FE-4 0.14 AC

BX18-9 0.41 AC

BX18-15 0.34 AC

BX18-23 1.49 AC

18" PIPE

24" FD

30" FD

30" PIPE

N 47° 57" W

N 2° 38' 07" W

DO NOT USE THE INFORMATION ON THIS SHEET FOR CONSTRUCTION PURPOSES. THIS SHEET IS IN THE PLANS FOR DOCUMENTATION AND TO ASSIST CONSTRUCTION PERSONNEL WITH DRAINAGE CONCERNS.

LEGEND

- DRAINAGE DIVIDE
- FLOW ARROW
- SXX-XXX PROPOSED STRUCTURE
- XX EXISTING STRUCTURE

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

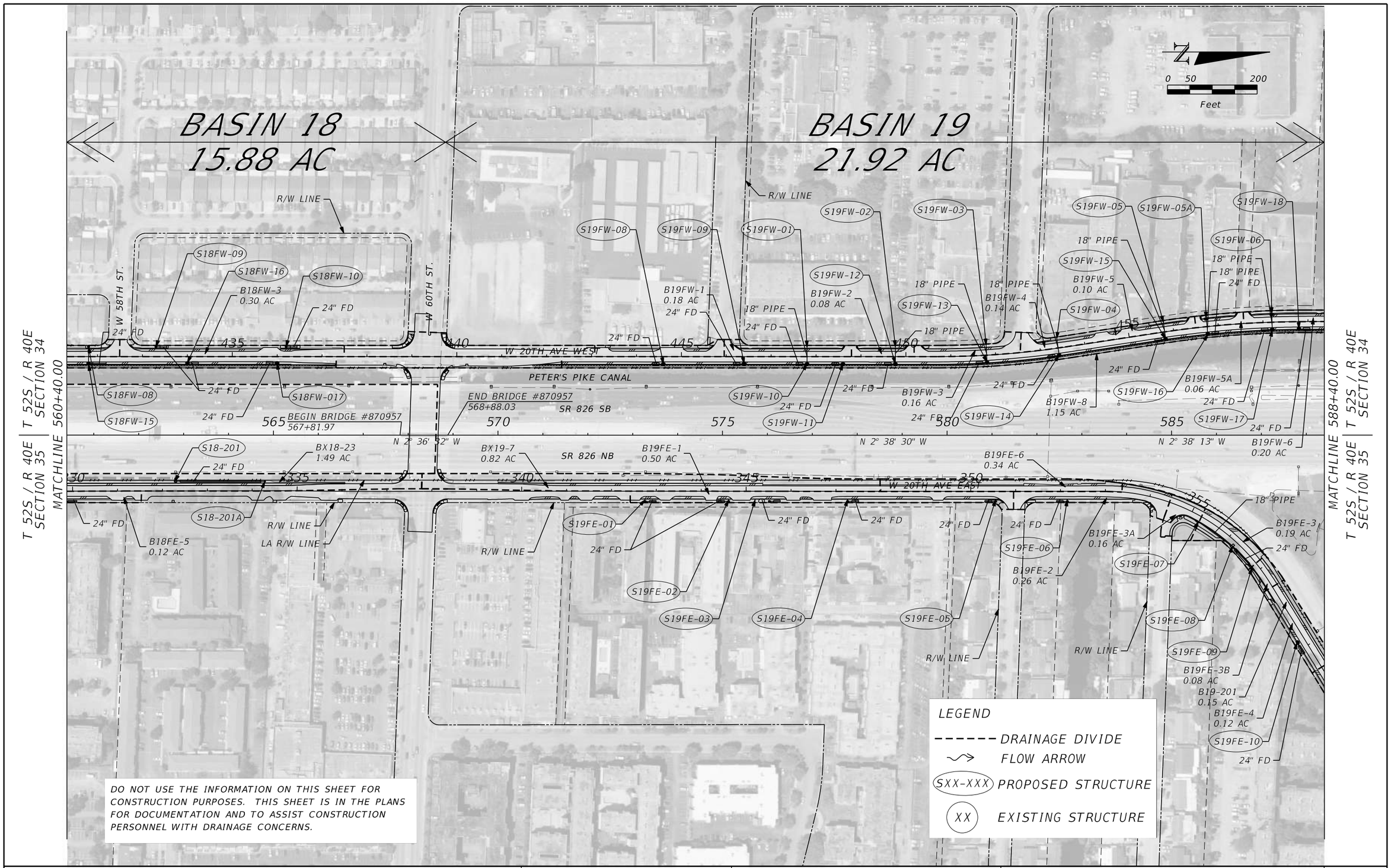
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01, 441830-1-52-01, 441831-1-52-01

DRAINAGE MAP

SHEET NO.

CALLI 12/17/2020 11:24:27 AM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\44716515201\drainage\DRMPRD05.dgn



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01, 441830-1-52-01, 441831-1-52-01

DRAINAGE MAP

SHEET NO.

CALLI 12/16/2020 5:03:42 PM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\44716515201\drainage\DRMPRD06.dg

SUMMARY OF MAX STAGE - PROPOSED CONDITIONS -BASIN 18

NODE	STORM EVENT							WARNING STAGE (FT)
	100YR-1HR	100YR-24HR	100YR-8HR	10YR-1HR	10YR-24HR	10YR-8HR	25YR-72HR	
EX18-15	4.17	2.77	3.72	3.69	2.58	3.32	4.16	4.69
EX18-20	3.96	2.73	3.64	3.55	2.56	3.23	4.04	6.26
EX18-23	3.97	2.73	3.65	3.56	2.56	3.23	4.06	4.64
EX18-28	3.44	2.66	3.25	3.14	2.52	3.00	3.55	4.94
EX18-31	3.31	2.63	3.14	3.03	2.51	2.94	3.42	4.86
EX18-33	3.31	2.62	3.13	3.03	2.51	2.93	3.41	4.94
EX18-36	24.23	23.37	23.79	23.93	23.27	23.60	24.07	27.12
EX18-38	25.11	24.55	24.83	24.92	24.48	24.70	25.01	28.32
EX18-4	7.13	6.31	6.71	6.84	6.22	6.53	6.97	10.00
EX18-6	5.73	3.76	4.34	4.54	3.64	4.07	5.23	7.42
EX18-9	4.27	2.77	3.74	3.72	2.58	3.32	4.24	4.69
S18-1	7.35	2.93	4.80	5.38	2.65	3.95	6.32	10.33
S18-10	4.41	2.76	4.06	4.02	2.57	3.42	4.45	4.61
S18-11	5.47	2.87	4.96	5.06	2.62	3.84	5.35	4.84
S18-12	8.10	2.97	5.80	6.31	2.66	4.22	7.19	7.50
S18-13	9.64	3.02	6.27	7.02	2.68	4.42	8.25	10.26
S18-14	11.86	10.29	11.02	11.27	10.13	10.68	11.53	15.26
S18-15	18.26	17.13	17.69	17.86	17.00	17.43	18.04	22.29
S18-15A	20.28	19.33	19.78	19.94	19.22	19.57	20.09	24.98
S18-16	21.98	21.03	21.49	21.64	20.92	21.27	21.79	26.00
S18-17	23.03	22.39	22.71	22.82	22.31	22.57	22.91	27.24
S18-2	6.59	2.91	4.57	5.02	2.64	3.85	5.79	7.67
S18-201	3.09	2.60	3.03	2.89	2.50	2.87	3.24	5.09
S18-3	5.12	2.86	4.13	4.33	2.62	3.66	4.79	6.23
S18-4	4.46	2.84	3.94	4.02	2.61	3.57	4.33	5.96
S18-5	4.47	2.84	3.94	4.02	2.61	3.56	4.34	5.28
S18-6	4.47	2.82	3.92	4.00	2.60	3.52	4.35	4.86
S18-7	4.35	2.79	3.84	3.88	2.59	3.44	4.27	4.10
S18-8	5.02	2.83	4.08	4.26	2.61	3.59	4.72	4.77
S18-9	4.72	2.80	4.33	4.33	2.59	3.55	4.72	4.62

Curve Number Calculations

CN CALCULATIONS FOR PROPOSED CONDITIONS - BASIN B-18

SUB-BASIN	TOTAL DRAINAGE AREA (AC)	PERVIOUS DRAINAGE AREA (AC)	PERVIOUS AREA CURVE NUMBER	IMP. DRAINAGE AREA (AC)	IMP. AREA CURVE NUMBER	COMPOSITE CURVE NUMBER
B18-1	0.87	0	61	0.87	96	96
B18-2	0.36	0	61	0.36	96	96
B18-3	0.33	0	61	0.33	96	96
B18-5	0.47	0	61	0.47	96	96
B18-6	0.74	0	61	0.74	96	96
B18-8	0.61	0	61	0.61	96	96
B18-9	0.46	0	61	0.46	96	96
B18-11	0.58	0	61	0.58	96	96
B18-12	0.3	0	61	0.3	96	96
B18-13	0.42	0	61	0.42	96	96
B18-14	0.72	0	61	0.72	96	96
B18-15	0.62	0	61	0.62	96	96
B18-16	0.35	0	61	0.35	96	96
B18-17	0.47	0	61	0.47	96	96
BX18-3	0.48	0	61	0.48	96	96
BX18-4	0.19	0	61	0.19	96	96
BX18-6	0.45	0	61	0.45	96	96
BX18-8	0.43	0	61	0.43	96	96
BX18-9	0.41	0.16	61	0.25	96	82
BX18-14	0.55	0	61	0.55	96	96
BX18-15	0.34	0.19	61	0.15	96	76
BX18-17	0.4	0	61	0.4	96	96
BX18-19	0.46	0	61	0.46	96	96
BX18-22	0.35	0	61	0.35	96	96
BX18-23	1.49	0.82	61	0.67	96	77
BX18-25	0.51	0	61	0.51	96	96
BX18-27	0.64	0	61	0.64	96	96
BX18-30	0.64	0	61	0.64	96	96
BX18-33	0.52	0	61	0.52	96	96
BX18-36	0.33	0	61	0.33	96	96
BX18-38	0.39	0	61	0.39	96	96
TOTAL BASIN B-18	15.88	1.17		14.71		

Average Hydraulic Conductivity

Average Hydraulic Conductivity

Basin B-18		
Percolation Test	P-2A	P-3A
Average Flow to 10 ft. depth (gpm)	20.00	0.10
Depth to Water Table (ft)	7.00	8.00
Head Maintained (ft)	7.00	8.00
Borehole Diameter (ft)	0.500	0.500
Borehole Depth (ft)	10.00	10.00
Du (ft)	7.00	8.00
Average Flow (cfs)	0.0446	0.0002
Ds (ft)	3.00	2.00
Hydraulic Conductivity K (cfs/ft2-ft head)	6.12E-04	2.89E-06
Average Hydraulic Conductivity K	3.07E-04	

Basin B-18		
Percolation Test	P-2B	P-3B
Average Flow to 15 ft. depth (gpm)	41.00	38.00
Depth to Water Table (ft)	7.00	8.00
Head Maintained (ft)	7.00	8.00
Borehole Diameter (ft)	0.267	0.267
Borehole Depth (ft)	5.00	5.00
Du (ft)	7.00	8.00
Average Flow (cfs)	0.0913	0.0847
Ds (ft)	8.00	7.00
Hydraulic Conductivity K (cfs/ft2-ft head)	3.12E-03	2.53E-03
Average Hydraulic Conductivity K	2.82E-03	
Total Average Hydraulic Conductivity K	**1.15E-03**	

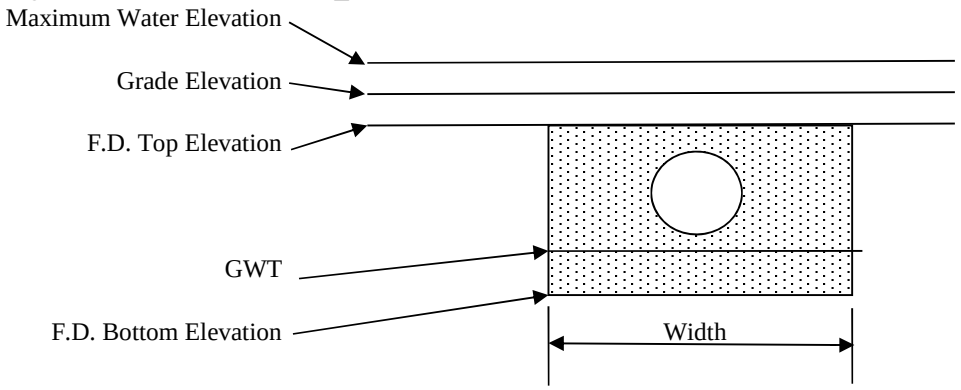
Rating Curve Calculations

Made by: _____ _____

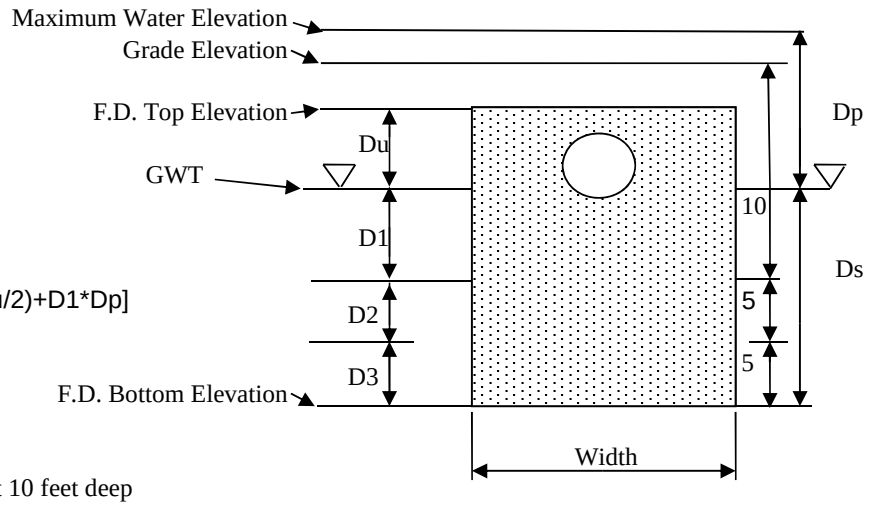
Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-18



Maximum Water Elevation =	**5.45**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**4.45**	ft.NAVD	
F.D.Top Elevation =	**3.45**	ft.NAVD	
Ground Water Table =	**1.95**	ft.NAVD	
F.D. Bottom Elevation =	**-10.06**	ft.NAVD	
Width =	**5.00**	feet.	
Pipe Diameter =	**30**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**1.15E-03**	cfs/ft^2-ft head	(Ave. P-2A,P-3A)
Hydraulic Conductivity K15 =	**1.15E-03**	cfs/ft^2-ft head	(Ave. P-2A,P-3A)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____

Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-18

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.95	***2.45***
(ft)	(cfs/ft)	(cfs/ft)
1.95	0.000	0.000
2.45	0.013	0.000
3.45	0.044	0.030
5.45	0.106	0.092

Rating Curve (Q)

Headwater	***Water Table Elev. (ft)***	
	1.95	***2.45***
(ft)	(cfs)	(cfs)
1.95	0.00	0.00
2.45	0.01	0.00
3.45	0.04	0.03
5.45	0.11	0.09

Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

Rating Curve Adjusted (Q)

Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.95	1.95	0.00
1.95	2.45	0.01
1.95	3.45	0.04
1.95	5.45	0.10
2.45	2.45	0.00
2.45	3.45	0.03
2.45	5.45	0.09

French Drain Length Calcs

COMPARISON OF PRE V/S POST IMP. AREA & CN CALCS - BASIN 18

PRE-DEVELOPMENT				POST-DEVELOPMENT CONDITIONS						
SUB-BASIN	TOTAL DRAINAGE AREA (AC)	IMPERVIOUS DRAINAGE AREA (AC)	COMPOSITE CURVE NUMBER	SUB-BASIN	TOTAL DRAINAGE AREA (AC)	PERVIOUS DRAINAGE AREA (AC)	PERVIOUS AREA CURVE NUMBER	IMPERVIOUS DRAINAGE AREA (AC)	IMPERVIOUS AREA CURVE NUMBER	COMPOSITE CURVE NUMBER
BX18-9	0.41	0.15	74	BX18-9	0.41	0.16	61	0.25	96	82
BX18-15	0.34	0.09	70	BX18-15	0.34	0.19	61	0.15	96	76
BX18-23	1.49	0.5	73	BX18-23	1.49	0.82	61	0.67	96	77
TOTAL SUB-BASIN B-18	2.24	0.74			2.24			1.07		

Total Additional Imp. Area for Basin 18= 0.33 ac

Note: only impacted sub-basins due to proposed improvement are inclded in this table.

REQUIRED VOLUME IN PROPOSED FRENCH DRAIN-BASIN15

Additional Imp. Area 0.33 ac

Required Treatment Volume

= 2.5" of Imp. area

Required Treatment Volume = 0.07 ac-ft (A)

Required Attenation Volume

$$Q = \frac{(P - 0.2S)^2}{(P + 0.8S)}$$

Q = Runoff (in) 13.51 in

P = Rainfall 25YR-72HR (in) = 14 in

S= maximum retention after runoff begins (in) 0.42 in

$$S = \frac{1000}{CN} - 10$$

CN = 96

Total Q in ac-ft 0.37 ac-ft (B)

Q (in) X Added Imp. Area/12

Provided Volume in French Drain =

maximum of (A) or (B) 0.37 ac-ft

Factor of Safety (F.S.) = 2

Required Volume in French Drain = 0.74 ac-ft

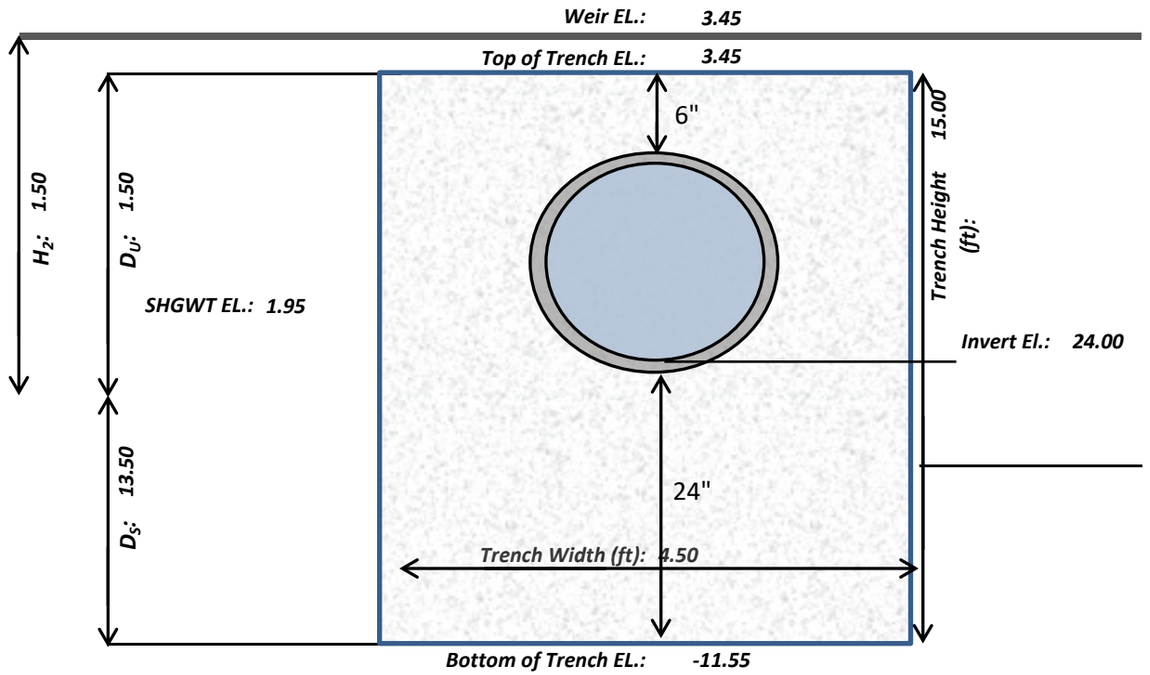
Provided in Volume in French Drain = 0.75 ac-ft

Basin 18 (SouthBound Swale)

Palmetto Expressway Improvments

FRENCH DRAIN DESIGN VOLUMES

French Drain (ICPR Link Name):	S18-201_EXF
Location	
SHGWT EL. (ft-NAVD):	1.95
Pipe Size (in):	24
Length of French Drain, L (LF):	180
Pipe Thickness (in):	3.00
Pipe Invert EL. (ft-NAVD):	0.70
Top of Trench EL. (ft-NAVD):	3.45
Bottom of Trench EL. (ft-NAVD):	-11.55
Trench Height, H_T (ft):	15.00
Weir EL. (ft-NAVD):	3.45
Trench Width, W (ft):	4.50
Average Hydraulic Conductivity, K_{10} (cfs/ft^2/ft-head):	1.150E-03
Depth to Water Table, H_2 (ft):	1.50
Non-Saturated Trench Depth, D_U (ft):	1.50
Saturated Trench Depth, D_S (ft):	13.50
$H_2 W$:	6.75
$2H_2 D_U$:	4.50
D_U^2:	2.25
$2H_2 D_S$:	40.50
$(1.39x10^{-4})WD_U$:	0.000938
If $D_U > D_S$ and $W < 2H_T$, Treatment Provided, V (ac-in):	10.42
If $D_S > D_U$ and/or $W > 2H_T$, Treatment Provided, V (ac-in):	9.02
$D_U > D_S$ and $W < 2H_T$ (Yes/No):	No
Treatment Volume Provided, V (Ac-ft):	**0.752**

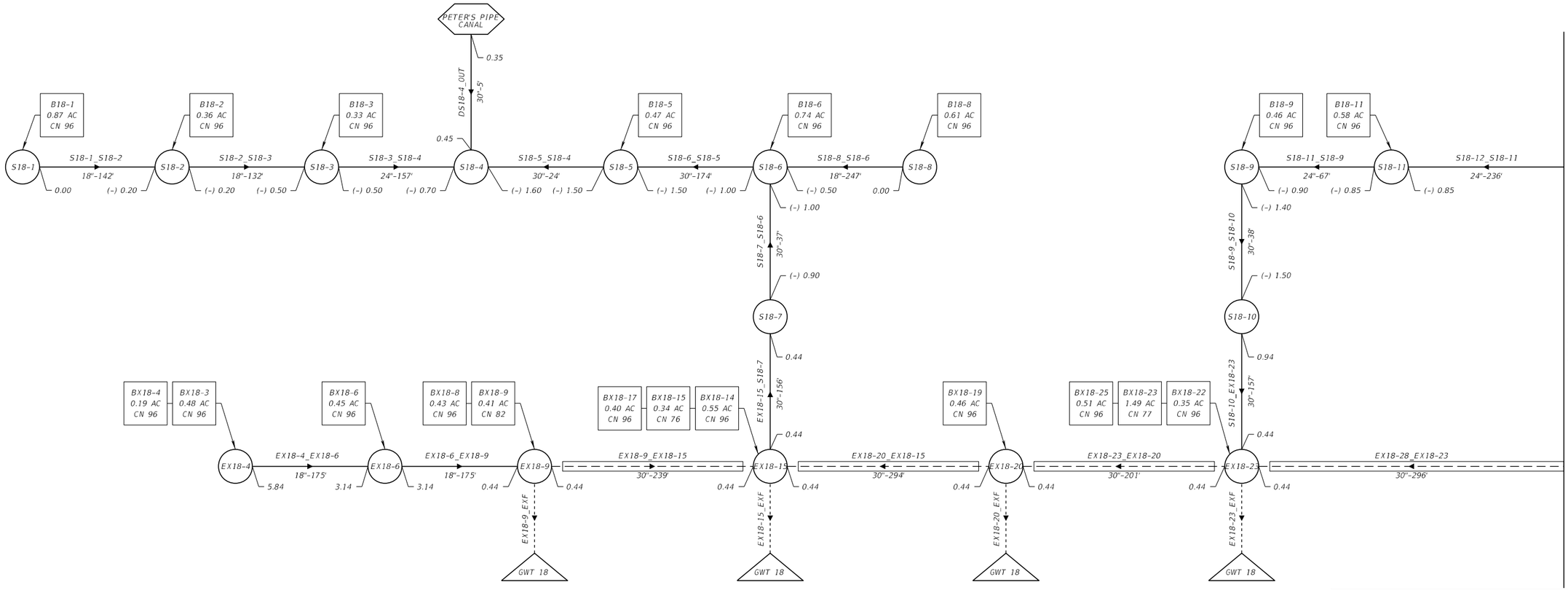


$$V = L[K_{10}(H_2W + 2H_2D_U - D_U^{\,2} + 2H_2D_S) + (1.39x10^{-4})WD_U]$$

$$V = L[K_{10}(2H_2D_U - D_U^{\,2} + 2H_2D_S) + (1.39x10^{-4})WD_U]$$

Nodal Diagram

POST-DEVELOPMENT CONDITIONS



WEIR INPUT SUMMARY							
WEIR	VERT. TYPE	HORIZ.	CIRC.	RECT.	INV.	SPAN	RISE
DS18-4_OUT	MAVIS	-	-	X	3.45'	60"	9.60"

LEGEND

- B18-1 / 0.12 AC / CN 96 — CONTRIBUTING BASIN, BASIN NAME, BASIN AREA, CURVE NUMBER
- S18-2 — NODE NAME
- 58ST_CANAL — BOUNDARY NODE WITH CONSTANT TAILWATER
- GWT 6-12 — BOUNDARY NODE WITH VARIABLE TAILWATER
- S18-3_S18-4 / 18"-42' / 21.50 / 21.40 — PIPE LINK WITH (QUANTITY)SIZE-LENGTH, INVERT ELEVATIONS
- WEX18_14 — WEIR LINK
- AREA 1_EXF — RATING CURVE LINK

PROPOSED DESIGN

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

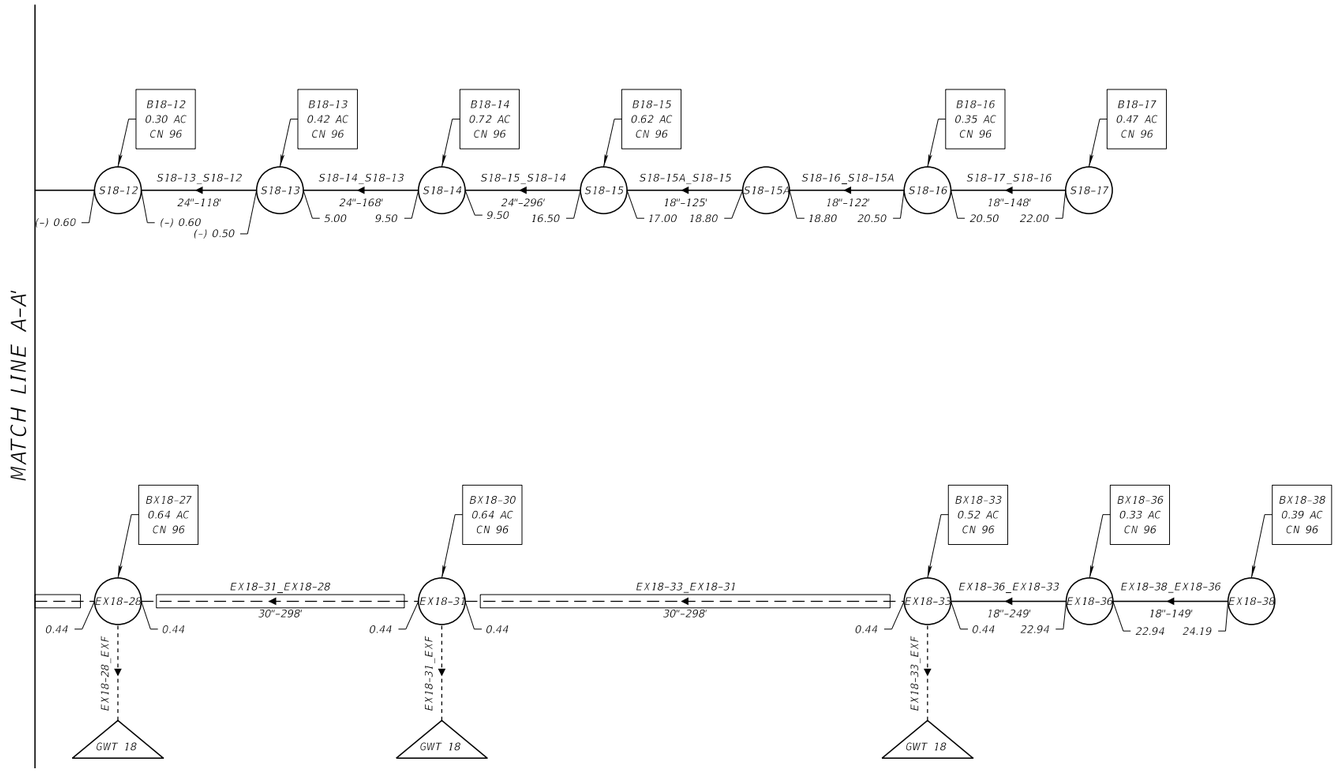
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01 441830-1-52-01 441831-1-52-01

NODAL DIAGRAM
BASIN 18

SHEET NO.

POST-DEVELOPMENT CONDITIONS



LEGEND	
B18-1 0.12 AC CN 96	CONTRIBUTING BASIN BASIN NAME BASIN AREA CURVE NUMBER
S18-2	NODE NAME
58ST_CANAL	BOUNDARY NODE WITH CONSTANT TAILWATER
GWT 6-12	BOUNDARY NODE WITH VARIABLE TAILWATER
S18-3_S18-4 18"-42" 21.50 21.40	PIPE LINK WITH (QUANTITY)SIZE-LENGTH INVERT ELEVATIONS
WEX18_14	WEIR LINK
AREA 1_EXF	RATING CURVE LINK

PROPOSED DESIGN

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01 441830-1-52-01 441831-1-52-01

NODAL DIAGRAM
BASIN 18

SHEET NO.

KTABUTEAU 12/17/2020 9:49:03 AM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\44716515201\drainage\DRDTRD106.dgn

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
EX18-15	Basin 18	100YR-1HR	0.67	4.17	4.69	0.0041	156	0.67	6.33	0.67	6.32
EX18-20	Basin 18	100YR-1HR	0.67	3.96	6.26	0.0026	144	1.32	6.41	1.25	7.06
EX18-23	Basin 18	100YR-1HR	0.67	3.97	4.64	-0.0027	154	0.70	15.84	0.72	15.87
EX18-28	Basin 18	100YR-1HR	0.67	3.44	4.94	0.0013	150	0.14	0.13	2.41	0.18
EX18-31	Basin 18	100YR-1HR	0.66	3.31	4.86	0.0011	150	0.65	3.78	0.65	3.77
EX18-33	Basin 18	100YR-1HR	0.66	3.31	4.94	0.0011	288	0.65	9.30	0.66	9.29
EX18-36	Basin 18	100YR-1HR	0.66	24.23	27.12	-0.0008	359	0.65	5.41	0.66	5.40
EX18-38	Basin 18	100YR-1HR	0.65	25.11	28.32	-0.0013	222	0.65	2.93	0.65	2.93
EX18-4	Basin 18	100YR-1HR	0.65	7.13	10.00	0.0069	214	0.65	5.04	0.65	5.04
EX18-6	Basin 18	100YR-1HR	0.68	5.73	7.42	0.0030	240	0.65	8.42	0.68	8.34
EX18-9	Basin 18	100YR-1HR	0.67	4.27	4.69	0.0028	135	0.67	13.78	0.67	13.77
GWT_18	Basin 18	100YR-1HR	0.00	1.95	99.00	0.0000	0	0.67	83.96	0.00	0.00
P_PIKE_CANAL	Basin 18	100YR-1HR	0.00	2.37	99.00	0.0000	0	0.67	14.98	0.00	0.00
S18-1	Basin 18	100YR-1HR	0.68	7.35	10.33	0.0043	118	0.65	6.55	0.67	6.45
S18-10	Basin 18	100YR-1HR	0.71	4.41	4.61	-0.0055	125	1.26	19.90	1.25	19.99
S18-11	Basin 18	100YR-1HR	0.94	5.47	4.84	-0.0529	42305	0.69	25.28	1.27	19.33
S18-12	Basin 18	100YR-1HR	0.71	8.10	7.50	-0.0123	131	0.69	21.14	0.70	21.06
S18-13	Basin 18	100YR-1HR	0.71	9.64	10.26	-0.0106	246	0.67	19.26	0.70	18.95
S18-14	Basin 18	100YR-1HR	0.67	11.86	15.26	0.0013	423	0.66	16.16	0.67	16.13
S18-15	Basin 18	100YR-1HR	0.67	18.26	22.29	-0.0011	405	0.66	10.79	0.67	10.78
S18-15A	Basin 18	100YR-1HR	0.67	20.28	24.98	0.0008	226	0.66	6.16	0.67	6.15
S18-16	Basin 18	100YR-1HR	0.66	21.98	26.00	-0.0010	257	0.65	6.17	0.66	6.16
S18-17	Basin 18	100YR-1HR	0.65	23.03	27.24	-0.0015	217	0.65	3.54	0.65	3.53
S18-2	Basin 18	100YR-1HR	0.68	6.59	7.67	0.0039	123	0.67	9.14	0.68	9.11
S18-201	Basin 18	100YR-1HR	0.67	3.09	5.09	0.0009	113	0.66	5.27	0.67	5.27
S18-3	Basin 18	100YR-1HR	0.68	5.12	6.23	0.0034	126	0.67	11.56	0.68	11.56
S18-4	Basin 18	100YR-1HR	0.67	4.46	5.96	-0.0050	122	0.67	15.37	0.67	14.98
S18-5	Basin 18	100YR-1HR	0.67	4.47	5.28	-0.0069	125	0.58	2.89	0.66	3.84
S18-6	Basin 18	100YR-1HR	0.67	4.47	4.86	0.0045	135	2.98	2.68	0.09	2.30
S18-7	Basin 18	100YR-1HR	0.67	4.35	4.10	0.0029	125	0.08	0.76	2.98	2.24
S18-8	Basin 18	100YR-1HR	0.67	5.02	4.77	0.0033	122	0.65	4.59	0.66	4.57
S18-9	Basin 18	100YR-1HR	0.76	4.72	4.62	-0.0100	2103	1.26	19.82	1.26	19.90
EX18-15	Basin 18	100YR-24HR	12.02	2.77	4.69	-0.0002	549	24.43	0.65	0.67	0.71
EX18-20	Basin 18	100YR-24HR	12.02	2.73	6.26	0.0003	449	0.01	0.42	24.38	0.36
EX18-23	Basin 18	100YR-24HR	12.02	2.73	4.64	-0.0005	572	12.00	2.56	12.00	2.55
EX18-28	Basin 18	100YR-24HR	12.03	2.66	4.94	0.0003	579	0.01	0.31	24.84	0.37
EX18-31	Basin 18	100YR-24HR	12.03	2.63	4.86	0.0003	603	24.80	0.29	0.01	0.31
EX18-33	Basin 18	100YR-24HR	12.03	2.62	4.94	-0.0015	492	11.98	1.67	12.01	1.67
EX18-36	Basin 18	100YR-24HR	12.00	23.37	27.12	-0.0001	354	11.98	0.97	11.98	0.97
EX18-38	Basin 18	100YR-24HR	11.96	24.55	28.32	-0.0001	204	11.98	0.53	11.96	0.53
EX18-4	Basin 18	100YR-24HR	11.99	6.31	10.00	0.0007	229	11.98	0.90	11.99	0.90
EX18-6	Basin 18	100YR-24HR	12.00	3.76	7.42	0.0003	342	11.99	1.51	11.97	1.51
EX18-9	Basin 18	100YR-24HR	12.02	2.77	4.69	-0.0001	377	12.00	2.61	12.02	2.61
GWT_18	Basin 18	100YR-24HR	23.00	2.45	99.00	0.0001	0	12.01	21.08	0.00	0.00
P_PIKE_CANAL	Basin 18	100YR-24HR	0.00	2.37	99.00	0.0000	0	0.00	0.00	0.00	0.00
S18-1	Basin 18	100YR-24HR	12.01	2.93	10.33	0.0003	118	11.98	1.17	12.00	1.17
S18-10	Basin 18	100YR-24HR	12.02	2.76	4.61	-0.0021	228	12.00	5.28	12.02	5.28
S18-11	Basin 18	100YR-24HR	12.02	2.87	4.84	0.0018	128	12.00	4.66	12.01	4.66
S18-12	Basin 18	100YR-24HR	12.02	2.97	7.50	0.0014	131	12.00	3.88	12.02	3.88
S18-13	Basin 18	100YR-24HR	12.02	3.02	10.26	0.0010	257	11.99	3.48	12.02	3.48
S18-14	Basin 18	100YR-24HR	12.00	10.29	15.26	-0.0001	498	11.98	2.91	11.99	2.91
S18-15	Basin 18	100YR-24HR	12.00	17.13	22.29	-0.0001	451	11.98	1.94	11.98	1.94

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S18-15A	Basin 18	100YR-24HR	12.01	19.33	24.98	-0.0001	275	11.97	1.11	12.01	1.11
S18-16	Basin 18	100YR-24HR	12.00	21.03	26.00	-0.0001	282	11.98	1.11	11.97	1.11
S18-17	Basin 18	100YR-24HR	12.00	22.39	27.24	-0.0001	207	11.98	0.63	11.96	0.63
S18-2	Basin 18	100YR-24HR	12.02	2.91	7.67	0.0006	123	12.00	1.66	11.99	1.66
S18-201	Basin 18	100YR-24HR	12.04	2.60	5.09	0.0039	113	12.00	1.68	12.01	1.68
S18-3	Basin 18	100YR-24HR	12.02	2.86	6.23	-0.0013	126	11.99	2.11	12.02	2.33
S18-4	Basin 18	100YR-24HR	11.99	2.84	5.96	-0.0060	122	12.02	4.51	0.00	0.00
S18-5	Basin 18	100YR-24HR	12.02	2.84	5.28	0.0072	125	0.01	2.30	48.00	2.91
S18-6	Basin 18	100YR-24HR	12.01	2.82	4.86	-0.0039	135	24.56	2.77	0.01	2.30
S18-7	Basin 18	100YR-24HR	12.02	2.79	4.10	-0.0007	209	0.67	0.71	24.58	2.33
S18-8	Basin 18	100YR-24HR	12.02	2.83	4.77	-0.0005	122	11.98	0.82	12.02	0.87
S18-9	Basin 18	100YR-24HR	12.02	2.80	4.62	0.0036	119	12.00	5.28	12.00	5.28
EX18-15	Basin 18	100YR-8HR	4.01	3.72	4.69	0.0017	156	4.00	2.63	4.00	2.63
EX18-20	Basin 18	100YR-8HR	4.01	3.64	6.26	-0.0049	144	4.00	4.43	4.02	4.42
EX18-23	Basin 18	100YR-8HR	4.01	3.65	4.64	0.0049	154	4.00	12.31	4.01	12.31
EX18-28	Basin 18	100YR-8HR	4.01	3.25	4.94	0.0010	150	0.01	0.31	8.79	0.33
EX18-31	Basin 18	100YR-8HR	4.01	3.14	4.86	0.0009	150	4.00	0.62	4.01	0.61
EX18-33	Basin 18	100YR-8HR	4.01	3.13	4.94	-0.0015	289	4.00	5.01	4.01	5.00
EX18-36	Basin 18	100YR-8HR	4.00	23.79	27.12	0.0008	390	4.00	2.91	3.99	2.91
EX18-38	Basin 18	100YR-8HR	3.99	24.83	28.32	0.0006	221	4.00	1.58	3.99	1.58
EX18-4	Basin 18	100YR-8HR	4.00	6.71	10.00	0.0018	240	4.00	2.71	3.99	2.71
EX18-6	Basin 18	100YR-8HR	4.00	4.34	7.42	0.0011	346	4.00	4.53	4.00	4.53
EX18-9	Basin 18	100YR-8HR	4.01	3.74	4.69	0.0017	250	4.00	7.78	4.01	7.77
GWT_18	Basin 18	100YR-8HR	8.00	2.45	99.00	0.0001	0	4.00	56.98	0.00	0.00
P_PIKE_CANAL	Basin 18	100YR-8HR	0.00	2.37	99.00	0.0000	0	4.01	5.30	0.00	0.00
S18-1	Basin 18	100YR-8HR	4.00	4.80	10.33	0.0030	118	4.00	3.52	4.00	3.51
S18-10	Basin 18	100YR-8HR	4.02	4.06	4.61	-0.0021	125	4.15	15.58	4.15	15.63
S18-11	Basin 18	100YR-8HR	4.07	4.96	4.84	-0.0092	9445	4.00	13.94	4.17	14.13
S18-12	Basin 18	100YR-8HR	4.03	5.80	7.50	0.0029	131	4.00	11.61	4.01	11.60
S18-13	Basin 18	100YR-8HR	4.02	6.27	10.26	0.0032	272	4.00	10.42	4.01	10.40
S18-14	Basin 18	100YR-8HR	4.00	11.02	15.26	0.0011	528	4.00	8.73	4.00	8.72
S18-15	Basin 18	100YR-8HR	4.00	17.69	22.29	0.0009	485	4.00	5.82	4.00	5.82
S18-15A	Basin 18	100YR-8HR	4.01	19.78	24.98	0.0008	289	3.99	3.31	4.00	3.31
S18-16	Basin 18	100YR-8HR	4.00	21.49	26.00	0.0009	302	4.00	3.31	3.99	3.31
S18-17	Basin 18	100YR-8HR	4.00	22.71	27.24	0.0006	221	4.00	1.90	3.98	1.90
S18-2	Basin 18	100YR-8HR	4.01	4.57	7.67	0.0027	123	4.00	4.97	4.00	4.97
S18-201	Basin 18	100YR-8HR	4.02	3.03	5.09	0.0039	113	4.00	3.66	4.01	3.66
S18-3	Basin 18	100YR-8HR	4.01	4.13	6.23	0.0023	126	4.00	6.30	4.01	6.32
S18-4	Basin 18	100YR-8HR	4.01	3.94	5.96	-0.0065	122	3.92	8.20	4.01	5.30
S18-5	Basin 18	100YR-8HR	4.01	3.94	5.28	0.0070	125	0.01	2.30	36.00	2.91
S18-6	Basin 18	100YR-8HR	4.01	3.92	4.86	-0.0037	135	8.56	2.73	0.01	2.30
S18-7	Basin 18	100YR-8HR	4.01	3.84	4.10	0.0019	125	0.42	0.71	8.57	2.29
S18-8	Basin 18	100YR-8HR	4.00	4.08	4.77	0.0022	122	4.00	2.47	4.00	2.47
S18-9	Basin 18	100YR-8HR	4.02	4.33	4.62	0.0036	119	4.15	15.53	4.15	15.58
EX18-15	Basin 18	10YR-1HR	0.67	3.69	4.69	0.0020	156	0.67	2.29	0.67	2.28
EX18-20	Basin 18	10YR-1HR	0.67	3.55	6.26	0.0016	144	0.73	3.90	0.75	3.93
EX18-23	Basin 18	10YR-1HR	0.67	3.56	4.64	0.0016	154	0.70	12.31	0.70	12.33
EX18-28	Basin 18	10YR-1HR	0.67	3.14	4.94	0.0009	150	0.16	0.13	2.38	0.18
EX18-31	Basin 18	10YR-1HR	0.67	3.03	4.86	0.0008	150	0.65	1.55	0.66	1.55
EX18-33	Basin 18	10YR-1HR	0.67	3.03	4.94	0.0008	292	0.66	6.31	0.67	6.31
EX18-36	Basin 18	10YR-1HR	0.67	23.93	27.12	-0.0007	389	0.65	3.68	0.67	3.66
EX18-38	Basin 18	10YR-1HR	0.66	24.92	28.32	-0.0007	222	0.65	2.00	0.65	1.99

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
EX18-4	Basin 18	10YR-1HR	0.66	6.84	10.00	0.0062	237	0.65	3.43	0.65	3.42
EX18-6	Basin 18	10YR-1HR	0.67	4.54	7.42	0.0027	318	0.65	5.72	0.67	5.71
EX18-9	Basin 18	10YR-1HR	0.67	3.72	4.69	0.0020	242	0.67	9.21	0.67	9.21
GWT_18	Basin 18	10YR-1HR	0.00	1.95	99.00	0.0000	0	0.67	64.68	0.00	0.00
P_PIKE_CANAL	Basin 18	10YR-1HR	0.00	2.37	99.00	0.0000	0	0.67	6.81	0.00	0.00
S18-1	Basin 18	10YR-1HR	0.67	5.38	10.33	-0.0030	118	0.65	4.45	0.67	4.41
S18-10	Basin 18	10YR-1HR	0.69	4.02	4.61	-0.0034	125	0.95	17.32	0.98	17.40
S18-11	Basin 18	10YR-1HR	0.83	5.06	4.84	-0.0220	16709	0.69	17.20	0.98	16.09
S18-12	Basin 18	10YR-1HR	0.72	6.31	7.50	-0.0052	131	0.69	14.36	0.70	14.33
S18-13	Basin 18	10YR-1HR	0.71	7.02	10.26	-0.0043	267	0.67	13.04	0.70	12.88
S18-14	Basin 18	10YR-1HR	0.68	11.27	15.26	-0.0012	506	0.67	10.96	0.68	10.92
S18-15	Basin 18	10YR-1HR	0.68	17.86	22.29	-0.0009	476	0.67	7.32	0.68	7.30
S18-15A	Basin 18	10YR-1HR	0.68	19.94	24.98	-0.0007	282	0.67	4.18	0.68	4.17
S18-16	Basin 18	10YR-1HR	0.67	21.64	26.00	-0.0008	299	0.65	4.19	0.67	4.18
S18-17	Basin 18	10YR-1HR	0.66	22.82	27.24	-0.0009	222	0.65	2.40	0.65	2.40
S18-2	Basin 18	10YR-1HR	0.68	5.02	7.67	0.0028	123	0.67	6.24	0.68	6.23
S18-201	Basin 18	10YR-1HR	0.67	2.89	5.09	0.0007	113	0.67	4.18	0.67	4.18
S18-3	Basin 18	10YR-1HR	0.67	4.33	6.23	0.0024	126	0.67	7.90	0.68	7.92
S18-4	Basin 18	10YR-1HR	0.67	4.02	5.96	-0.0054	122	0.71	9.86	0.67	6.81
S18-5	Basin 18	10YR-1HR	0.67	4.02	5.28	0.0060	125	0.11	1.25	25.00	2.91
S18-6	Basin 18	10YR-1HR	0.67	4.00	4.86	-0.0038	135	2.98	2.68	0.11	1.25
S18-7	Basin 18	10YR-1HR	0.67	3.88	4.10	0.0021	125	0.10	0.72	2.98	2.24
S18-8	Basin 18	10YR-1HR	0.67	4.26	4.77	0.0023	122	0.65	3.12	0.66	3.11
S18-9	Basin 18	10YR-1HR	0.71	4.33	4.62	-0.0050	119	0.94	17.25	0.95	17.32
EX18-15	Basin 18	10YR-24HR	12.03	2.58	4.69	-0.0001	719	0.00	0.00	24.36	1.21
EX18-20	Basin 18	10YR-24HR	12.04	2.56	6.26	0.0003	556	24.39	0.45	0.00	0.00
EX18-23	Basin 18	10YR-24HR	12.04	2.56	4.64	-0.0005	705	12.00	1.34	12.00	1.33
EX18-28	Basin 18	10YR-24HR	12.04	2.52	4.94	0.0003	668	0.01	0.31	0.00	0.00
EX18-31	Basin 18	10YR-24HR	21.02	2.51	4.86	0.0003	677	1.34	0.14	0.01	0.31
EX18-33	Basin 18	10YR-24HR	21.02	2.51	4.94	-0.0015	486	11.98	1.10	12.02	1.09
EX18-36	Basin 18	10YR-24HR	12.01	23.27	27.12	-0.0000	334	11.98	0.64	11.98	0.64
EX18-38	Basin 18	10YR-24HR	11.98	24.48	28.32	-0.0000	197	11.98	0.35	11.98	0.35
EX18-4	Basin 18	10YR-24HR	12.00	6.22	10.00	0.0005	221	11.98	0.59	11.95	0.59
EX18-6	Basin 18	10YR-24HR	12.00	3.64	7.42	0.0003	328	11.98	0.99	12.00	0.99
EX18-9	Basin 18	10YR-24HR	12.03	2.58	4.69	-0.0001	429	12.00	1.70	12.00	1.71
GWT_18	Basin 18	10YR-24HR	23.00	2.45	99.00	0.0001	0	12.02	13.69	0.00	0.00
P_PIKE_CANAL	Basin 18	10YR-24HR	0.00	2.37	99.00	0.0000	0	0.00	0.00	0.00	0.00
S18-1	Basin 18	10YR-24HR	12.02	2.65	10.33	0.0002	118	11.98	0.77	12.00	0.77
S18-10	Basin 18	10YR-24HR	12.03	2.57	4.61	-0.0021	261	12.00	3.47	12.01	3.47
S18-11	Basin 18	10YR-24HR	12.03	2.62	4.84	-0.0015	128	12.00	3.07	12.01	3.06
S18-12	Basin 18	10YR-24HR	12.03	2.66	7.50	0.0014	131	12.00	2.55	12.02	2.55
S18-13	Basin 18	10YR-24HR	12.03	2.68	10.26	0.0007	248	11.99	2.29	12.02	2.29
S18-14	Basin 18	10YR-24HR	12.01	10.13	15.26	-0.0001	471	12.00	1.92	11.99	1.92
S18-15	Basin 18	10YR-24HR	12.00	17.00	22.29	-0.0001	427	11.98	1.28	12.00	1.28
S18-15A	Basin 18	10YR-24HR	12.02	19.22	24.98	-0.0000	264	11.97	0.73	11.98	0.73
S18-16	Basin 18	10YR-24HR	12.00	20.92	26.00	-0.0000	270	11.99	0.73	11.97	0.73
S18-17	Basin 18	10YR-24HR	11.99	22.31	27.24	-0.0001	199	11.98	0.42	11.99	0.42
S18-2	Basin 18	10YR-24HR	12.02	2.64	7.67	0.0006	123	12.00	1.09	11.97	1.09
S18-201	Basin 18	10YR-24HR	21.02	2.50	5.09	0.0039	113	12.01	1.17	12.02	1.17
S18-3	Basin 18	10YR-24HR	12.04	2.62	6.23	-0.0013	126	11.97	1.39	12.00	1.42
S18-4	Basin 18	10YR-24HR	12.04	2.61	5.96	0.0050	122	11.34	0.00	0.00	0.00
S18-5	Basin 18	10YR-24HR	12.03	2.61	5.28	-0.0050	125	24.66	2.31	0.00	0.00

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S18-6	Basin 18	10YR-24HR	12.02	2.60	4.86	0.0031	135	0.00	0.00	24.66	2.31
S18-7	Basin 18	10YR-24HR	12.03	2.59	4.10	-0.0008	251	24.48	1.16	0.00	0.00
S18-8	Basin 18	10YR-24HR	12.03	2.61	4.77	0.0004	122	11.98	0.54	12.00	0.57
S18-9	Basin 18	10YR-24HR	12.03	2.59	4.62	0.0036	119	12.00	3.47	12.00	3.47
EX18-15	Basin 18	10YR-8HR	4.01	3.32	4.69	0.0009	156	8.44	0.60	0.68	0.71
EX18-20	Basin 18	10YR-8HR	4.02	3.23	6.26	-0.0050	144	3.38	2.45	4.02	1.25
EX18-23	Basin 18	10YR-8HR	4.02	3.23	4.64	0.0044	154	4.01	6.61	3.57	6.99
EX18-28	Basin 18	10YR-8HR	4.02	3.00	4.94	0.0007	146	0.01	0.31	8.77	0.33
EX18-31	Basin 18	10YR-8HR	4.02	2.94	4.86	0.0006	131	8.65	0.25	0.01	0.31
EX18-33	Basin 18	10YR-8HR	4.02	2.93	4.94	-0.0015	287	4.00	3.32	4.01	3.31
EX18-36	Basin 18	10YR-8HR	4.01	23.60	27.12	0.0004	382	4.00	1.93	3.99	1.93
EX18-38	Basin 18	10YR-8HR	4.00	24.70	28.32	0.0003	215	4.00	1.05	4.00	1.04
EX18-4	Basin 18	10YR-8HR	4.00	6.53	10.00	0.0013	239	4.00	1.80	3.99	1.79
EX18-6	Basin 18	10YR-8HR	4.00	4.07	7.42	0.0007	356	4.00	3.00	4.00	3.00
EX18-9	Basin 18	10YR-8HR	4.01	3.32	4.69	0.0009	251	4.00	5.08	4.01	5.10
GWT_18	Basin 18	10YR-8HR	8.00	2.45	99.00	0.0001	0	4.01	40.39	0.00	0.00
P_PIKE_CANAL	Basin 18	10YR-8HR	0.00	2.37	99.00	0.0000	0	4.01	0.68	0.00	0.00
S18-1	Basin 18	10YR-8HR	4.01	3.95	10.33	0.0015	118	4.00	2.33	4.00	2.33
S18-10	Basin 18	10YR-8HR	4.02	3.42	4.61	-0.0021	125	4.02	10.45	4.03	10.53
S18-11	Basin 18	10YR-8HR	4.02	3.84	4.84	0.0018	128	4.02	9.23	4.03	9.23
S18-12	Basin 18	10YR-8HR	4.02	4.22	7.50	0.0017	131	4.02	7.69	4.04	7.69
S18-13	Basin 18	10YR-8HR	4.02	4.42	10.26	0.0019	270	4.00	6.90	4.03	6.89
S18-14	Basin 18	10YR-8HR	4.01	10.68	15.26	0.0007	530	4.00	5.78	4.00	5.78
S18-15	Basin 18	10YR-8HR	4.01	17.43	22.29	0.0006	481	4.00	3.86	4.00	3.85
S18-15A	Basin 18	10YR-8HR	4.01	19.57	24.98	0.0005	288	3.99	2.20	4.01	2.20
S18-16	Basin 18	10YR-8HR	4.00	21.27	26.00	0.0005	298	4.00	2.20	3.99	2.20
S18-17	Basin 18	10YR-8HR	4.00	22.57	27.24	0.0003	217	4.00	1.26	3.99	1.26
S18-2	Basin 18	10YR-8HR	4.01	3.85	7.67	0.0014	123	4.00	3.29	4.00	3.29
S18-201	Basin 18	10YR-8HR	4.02	2.87	5.09	0.0039	113	4.00	2.80	4.01	2.80
S18-3	Basin 18	10YR-8HR	4.01	3.66	6.23	-0.0013	126	4.00	4.17	4.01	4.17
S18-4	Basin 18	10YR-8HR	4.01	3.57	5.96	-0.0056	122	4.87	4.50	4.01	0.68
S18-5	Basin 18	10YR-8HR	4.01	3.56	5.28	0.0070	125	0.01	2.30	36.00	2.91
S18-6	Basin 18	10YR-8HR	4.01	3.52	4.86	0.0031	135	8.53	2.74	0.01	2.30
S18-7	Basin 18	10YR-8HR	4.01	3.44	4.10	0.0009	125	0.67	0.71	8.55	2.29
S18-8	Basin 18	10YR-8HR	4.01	3.59	4.77	0.0011	122	4.00	1.63	4.00	1.63
S18-9	Basin 18	10YR-8HR	4.02	3.55	4.62	0.0036	119	4.02	10.45	4.02	10.45
EX18-15	Basin 18	25YR-72HR	60.03	4.16	4.69	0.0045	156	60.02	6.50	60.03	6.49
EX18-20	Basin 18	25YR-72HR	60.03	4.04	6.26	-0.0026	144	60.02	5.91	60.03	5.90
EX18-23	Basin 18	25YR-72HR	60.03	4.06	4.64	0.0024	154	60.03	15.73	60.03	15.73
EX18-28	Basin 18	25YR-72HR	60.03	3.55	4.94	0.0014	150	0.02	0.31	73.11	0.39
EX18-31	Basin 18	25YR-72HR	60.03	3.42	4.86	0.0012	150	60.02	2.45	60.03	2.45
EX18-33	Basin 18	25YR-72HR	60.03	3.41	4.94	-0.0014	292	60.02	7.65	60.03	7.65
EX18-36	Basin 18	25YR-72HR	60.04	24.07	27.12	0.0009	381	60.02	4.46	60.03	4.44
EX18-38	Basin 18	25YR-72HR	60.02	25.01	28.32	0.0008	223	60.02	2.42	60.02	2.41
EX18-4	Basin 18	25YR-72HR	60.02	6.97	10.00	0.0011	229	60.02	4.16	60.02	4.15
EX18-6	Basin 18	25YR-72HR	60.04	5.23	7.42	0.0025	243	60.02	6.94	60.05	6.89
EX18-9	Basin 18	25YR-72HR	60.03	4.24	4.69	-0.0028	135	60.03	11.96	60.04	11.96
GWT_18	Basin 18	25YR-72HR	72.00	2.45	99.00	0.0001	0	60.03	74.84	0.00	0.00
P_PIKE_CANAL	Basin 18	25YR-72HR	0.00	2.37	99.00	0.0000	0	60.03	12.87	0.00	0.00
S18-1	Basin 18	25YR-72HR	60.04	6.32	10.33	0.0043	118	60.02	5.40	60.04	5.34
S18-10	Basin 18	25YR-72HR	60.05	4.45	4.61	-0.0041	125	60.40	17.32	60.39	17.35
S18-11	Basin 18	25YR-72HR	60.22	5.35	4.84	-0.0312	34852	60.05	20.96	60.47	16.13

Qpost = 12.87 <
Qpre = 12.94 cfs

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S18-12	Basin 18	25YR-72HR	60.07	7.19	7.50	-0.0068	131	60.05	17.49	60.06	17.44
S18-13	Basin 18	25YR-72HR	60.07	8.25	10.26	-0.0054	244	60.03	15.85	60.06	15.68
S18-14	Basin 18	25YR-72HR	60.04	11.53	15.26	0.0014	431	60.03	13.29	60.04	13.27
S18-15	Basin 18	25YR-72HR	60.04	18.04	22.29	0.0011	455	60.03	8.88	60.04	8.86
S18-15A	Basin 18	25YR-72HR	60.04	20.09	24.98	0.0010	268	60.03	5.07	60.04	5.06
S18-16	Basin 18	25YR-72HR	60.03	21.79	26.00	0.0011	289	60.02	5.08	60.03	5.07
S18-17	Basin 18	25YR-72HR	60.02	22.91	27.24	0.0009	221	60.02	2.92	60.02	2.91
S18-2	Basin 18	25YR-72HR	60.04	5.79	7.67	0.0039	123	60.03	7.56	60.04	7.54
S18-201	Basin 18	25YR-72HR	60.03	3.24	5.09	0.0038	113	60.02	4.72	60.03	4.72
S18-3	Basin 18	25YR-72HR	60.04	4.79	6.23	0.0034	126	60.03	9.57	60.04	9.57
S18-4	Basin 18	25YR-72HR	60.03	4.33	5.96	-0.0056	122	60.03	12.47	60.03	12.87
S18-5	Basin 18	25YR-72HR	60.03	4.34	5.28	0.0069	125	60.02	4.73	60.02	2.93
S18-6	Basin 18	25YR-72HR	60.03	4.35	4.86	-0.0034	135	72.60	2.78	0.02	2.30
S18-7	Basin 18	25YR-72HR	60.03	4.27	4.10	0.0027	125	0.02	0.71	72.62	2.33
S18-8	Basin 18	25YR-72HR	60.03	4.72	4.77	0.0032	122	60.02	3.78	60.03	3.76
S18-9	Basin 18	25YR-72HR	60.07	4.72	4.62	-0.0064	2058	60.39	17.29	60.40	17.32

==========
==== Basins ====
==========

Name: B18-1 Node: S18-1 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.870 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B18-11 Node: S18-11 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.580 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B18-12 Node: S18-12 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.300 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B18-13 Node: S18-13 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.420 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B18-14 Node: S18-14 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.720 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B18-15 Node: S18-15 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00

```
            Area(ac): 0.620                 Time Shift(hrs): 0.00
        Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B18-16                   Node: S18-16                Status: Onsite
        Group: Basin 18                 Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                   Peaking Factor: 256.0
         Rainfall File:                     Storm Duration(hrs): 0.00
  Rainfall Amount(in): 0.000                  Time of Conc(min): 10.00
            Area(ac): 0.350                   Time Shift(hrs): 0.00
        Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B18-17                   Node: S18-17                Status: Onsite
        Group: Basin 18                 Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                   Peaking Factor: 256.0
         Rainfall File:                     Storm Duration(hrs): 0.00
  Rainfall Amount(in): 0.000                  Time of Conc(min): 10.00
            Area(ac): 0.470                   Time Shift(hrs): 0.00
        Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B18-2                    Node: S18-2                 Status: Onsite
        Group: Basin 18                 Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                   Peaking Factor: 256.0
         Rainfall File:                     Storm Duration(hrs): 0.00
  Rainfall Amount(in): 0.000                  Time of Conc(min): 10.00
            Area(ac): 0.360                   Time Shift(hrs): 0.00
        Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B18-3                    Node: S18-3                 Status: Onsite
        Group: Basin 18                 Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                   Peaking Factor: 256.0
         Rainfall File:                     Storm Duration(hrs): 0.00
  Rainfall Amount(in): 0.000                  Time of Conc(min): 10.00
            Area(ac): 0.330                   Time Shift(hrs): 0.00
        Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B18-5                    Node: S18-5                 Status: Onsite
        Group: Basin 18                 Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                   Peaking Factor: 256.0
         Rainfall File:                     Storm Duration(hrs): 0.00
  Rainfall Amount(in): 0.000                  Time of Conc(min): 10.00
            Area(ac): 0.470                   Time Shift(hrs): 0.00
        Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B18-6                    Node: S18-6                 Status: Onsite
        Group: Basin 18                 Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                   Peaking Factor: 256.0
```

Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.740 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B18-8 Node: S18-8 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.610 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B18-9 Node: S18-9 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.460 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX18-14 Node: EX18-15 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.550 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX18-15 Node: EX18-15 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.340 Time Shift(hrs): 0.00
Curve Number: 76.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX18-17 Node: EX18-15 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.400 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX18-19 Node: EX18-20 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.460 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX18-22 Node: EX18-23 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.350 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX18-23 Node: EX18-23 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 1.490 Time Shift(hrs): 0.00
Curve Number: 77.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX18-25 Node: EX18-23 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.510 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX18-27 Node: EX18-28 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.640 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX18-3 Node: EX18-4 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.480 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX18-30 Node: EX18-31 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.640 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX18-33 Node: EX18-33 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.520 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX18-36 Node: EX18-36 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.330 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX18-38 Node: EX18-38 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.390 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX18-4 Node: EX18-4 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.190 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX18-6 Node: EX18-6 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.450 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

```
------------------------------------------------------------------------------------------------
         Name: BX18-8                  Node: EX18-9                Status: Onsite
        Group: Basin 18                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.430                 Time Shift(hrs): 0.00
          Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


------------------------------------------------------------------------------------------------
         Name: BX18-9                  Node: EX18-9                Status: Onsite
        Group: Basin 18                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                  Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000              Time of Conc(min): 10.00
              Area(ac): 0.410                 Time Shift(hrs): 0.00
          Curve Number: 82.00             Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


================================================================================================
==== Nodes =====================================================================================
================================================================================================

      Name: EX18-15             Base Flow(cfs): 0.000          Init Stage(ft): 1.950
     Group: Basin 18                                           Warn Stage(ft): 4.690
      Type: Stage/Area


      Stage(ft)        Area(ac)
--------------- ---------------
          1.950          0.0004
          4.690          0.0004

------------------------------------------------------------------------------------------------
      Name: EX18-20             Base Flow(cfs): 0.000          Init Stage(ft): 1.950
     Group: Basin 18                                           Warn Stage(ft): 6.260
      Type: Stage/Area


      Stage(ft)        Area(ac)
--------------- ---------------
          1.950          0.0004
          6.260          0.0004

------------------------------------------------------------------------------------------------
      Name: EX18-23             Base Flow(cfs): 0.000          Init Stage(ft): 1.950
     Group: Basin 18                                           Warn Stage(ft): 4.640
      Type: Stage/Area


      Stage(ft)        Area(ac)
--------------- ---------------
          1.950          0.0004
          4.640          0.0004
          4.650          0.0040

------------------------------------------------------------------------------------------------
      Name: EX18-28             Base Flow(cfs): 0.000          Init Stage(ft): 1.950
     Group: Basin 18                                           Warn Stage(ft): 4.940
      Type: Stage/Area


      Stage(ft)        Area(ac)
--------------- ---------------
```

1.950	0.0004
4.940	0.0004

Name: EX18-31 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 4.860
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
4.860	0.0004

Name: EX18-33 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 4.940
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
4.940	0.0004

Name: EX18-36 Base Flow(cfs): 0.000 Init Stage(ft): 22.940
Group: Basin 18 Warn Stage(ft): 27.120
Type: Stage/Area

Stage(ft)	Area(ac)
20.940	0.0004
27.120	0.0004

Name: EX18-38 Base Flow(cfs): 0.000 Init Stage(ft): 24.190
Group: Basin 18 Warn Stage(ft): 28.320
Type: Stage/Area

Stage(ft)	Area(ac)
22.190	0.0004
28.320	0.0004

Name: EX18-4 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 10.000
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
10.000	0.0004

Name: EX18-6 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 7.420
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
7.420	0.0004

Name: EX18-9 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 4.690
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
4.690	0.0004

Name: GWT_18 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	1.950
108.00	1.950

Name: P_PIKE_CANAL Base Flow(cfs): 0.000 Init Stage(ft): 2.370
Group: Basin 18 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	2.370
108.00	2.370

Name: S18-1 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 10.330
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
10.330	0.0004

Name: S18-10 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 4.610
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
4.610	0.0004
4.620	0.0040

Name: S18-11 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 4.840
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
4.840	0.0004
5.000	0.2900
5.200	0.5800

Name: S18-12 Base Flow(cfs): 0.000 Init Stage(ft): 1.950

Group: Basin 18 Warn Stage(ft): 7.500
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
7.500	0.0004

Name: S18-13 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 10.260
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
10.260	0.0004

Name: S18-14 Base Flow(cfs): 0.000 Init Stage(ft): 9.500
Group: Basin 18 Warn Stage(ft): 15.260
Type: Stage/Area

Stage(ft)	Area(ac)
7.500	0.0004
15.260	0.0004

Name: S18-15 Base Flow(cfs): 0.000 Init Stage(ft): 16.500
Group: Basin 18 Warn Stage(ft): 22.290
Type: Stage/Area

Stage(ft)	Area(ac)
14.500	0.0004
22.290	0.0004

Name: S18-15A Base Flow(cfs): 0.000 Init Stage(ft): 18.800
Group: Basin 18 Warn Stage(ft): 24.980
Type: Stage/Area

Stage(ft)	Area(ac)
16.800	0.0004
24.980	0.0004

Name: S18-16 Base Flow(cfs): 0.000 Init Stage(ft): 20.500
Group: Basin 18 Warn Stage(ft): 26.000
Type: Stage/Area

Stage(ft)	Area(ac)
18.500	0.0004
26.000	0.0004

Name: S18-17 Base Flow(cfs): 0.000 Init Stage(ft): 22.000
Group: Basin 18 Warn Stage(ft): 27.240
Type: Stage/Area

Stage(ft)	Area(ac)
20.000	0.0004
27.240	0.0004

Name: S18-2 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 7.670
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
7.670	0.0004

Name: S18-201 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 5.090
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
5.090	0.0004

Name: S18-3 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 6.230
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
6.230	0.0004

Name: S18-4 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 5.960
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
5.960	0.0004

Name: S18-5 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 5.280
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
5.280	0.0004

Name: S18-6 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 4.860
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004

4.860	0.0004

Name: S18-7 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 4.100
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
4.100	0.0004

Name: S18-8 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 4.770
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
4.770	0.0004

Name: S18-9 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 4.620
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
4.620	0.0004
5.120	0.2300
5.620	0.4600

Operating Tables

Name: E_OPT_18 Group: Basin 18
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.950	1.95	0.00
1.950	2.45	0.01
1.950	3.45	0.04
1.950	5.45	0.10
2.450	2.45	0.00
2.450	3.45	0.03
2.450	5.45	0.09

Pipes

Name: EX18-15_S18-7 From Node: EX18-15 Length(ft): 156.00
Group: Basin 18 To Node: S18-7 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	30.00	30.00
Rise(in):	30.00	30.00
Invert(ft):	0.440	0.440
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Solution Algorithm: Most Restrictive
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.10
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX18-16_S18-15A	From Node:	S18-16	Length(ft): 122.00
Group:	Basin 18	To Node:	S18-15A	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	18.00	18.00		Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00		Exit Loss Coef: 0.10
Invert(ft):	20.500	18.800		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX18-20_EX18-15	From Node:	EX18-20	Length(ft): 294.00
Group:	Basin 18	To Node:	EX18-15	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	30.00	30.00		Entrance Loss Coef: 1.35
Rise(in):	30.00	30.00		Exit Loss Coef: 1.46
Invert(ft):	0.440	0.440		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX18-23_EX18-20	From Node:	EX18-23	Length(ft): 201.00
Group:	Basin 18	To Node:	EX18-20	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	30.00	30.00		Entrance Loss Coef: 1.35
Rise(in):	30.00	30.00		Exit Loss Coef: 0.10
Invert(ft):	0.440	0.440		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX18-28_EX18-23	From Node:	EX18-28	Length(ft):	296.00
Group:	Basin 18	To Node:	EX18-23	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	30.00	30.00		Entrance Loss Coef:	1.35
Rise(in):	30.00	30.00		Exit Loss Coef:	0.10
Invert(ft):	0.440	0.440		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX18-31_EX18-28	From Node:	EX18-31	Length(ft):	298.00
Group:	Basin 18	To Node:	EX18-28	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	30.00	30.00		Entrance Loss Coef:	1.35
Rise(in):	30.00	30.00		Exit Loss Coef:	0.10
Invert(ft):	0.440	0.440		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX18-33_18-201	From Node:	EX18-33	Length(ft):	4.00
Group:	Basin 18	To Node:	S18-201	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Automatic
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	0.50
Invert(ft):	0.000	-0.100		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX18-33_EX18-31	From Node:	EX18-33	Length(ft):	298.00
Group:	Basin 18	To Node:	EX18-31	Count:	1
				Friction Equation:	Automatic

	UPSTREAM	DOWNSTREAM		
			Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	30.00	30.00	Entrance Loss Coef:	1.35
Rise(in):	30.00	30.00	Exit Loss Coef:	0.10
Invert(ft):	0.440	0.440	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX18-36_EX18-33	From Node: EX18-36	Length(ft): 249.00
Group:	Basin 18	To Node: EX18-33	Count: 1
			Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
			Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	0.10
Invert(ft):	22.940	0.440	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX18-38_EX18-36	From Node: EX18-38	Length(ft): 149.00
Group:	Basin 18	To Node: EX18-36	Count: 1
			Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
			Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	0.10
Invert(ft):	24.190	22.940	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX18-4_EX18-6	From Node: EX18-4	Length(ft): 175.00
Group:	Basin 18	To Node: EX18-6	Count: 1
			Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
			Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	0.10
Invert(ft):	5.840	3.140	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn

Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX18-6_EX18-9	From Node: EX18-6	Length(ft): 175.00
Group:	Basin 18	To Node: EX18-9	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.10
Invert(ft):	3.140	0.440	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX18-9_EX18-15	From Node: EX18-9	Length(ft): 239.00
Group:	Basin 18	To Node: EX18-15	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	30.00	30.00	Entrance Loss Coef: 1.35
Rise(in):	30.00	30.00	Exit Loss Coef: 1.46
Invert(ft):	0.440	0.440	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S18-10_EX18-23	From Node: S18-10	Length(ft): 156.00
Group:	Basin 18	To Node: EX18-23	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	30.00	30.00	Entrance Loss Coef: 0.50
Rise(in):	30.00	30.00	Exit Loss Coef: 0.10
Invert(ft):	0.500	0.440	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S18-11_S18-9	From Node: S18-11	Length(ft): 67.00
Group:	Basin 18	To Node: S18-9	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 0.10
Invert(ft):	-0.850	-0.900	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S18-12_S18-11	From Node: S18-12	Length(ft): 236.00
Group:	Basin 18	To Node: S18-11	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 0.10
Invert(ft):	-0.600	-0.850	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S18-13_S18-12	From Node: S18-13	Length(ft): 118.00
Group:	Basin 18	To Node: S18-12	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 0.10
Invert(ft):	-0.500	-0.600	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S18-14_S18-13	From Node: S18-14	Length(ft): 168.00

```
       Group: Basin 18              To Node: S18-13                Count: 1
                                                        Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
    Geometry: Circular       Circular                         Flow: Both
    Span(in): 24.00          24.00                   Entrance Loss Coef: 0.50
    Rise(in): 24.00          24.00                       Exit Loss Coef: 0.10
  Invert(ft): 9.500          5.000                       Bend Loss Coef: 0.00
 Manning's N: 0.012000       0.012000                 Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000          0.000                     Inlet Ctrl Spec: Use dn
Bot Clip(in): 0.000          0.000                   Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


--------------------------------------------------------------------------------------------------
        Name: S18-15_S18-14      From Node: S18-15            Length(ft): 296.00
       Group: Basin 18             To Node: S18-14                 Count: 1
                                                        Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
    Geometry: Circular       Circular                         Flow: Both
    Span(in): 24.00          24.00                   Entrance Loss Coef: 0.50
    Rise(in): 24.00          24.00                       Exit Loss Coef: 0.10
  Invert(ft): 16.500         9.500                       Bend Loss Coef: 0.00
 Manning's N: 0.012000       0.012000                 Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000          0.000                     Inlet Ctrl Spec: Use dn
Bot Clip(in): 0.000          0.000                   Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


--------------------------------------------------------------------------------------------------
        Name: S18-15A_S18-15     From Node: S18-15A           Length(ft): 125.00
       Group: Basin 18             To Node: S18-15                 Count: 1
                                                        Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
    Geometry: Circular       Circular                         Flow: Both
    Span(in): 18.00          18.00                   Entrance Loss Coef: 0.50
    Rise(in): 18.00          18.00                       Exit Loss Coef: 0.10
  Invert(ft): 18.800         17.000                      Bend Loss Coef: 0.00
 Manning's N: 0.012000       0.012000                 Outlet Ctrl Spec: Use dc or tw
Top Clip(in): 0.000          0.000                     Inlet Ctrl Spec: Use dn
Bot Clip(in): 0.000          0.000                   Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


--------------------------------------------------------------------------------------------------
        Name: S18-17_S18-16      From Node: S18-17            Length(ft): 148.00
       Group: Basin 18             To Node: S18-16                 Count: 1
                                                        Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
    Geometry: Circular       Circular                         Flow: Both
    Span(in): 18.00          18.00                   Entrance Loss Coef: 0.50
    Rise(in): 18.00          18.00                       Exit Loss Coef: 0.10
  Invert(ft): 22.000         20.500                      Bend Loss Coef: 0.00
```

Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S18-1_S12-2	From Node: S18-1	Length(ft): 142.00
Group:	Basin 18	To Node: S18-2	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.10
Invert(ft):	0.000	-0.200	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S18-2_S18-3	From Node: S18-2	Length(ft): 132.00
Group:	Basin 18	To Node: S18-3	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.10
Invert(ft):	-0.200	-0.500	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S18-3_S18-4	From Node: S18-3	Length(ft): 157.00
Group:	Basin 18	To Node: S18-4	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	24.00	24.00	Entrance Loss Coef: 0.50
Rise(in):	24.00	24.00	Exit Loss Coef: 1.46
Invert(ft):	-0.500	-0.700	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:

Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: S18-5_S18-4 From Node: S18-5 Length(ft): 24.00
Group: Basin 18 To Node: S18-4 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	30.00	30.00	Flow:	Both
Rise(in):	30.00	30.00	Entrance Loss Coef:	0.50
Invert(ft):	-1.500	-1.600	Exit Loss Coef:	1.46
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: S18-6_S18-5 From Node: S18-6 Length(ft): 174.00
Group: Basin 18 To Node: S18-5 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	30.00	30.00	Flow:	Both
Rise(in):	30.00	30.00	Entrance Loss Coef:	0.50
Invert(ft):	-1.000	-1.500	Exit Loss Coef:	0.10
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: S18-7_S18-6 From Node: S18-7 Length(ft): 37.00
Group: Basin 18 To Node: S18-6 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	30.00	30.00	Flow:	Both
Rise(in):	30.00	30.00	Entrance Loss Coef:	0.50
Invert(ft):	-0.900	-1.000	Exit Loss Coef:	1.46
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

```
-------------------------------------------------------------------------------------------------
         Name: S18-8_S18-6         From Node: S18-8              Length(ft): 247.00
        Group: Basin 18              To Node: S18-6                   Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 18.00          18.00                    Entrance Loss Coef: 0.50
     Rise(in): 18.00          18.00                        Exit Loss Coef: 0.10
   Invert(ft): 0.000          -0.500                       Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: S18-9_S18-10        From Node: S18-9              Length(ft): 38.00
        Group: Basin 18              To Node: S18-10                  Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 30.00          30.00                    Entrance Loss Coef: 0.50
     Rise(in): 30.00          30.00                        Exit Loss Coef: 0.10
   Invert(ft): -1.400         -1.500                       Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                     Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


=================================================================================================
==== Drop Structures ============================================================================
=================================================================================================

         Name: DS18-4              From Node: S18-4              Length(ft): 5.00
        Group: Basin 18              To Node: P_PIKE_CANAL            Count: 1

               UPSTREAM       DOWNSTREAM                Friction Equation: Automatic
     Geometry: Circular       Circular                 Solution Algorithm: Most Restrictive
     Span(in): 30.00          30.00                            Flow: Both
     Rise(in): 30.00          30.00                    Entrance Loss Coef: 0.500
   Invert(ft): 0.450          0.350                        Exit Loss Coef: 1.000
  Manning's N: 0.012000       0.012000                   Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                        Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                          Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


*** Weir 1 of 1 for Drop Structure DS18-4 ***
                                                                                    TABLE
                  Count: 1                        Bottom Clip(in): 0.000
                   Type: Vertical: Mavis             Top Clip(in): 0.000
                   Flow: Both                     Weir Disc Coef: 3.130
               Geometry: Rectangular           Orifice Disc Coef: 0.600
```

Span(in): 60.00 Invert(ft): 3.450
Rise(in): 9.60 Control Elev(ft): 3.450

==========
==== Rating Curves ==========
==========

Name: EX18-15_EXF From Node: EX18-15 Count: 267
Group: Basin 18 To Node: GWT_18 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_18	1.950	1.950
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: EX18-20_EXF From Node: EX18-20 Count: 248
Group: Basin 18 To Node: GWT_18 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_18	1.950	1.950
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: EX18-23_EXF From Node: EX18-23 Count: 249
Group: Basin 18 To Node: GWT_18 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_18	1.950	1.950
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: EX18-28_EXF From Node: EX18-28 Count: 297
Group: Basin 18 To Node: GWT_18 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_18	1.950	1.950
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: EX18-31_EXF From Node: EX18-31 Count: 282
Group: Basin 18 To Node: GWT_18 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_18	1.950	1.950
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: EX18-33_EXF From Node: EX18-33 Count: 141
Group: Basin 18 To Node: GWT_18 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_18	1.950	1.950
#2:		0.000	0.000
#3:		0.000	0.000

#4:	0.000	0.000

Name: EX18-9_EXF From Node: EX18-9 Count: 120
Group: Basin 18 To Node: GWT_18 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_18	1.950	1.950
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S18-201_EXF From Node: S18-201 Count: 180
Group: Basin 18 To Node: GWT_18 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_18	1.950	1.950
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

==========
==== Hydrology Simulations ==========
==========

Name: 100YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 5.00

Time(hrs)	Print Inc(min)
1.000	1.00
1.330	1.00

Name: 100YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 13.44

Time(hrs)	Print Inc(min)
8.000	5.00
16.000	1.00
24.000	5.00
24.330	5.00

Name: 100YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 9.60

Time(hrs)	Print Inc(min)
2.000	5.00
6.000	1.00
8.000	5.00
8.330	5.00

```
--------------------------------------------------------------------------------------------------
         Name: 10YR-1HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 1.00
          Rainfall File: Fdot-1
    Rainfall Amount(in): 3.50

Time(hrs)       Print Inc(min)
--------------- ---------------
1.000           1.00
1.330           1.00

--------------------------------------------------------------------------------------------------
         Name: 10YR-24HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Fdot-24
    Rainfall Amount(in): 8.88

Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.00
16.000          1.00
24.000          5.00
24.330          5.00

--------------------------------------------------------------------------------------------------
         Name: 10YR-8HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 8.00
          Rainfall File: Fdot-8
    Rainfall Amount(in): 6.40

Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           5.00
6.000           1.00
8.000           5.00
8.330           5.00

--------------------------------------------------------------------------------------------------
         Name: 25YR-72HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 72.00
          Rainfall File: Sfwmd72
    Rainfall Amount(in): 14.00

Time(hrs)       Print Inc(min)
--------------- ---------------
48.000          15.00
56.000          5.00
64.000          1.00
72.000          5.00
72.330          5.00

==================================================================================================
==== Routing Simulations ==========================================================================
==================================================================================================

         Name: 100YR-1HR           Hydrology Sim: 100YR-1HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
```

Start Time(hrs): 0.000 End Time(hrs): 25.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
1.000	1.000
25.000	15.000

Group	Run
Basin 18	Yes

Name: 100YR-24HR Hydrology Sim: 100YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 48.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 24HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
48.000	15.000

Group	Run
Basin 18	Yes

Name: 100YR-8HR Hydrology Sim: 100YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 36.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 8HR Boundary Flows:

Time(hrs)	Print Inc(min)
2.000	5.000
6.000	1.000
8.000	5.000
36.000	15.000

Group	Run
Basin 18	Yes

Name: 10YR-1HR Hydrology Sim: 10YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

```
        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 25.00
     Min Calc Time(sec): 0.5000               Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
1.000           1.000
25.000          15.000

Group           Run
--------------- -----
Basin 18        Yes


-------------------------------------------------------------------------------------------------
         Name: 10YR-24HR           Hydrology Sim: 10YR-24HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 48.00
     Min Calc Time(sec): 0.5000               Max Calc Time(sec): 60.0000
        Boundary Stages: 24HR                    Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.000
16.000          1.000
24.000          5.000
48.000          15.000

Group           Run
--------------- -----
Basin 18        Yes


-------------------------------------------------------------------------------------------------
         Name: 10YR-8HR            Hydrology Sim: 10YR-8HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 36.00
     Min Calc Time(sec): 0.5000               Max Calc Time(sec): 60.0000
        Boundary Stages: 8HR                     Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           5.000
6.000           1.000
8.000           5.000
36.000          15.000

Group           Run
--------------- -----
Basin 18        Yes


-------------------------------------------------------------------------------------------------
         Name: 25YR-72HR           Hydrology Sim: 25YR-72HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP
```

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 96.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 72HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
96.000	15.000

Group	Run
Basin 18	Yes

Boundary Conditions

Name: 8HR Node: GWT_18 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.950
1.000	1.960
2.000	2.020
3.000	2.090
4.000	2.300
5.000	2.380
6.000	2.410
7.000	2.440
8.000	2.450
12.000	1.950
36.000	1.950

Name: 24HR Node: GWT_18 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.950
1.000	1.960
2.000	1.970
3.000	1.980
4.000	2.000
5.000	2.010
6.000	2.030
7.000	2.050
8.000	2.070
9.000	2.100
10.000	2.130
11.000	2.170
12.000	2.220
13.000	2.260
14.000	2.290
15.000	2.320
16.000	2.340
17.000	2.360
18.000	2.380
19.000	2.400
20.000	2.420
21.000	2.430
22.000	2.440
23.000	2.450
24.000	2.450
36.000	1.950
48.000	1.950

Name: 72HR Node: GWT_18 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.950
24.000	2.000
36.000	2.040
48.000	2.080
49.000	2.090
50.000	2.090
51.000	2.090
52.000	2.100
53.000	2.100
54.000	2.110
55.000	2.120
56.000	2.130
57.000	2.150
57.500	2.150
58.000	2.160
58.500	2.170
59.000	2.180
59.500	2.200
60.000	2.320
60.500	2.350
61.000	2.360
61.500	2.370
62.000	2.380
62.500	2.390
63.000	2.390
64.000	2.410
65.000	2.410
66.000	2.420
68.000	2.430
70.000	2.440
72.000	2.450
96.000	1.950

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	0.00	0.0	0.0	0.0	0.0	0.00
25YR-72HR	0.08	0.0	-0.1	0.1	0.0	0.00
25YR-72HR	0.17	0.0	-1.2	1.2	0.0	0.00
25YR-72HR	0.25	0.0	-2.7	2.7	-0.0	-0.00
25YR-72HR	0.33	0.0	-4.1	4.1	0.0	0.00
25YR-72HR	0.42	0.0	-5.4	5.4	0.0	0.00
25YR-72HR	0.50	0.0	-6.7	6.7	0.0	0.00
25YR-72HR	0.58	0.0	-7.9	7.9	0.0	0.00
25YR-72HR	0.67	0.0	-9.2	9.2	0.0	0.00
25YR-72HR	0.75	0.0	-10.4	10.4	0.0	0.00
25YR-72HR	0.83	0.0	-11.7	11.7	0.0	0.00
25YR-72HR	0.92	0.0	-13.0	13.0	0.0	0.00
25YR-72HR	1.00	0.0	-14.2	14.2	0.0	0.00
25YR-72HR	1.08	0.0	-15.5	15.5	0.0	0.00
25YR-72HR	1.17	0.0	-16.7	16.7	0.0	0.00
25YR-72HR	1.25	0.0	-18.0	18.0	0.0	0.00
25YR-72HR	1.33	0.4	-19.2	19.5	0.0	0.00
25YR-72HR	1.42	1.5	-20.0	21.5	0.0	0.00
25YR-72HR	1.50	3.3	-20.3	23.6	0.0	0.00
25YR-72HR	1.58	7.5	-19.7	27.2	0.0	0.00
25YR-72HR	1.67	15.6	-16.8	32.5	0.0	0.00
25YR-72HR	1.75	27.7	-11.0	38.7	0.0	0.00
25YR-72HR	1.83	44.2	-1.6	45.8	0.0	0.00
25YR-72HR	1.92	65.7	11.9	53.8	0.0	0.00
25YR-72HR	2.00	92.1	29.6	62.5	0.0	0.00
25YR-72HR	2.08	123.5	51.5	71.9	0.0	0.00
25YR-72HR	2.17	159.9	77.7	82.2	0.0	0.00
25YR-72HR	2.25	201.4	108.2	93.2	0.0	0.00
25YR-72HR	2.33	247.7	143.0	104.7	-0.0	-0.00
25YR-72HR	2.42	298.6	182.1	116.5	0.0	0.00
25YR-72HR	2.50	354.2	225.5	128.7	0.0	0.00
25YR-72HR	2.58	414.3	273.1	141.1	0.0	0.00
25YR-72HR	2.67	478.5	324.9	153.6	0.0	0.00
25YR-72HR	2.75	547.0	380.7	166.3	-0.0	-0.00
25YR-72HR	2.83	619.5	440.5	179.0	-0.0	-0.00
25YR-72HR	2.92	695.9	504.2	191.7	-0.0	-0.00
25YR-72HR	3.00	776.1	571.6	204.5	-0.0	-0.00
25YR-72HR	3.08	859.9	642.6	217.3	-0.0	-0.00
25YR-72HR	3.17	947.2	717.1	230.1	-0.0	-0.00
25YR-72HR	3.25	1038.1	794.9	243.1	-0.0	-0.00
25YR-72HR	3.33	1132.2	876.0	256.2	-0.0	-0.00
25YR-72HR	3.42	1229.6	960.3	269.3	-0.0	-0.00
25YR-72HR	3.50	1330.1	1047.5	282.6	-0.0	-0.00
25YR-72HR	3.58	1433.7	1137.8	295.9	-0.0	-0.00
25YR-72HR	3.67	1540.2	1230.8	309.4	-0.0	-0.00
25YR-72HR	3.75	1649.6	1326.7	323.0	-0.0	-0.00
25YR-72HR	3.83	1761.9	1425.2	336.7	-0.0	-0.00
25YR-72HR	3.92	1876.8	1526.4	350.4	-0.0	-0.00
25YR-72HR	4.00	1994.4	1630.1	364.3	-0.0	-0.00
25YR-72HR	4.08	2114.6	1736.2	378.4	-0.0	-0.00
25YR-72HR	4.17	2237.2	1844.6	392.6	0.0	0.00
25YR-72HR	4.25	2362.3	1955.4	407.0	0.0	0.00
25YR-72HR	4.33	2489.8	2068.4	421.4	0.0	0.00
25YR-72HR	4.42	2619.6	2183.5	436.0	0.0	0.00
25YR-72HR	4.50	2751.6	2300.9	450.7	-0.0	-0.00
25YR-72HR	4.58	2885.8	2420.3	465.5	-0.0	-0.00
25YR-72HR	4.67	3022.1	2541.7	480.5	-0.0	-0.00
25YR-72HR	4.75	3160.6	2665.1	495.5	-0.0	-0.00
25YR-72HR	4.83	3301.0	2790.4	510.6	-0.0	-0.00
25YR-72HR	4.92	3443.4	2917.6	525.8	-0.0	-0.00
25YR-72HR	5.00	3587.8	3046.6	541.2	-0.0	-0.00
25YR-72HR	5.08	3734.0	3177.5	556.6	-0.0	-0.00
25YR-72HR	5.17	3882.1	3310.0	572.0	-0.0	-0.00
25YR-72HR	5.25	4031.9	3444.3	587.6	-0.0	-0.00
25YR-72HR	5.33	4183.5	3580.2	603.3	-0.0	-0.00
25YR-72HR	5.42	4336.8	3717.7	619.0	-0.0	-0.00
25YR-72HR	5.50	4491.8	3856.9	634.9	-0.0	-0.00
25YR-72HR	5.58	4648.3	3997.6	650.8	-0.0	-0.00
25YR-72HR	5.67	4806.5	4140.9	665.6	-0.0	-0.00
25YR-72HR	5.75	4966.2	4287.2	679.0	-0.0	-0.00
25YR-72HR	5.83	5127.4	4436.1	691.4	-0.0	-0.00
25YR-72HR	5.92	5290.1	4587.1	703.0	-0.0	-0.00
25YR-72HR	6.00	5454.3	4739.9	714.4	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	6.08	5619.8	4894.3	725.5	-0.0	-0.00
25YR-72HR	6.17	5786.8	5050.1	736.7	-0.0	-0.00
25YR-72HR	6.25	5955.1	5207.3	747.8	-0.0	-0.00
25YR-72HR	6.33	6124.7	5365.8	758.9	-0.0	-0.00
25YR-72HR	6.42	6295.6	5525.5	770.1	-0.0	-0.00
25YR-72HR	6.50	6467.8	5686.5	781.3	-0.0	-0.00
25YR-72HR	6.58	6641.2	5848.7	792.5	-0.0	-0.00
25YR-72HR	6.67	6815.8	6012.1	803.7	-0.0	-0.00
25YR-72HR	6.75	6991.6	6176.6	815.0	-0.0	-0.00
25YR-72HR	6.83	7168.5	6342.3	826.2	-0.0	-0.00
25YR-72HR	6.92	7346.6	6509.1	837.5	-0.0	-0.00
25YR-72HR	7.00	7525.8	6676.9	848.9	-0.0	-0.00
25YR-72HR	7.08	7706.1	6845.9	860.3	-0.0	-0.00
25YR-72HR	7.17	7887.5	7015.8	871.6	-0.0	-0.00
25YR-72HR	7.25	8069.9	7186.8	883.1	-0.0	-0.00
25YR-72HR	7.33	8253.4	7358.9	894.5	-0.0	-0.00
25YR-72HR	7.42	8437.9	7531.9	906.0	-0.0	-0.00
25YR-72HR	7.50	8623.4	7705.9	917.5	-0.0	-0.00
25YR-72HR	7.58	8809.9	7880.8	929.1	-0.0	-0.00
25YR-72HR	7.67	8997.4	8056.8	940.6	-0.0	-0.00
25YR-72HR	7.75	9185.8	8233.6	952.2	-0.0	-0.00
25YR-72HR	7.83	9375.2	8411.4	963.8	-0.0	-0.00
25YR-72HR	7.92	9565.5	8590.1	975.5	-0.0	-0.00
25YR-72HR	8.00	9756.7	8769.6	987.1	-0.0	-0.00
25YR-72HR	8.08	9948.9	8950.1	998.8	-0.0	-0.00
25YR-72HR	8.10	9987.4	8986.3	1001.1	-0.0	-0.00
25YR-72HR	8.12	10025.9	9022.5	1003.4	-0.0	-0.00
25YR-72HR	8.13	10064.5	9058.8	1005.7	-0.0	-0.00
25YR-72HR	8.15	10103.2	9095.2	1008.0	-0.0	-0.00
25YR-72HR	8.17	10141.8	9131.7	1010.2	-0.0	-0.00
25YR-72HR	8.18	10180.5	9168.3	1012.3	-0.0	-0.00
25YR-72HR	8.20	10219.3	9205.0	1014.3	-0.0	-0.00
25YR-72HR	8.22	10258.0	9241.9	1016.2	-0.0	-0.00
25YR-72HR	8.23	10296.8	9278.9	1017.9	-0.0	-0.00
25YR-72HR	8.25	10335.7	9316.1	1019.6	-0.0	-0.00
25YR-72HR	8.27	10374.6	9353.4	1021.2	-0.0	-0.00
25YR-72HR	8.28	10413.5	9390.9	1022.6	-0.0	-0.00
25YR-72HR	8.30	10452.4	9428.5	1023.9	-0.0	-0.00
25YR-72HR	8.32	10491.4	9466.2	1025.1	-0.0	-0.00
25YR-72HR	8.33	10530.4	9504.1	1026.3	-0.0	-0.00
25YR-72HR	8.35	10569.4	9542.1	1027.3	-0.0	-0.00
25YR-72HR	8.37	10608.5	9580.2	1028.2	-0.0	-0.00
25YR-72HR	8.38	10647.6	9618.5	1029.1	-0.0	-0.00
25YR-72HR	8.40	10686.7	9656.8	1029.9	-0.0	-0.00
25YR-72HR	8.42	10725.9	9695.2	1030.7	-0.0	-0.00
25YR-72HR	8.43	10765.1	9733.7	1031.4	-0.0	-0.00
25YR-72HR	8.45	10804.3	9772.2	1032.1	-0.0	-0.00
25YR-72HR	8.47	10843.6	9810.9	1032.7	-0.0	-0.00
25YR-72HR	8.48	10882.9	9849.6	1033.3	-0.0	-0.00
25YR-72HR	8.50	10922.2	9888.3	1033.9	-0.0	-0.00
25YR-72HR	8.52	10961.6	9927.1	1034.5	-0.0	-0.00
25YR-72HR	8.53	11001.0	9966.0	1035.0	-0.0	-0.00
25YR-72HR	8.55	11040.4	10004.9	1035.5	-0.0	-0.00
25YR-72HR	8.57	11079.9	10043.8	1036.0	-0.0	-0.00
25YR-72HR	8.58	11119.4	10082.8	1036.5	-0.0	-0.00
25YR-72HR	8.60	11158.9	10121.9	1037.0	-0.0	-0.00
25YR-72HR	8.62	11198.4	10161.0	1037.5	-0.0	-0.00
25YR-72HR	8.63	11238.0	10200.1	1037.9	-0.0	-0.00
25YR-72HR	8.65	11277.6	10239.2	1038.4	-0.0	-0.00
25YR-72HR	8.67	11317.3	10278.4	1038.9	-0.0	-0.00
25YR-72HR	8.68	11356.9	10317.6	1039.3	-0.0	-0.00
25YR-72HR	8.70	11396.6	10356.9	1039.8	-0.0	-0.00
25YR-72HR	8.72	11436.4	10396.2	1040.2	-0.0	-0.00
25YR-72HR	8.73	11476.1	10435.5	1040.7	-0.0	-0.00
25YR-72HR	8.75	11515.9	10474.8	1041.1	-0.0	-0.00
25YR-72HR	8.77	11555.8	10514.2	1041.6	-0.0	-0.00
25YR-72HR	8.78	11595.6	10553.6	1042.0	-0.0	-0.00
25YR-72HR	8.80	11635.5	10593.1	1042.4	-0.0	-0.00
25YR-72HR	8.82	11675.4	10632.6	1042.9	-0.0	-0.00
25YR-72HR	8.83	11715.4	10672.1	1043.3	-0.0	-0.00
25YR-72HR	8.85	11755.4	10711.6	1043.7	-0.0	-0.00
25YR-72HR	8.87	11795.4	10751.2	1044.2	-0.0	-0.00
25YR-72HR	8.88	11835.4	10790.8	1044.6	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	8.90	11875.5	10830.4	1045.0	-0.0	-0.00
25YR-72HR	8.92	11915.6	10870.1	1045.5	-0.0	-0.00
25YR-72HR	8.93	11955.7	10909.8	1045.9	-0.0	-0.00
25YR-72HR	8.95	11995.9	10949.5	1046.3	-0.0	-0.00
25YR-72HR	8.97	12036.0	10989.3	1046.8	-0.0	-0.00
25YR-72HR	8.98	12076.3	11029.1	1047.2	-0.0	-0.00
25YR-72HR	9.00	12116.5	11068.9	1047.6	-0.0	-0.00
25YR-72HR	9.02	12156.8	11108.7	1048.1	-0.0	-0.00
25YR-72HR	9.03	12197.1	11148.6	1048.5	-0.0	-0.00
25YR-72HR	9.05	12237.4	11188.5	1048.9	-0.0	-0.00
25YR-72HR	9.07	12277.7	11228.4	1049.3	-0.0	-0.00
25YR-72HR	9.08	12318.1	11268.4	1049.8	-0.0	-0.00
25YR-72HR	9.10	12358.5	11308.4	1050.2	-0.0	-0.00
25YR-72HR	9.12	12399.0	11348.4	1050.6	-0.0	-0.00
25YR-72HR	9.13	12439.5	11388.4	1051.0	-0.0	-0.00
25YR-72HR	9.15	12479.9	11428.5	1051.5	-0.0	-0.00
25YR-72HR	9.17	12520.5	11468.6	1051.9	-0.0	-0.00
25YR-72HR	9.18	12561.0	11508.7	1052.3	-0.0	-0.00
25YR-72HR	9.20	12601.6	11548.9	1052.7	-0.0	-0.00
25YR-72HR	9.22	12642.2	11589.1	1053.1	-0.0	-0.00
25YR-72HR	9.23	12682.8	11629.3	1053.6	-0.0	-0.00
25YR-72HR	9.25	12723.5	11669.5	1054.0	-0.0	-0.00
25YR-72HR	9.27	12764.2	11709.8	1054.4	-0.0	-0.00
25YR-72HR	9.28	12804.9	11750.1	1054.8	-0.0	-0.00
25YR-72HR	9.30	12845.7	11790.4	1055.2	-0.0	-0.00
25YR-72HR	9.32	12886.4	11830.8	1055.7	-0.0	-0.00
25YR-72HR	9.33	12927.2	11871.2	1056.1	-0.0	-0.00
25YR-72HR	9.35	12968.1	11911.6	1056.5	-0.0	-0.00
25YR-72HR	9.37	13008.9	11952.0	1056.9	-0.0	-0.00
25YR-72HR	9.38	13049.8	11992.5	1057.3	-0.0	-0.00
25YR-72HR	9.40	13090.7	12033.0	1057.7	-0.0	-0.00
25YR-72HR	9.42	13131.6	12073.5	1058.1	-0.0	-0.00
25YR-72HR	9.43	13172.6	12114.0	1058.6	-0.0	-0.00
25YR-72HR	9.45	13213.6	12154.6	1059.0	-0.0	-0.00
25YR-72HR	9.47	13254.6	12195.2	1059.4	-0.0	-0.00
25YR-72HR	9.48	13295.6	12235.8	1059.8	-0.0	-0.00
25YR-72HR	9.50	13336.7	12276.5	1060.2	-0.0	-0.00
25YR-72HR	9.52	13377.8	12317.1	1060.6	-0.0	-0.00
25YR-72HR	9.53	13418.9	12357.9	1061.0	-0.0	-0.00
25YR-72HR	9.55	13460.0	12398.6	1061.4	-0.0	-0.00
25YR-72HR	9.57	13501.2	12439.3	1061.8	-0.0	-0.00
25YR-72HR	9.58	13542.4	12480.1	1062.3	-0.0	-0.00
25YR-72HR	9.60	13583.6	12520.9	1062.7	-0.0	-0.00
25YR-72HR	9.62	13624.8	12561.8	1063.1	-0.0	-0.00
25YR-72HR	9.63	13666.1	12602.6	1063.5	-0.0	-0.00
25YR-72HR	9.65	13707.4	12643.5	1063.9	-0.0	-0.00
25YR-72HR	9.67	13748.7	12684.4	1064.3	-0.0	-0.00
25YR-72HR	9.68	13790.1	12725.4	1064.7	-0.0	-0.00
25YR-72HR	9.70	13831.5	12766.4	1065.1	-0.0	-0.00
25YR-72HR	9.72	13872.9	12807.4	1065.5	-0.0	-0.00
25YR-72HR	9.73	13914.3	12848.4	1065.9	-0.0	-0.00
25YR-72HR	9.75	13955.8	12889.4	1066.3	-0.0	-0.00
25YR-72HR	9.77	13997.2	12930.5	1066.7	-0.0	-0.00
25YR-72HR	9.78	14038.8	12971.6	1067.1	-0.0	-0.00
25YR-72HR	9.80	14080.3	13012.7	1067.6	-0.0	-0.00
25YR-72HR	9.82	14121.9	13053.9	1068.0	-0.0	-0.00
25YR-72HR	9.83	14163.4	13095.1	1068.4	-0.0	-0.00
25YR-72HR	9.85	14205.1	13136.3	1068.8	-0.0	-0.00
25YR-72HR	9.87	14246.7	13177.5	1069.2	-0.0	-0.00
25YR-72HR	9.88	14288.4	13218.8	1069.6	-0.0	-0.00
25YR-72HR	9.90	14330.1	13260.1	1070.0	-0.0	-0.00
25YR-72HR	9.92	14371.8	13301.4	1070.4	-0.0	-0.00
25YR-72HR	9.93	14413.5	13342.7	1070.8	-0.0	-0.00
25YR-72HR	9.95	14455.3	13384.1	1071.2	-0.0	-0.00
25YR-72HR	9.97	14497.1	13425.5	1071.6	-0.0	-0.00
25YR-72HR	9.98	14539.0	13466.9	1072.0	-0.0	-0.00
25YR-72HR	10.00	14580.8	13508.4	1072.4	-0.0	-0.00
25YR-72HR	10.02	14622.7	13549.9	1072.8	-0.0	-0.00
25YR-72HR	10.03	14664.6	13591.4	1073.2	-0.0	-0.00
25YR-72HR	10.05	14706.6	13632.9	1073.7	-0.0	-0.00
25YR-72HR	10.07	14748.5	13674.5	1074.1	-0.0	-0.00
25YR-72HR	10.08	14790.5	13716.1	1074.5	-0.0	-0.00
25YR-72HR	10.10	14832.5	13757.7	1074.9	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	10.12	14874.6	13799.3	1075.3	-0.0	-0.00
25YR-72HR	10.13	14916.6	13841.0	1075.7	-0.0	-0.00
25YR-72HR	10.15	14958.7	13882.7	1076.1	-0.0	-0.00
25YR-72HR	10.17	15000.9	13924.4	1076.5	-0.0	-0.00
25YR-72HR	10.18	15043.0	13966.1	1076.9	-0.0	-0.00
25YR-72HR	10.20	15085.2	14007.9	1077.3	-0.0	-0.00
25YR-72HR	10.22	15127.4	14049.7	1077.7	-0.0	-0.00
25YR-72HR	10.23	15169.6	14091.5	1078.1	-0.0	-0.00
25YR-72HR	10.25	15211.9	14133.4	1078.5	-0.0	-0.00
25YR-72HR	10.27	15254.2	14175.3	1078.9	-0.0	-0.00
25YR-72HR	10.28	15296.5	14217.2	1079.3	-0.0	-0.00
25YR-72HR	10.30	15338.8	14259.1	1079.7	-0.0	-0.00
25YR-72HR	10.32	15381.2	14301.1	1080.1	-0.0	-0.00
25YR-72HR	10.33	15423.6	14343.1	1080.5	-0.0	-0.00
25YR-72HR	10.35	15466.0	14385.1	1080.9	-0.0	-0.00
25YR-72HR	10.37	15508.4	14427.1	1081.3	-0.0	-0.00
25YR-72HR	10.38	15550.9	14469.2	1081.7	-0.0	-0.00
25YR-72HR	10.40	15593.4	14511.3	1082.1	-0.0	-0.00
25YR-72HR	10.42	15635.9	14553.4	1082.5	-0.0	-0.00
25YR-72HR	10.43	15678.5	14595.6	1082.9	-0.0	-0.00
25YR-72HR	10.45	15721.0	14637.7	1083.3	-0.0	-0.00
25YR-72HR	10.47	15763.6	14679.9	1083.7	-0.0	-0.00
25YR-72HR	10.48	15806.2	14722.2	1084.1	-0.0	-0.00
25YR-72HR	10.50	15848.9	14764.4	1084.5	-0.0	-0.00
25YR-72HR	10.52	15891.6	14806.7	1084.9	-0.0	-0.00
25YR-72HR	10.53	15934.3	14849.0	1085.3	-0.0	-0.00
25YR-72HR	10.55	15977.0	14891.3	1085.7	-0.0	-0.00
25YR-72HR	10.57	16019.8	14933.7	1086.1	-0.0	-0.00
25YR-72HR	10.58	16062.5	14976.1	1086.5	-0.0	-0.00
25YR-72HR	10.60	16105.3	15018.5	1086.9	-0.0	-0.00
25YR-72HR	10.62	16148.2	15060.9	1087.3	-0.0	-0.00
25YR-72HR	10.63	16191.0	15103.4	1087.7	-0.0	-0.00
25YR-72HR	10.65	16233.9	15145.9	1088.0	-0.0	-0.00
25YR-72HR	10.67	16276.8	15188.4	1088.4	-0.0	-0.00
25YR-72HR	10.68	16319.7	15230.9	1088.8	-0.0	-0.00
25YR-72HR	10.70	16362.7	15273.5	1089.2	-0.0	-0.00
25YR-72HR	10.72	16405.7	15316.1	1089.6	-0.0	-0.00
25YR-72HR	10.73	16448.7	15358.7	1090.0	-0.0	-0.00
25YR-72HR	10.75	16491.7	15401.3	1090.4	-0.0	-0.00
25YR-72HR	10.77	16534.8	15444.0	1090.8	-0.0	-0.00
25YR-72HR	10.78	16577.8	15486.7	1091.2	-0.0	-0.00
25YR-72HR	10.80	16621.0	15529.4	1091.6	-0.0	-0.00
25YR-72HR	10.82	16664.1	15572.1	1091.9	-0.0	-0.00
25YR-72HR	10.83	16707.2	15614.9	1092.3	-0.0	-0.00
25YR-72HR	10.85	16750.4	15657.7	1092.7	-0.0	-0.00
25YR-72HR	10.87	16793.6	15700.5	1093.1	-0.0	-0.00
25YR-72HR	10.88	16836.8	15743.4	1093.5	-0.0	-0.00
25YR-72HR	10.90	16880.1	15786.2	1093.9	-0.0	-0.00
25YR-72HR	10.92	16923.4	15829.1	1094.3	-0.0	-0.00
25YR-72HR	10.93	16966.7	15872.0	1094.7	-0.0	-0.00
25YR-72HR	10.95	17010.0	15915.0	1095.0	-0.0	-0.00
25YR-72HR	10.97	17053.4	15957.9	1095.4	-0.0	-0.00
25YR-72HR	10.98	17096.7	16000.9	1095.8	-0.0	-0.00
25YR-72HR	11.00	17140.1	16043.9	1096.2	-0.0	-0.00
25YR-72HR	11.02	17183.5	16087.0	1096.6	-0.0	-0.00
25YR-72HR	11.03	17227.0	16130.0	1097.0	-0.0	-0.00
25YR-72HR	11.05	17270.5	16173.1	1097.3	-0.0	-0.00
25YR-72HR	11.07	17314.0	16216.2	1097.7	-0.0	-0.00
25YR-72HR	11.08	17357.5	16259.4	1098.1	-0.0	-0.00
25YR-72HR	11.10	17401.0	16302.5	1098.5	-0.0	-0.00
25YR-72HR	11.12	17444.6	16345.7	1098.9	-0.0	-0.00
25YR-72HR	11.13	17488.2	16388.9	1099.3	-0.0	-0.00
25YR-72HR	11.15	17531.8	16432.1	1099.6	-0.0	-0.00
25YR-72HR	11.17	17575.4	16475.4	1100.0	-0.0	-0.00
25YR-72HR	11.18	17619.1	16518.7	1100.4	-0.0	-0.00
25YR-72HR	11.20	17662.8	16562.0	1100.8	-0.0	-0.00
25YR-72HR	11.22	17706.5	16605.3	1101.2	-0.0	-0.00
25YR-72HR	11.23	17750.2	16648.6	1101.5	-0.0	-0.00
25YR-72HR	11.25	17793.9	16692.0	1101.9	-0.0	-0.00
25YR-72HR	11.27	17837.7	16735.4	1102.3	-0.0	-0.00
25YR-72HR	11.28	17881.5	16778.8	1102.7	-0.0	-0.00
25YR-72HR	11.30	17925.3	16822.3	1103.1	-0.0	-0.00
25YR-72HR	11.32	17969.2	16865.7	1103.4	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	11.33	18013.0	16909.2	1103.8	-0.0	-0.00
25YR-72HR	11.35	18056.9	16952.7	1104.2	-0.0	-0.00
25YR-72HR	11.37	18100.8	16996.3	1104.6	-0.0	-0.00
25YR-72HR	11.38	18144.8	17039.8	1105.0	-0.0	-0.00
25YR-72HR	11.40	18188.7	17083.4	1105.3	-0.0	-0.00
25YR-72HR	11.42	18232.7	17127.0	1105.7	-0.0	-0.00
25YR-72HR	11.43	18276.7	17170.6	1106.1	-0.0	-0.00
25YR-72HR	11.45	18320.7	17214.3	1106.4	-0.0	-0.00
25YR-72HR	11.47	18364.8	17258.0	1106.8	-0.0	-0.00
25YR-72HR	11.48	18408.9	17301.7	1107.2	-0.0	-0.00
25YR-72HR	11.50	18453.0	17345.4	1107.6	-0.0	-0.00
25YR-72HR	11.52	18497.1	17389.1	1107.9	-0.0	-0.00
25YR-72HR	11.53	18541.2	17432.9	1108.3	-0.0	-0.00
25YR-72HR	11.55	18585.4	17476.7	1108.7	-0.0	-0.00
25YR-72HR	11.57	18629.5	17520.5	1109.1	-0.0	-0.00
25YR-72HR	11.58	18673.7	17564.3	1109.4	-0.0	-0.00
25YR-72HR	11.60	18718.0	17608.2	1109.8	-0.0	-0.00
25YR-72HR	11.62	18762.2	17652.0	1110.2	-0.0	-0.00
25YR-72HR	11.63	18806.5	17695.9	1110.5	-0.0	-0.00
25YR-72HR	11.65	18850.8	17739.8	1110.9	-0.0	-0.00
25YR-72HR	11.67	18895.1	17783.8	1111.3	-0.0	-0.00
25YR-72HR	11.68	18939.4	17827.7	1111.7	-0.0	-0.00
25YR-72HR	11.70	18983.8	17871.7	1112.0	-0.0	-0.00
25YR-72HR	11.72	19028.1	17915.7	1112.4	-0.0	-0.00
25YR-72HR	11.73	19072.5	17959.8	1112.8	-0.0	-0.00
25YR-72HR	11.75	19117.0	18003.8	1113.1	-0.0	-0.00
25YR-72HR	11.77	19161.4	18047.9	1113.5	-0.0	-0.00
25YR-72HR	11.78	19205.9	18092.0	1113.9	-0.0	-0.00
25YR-72HR	11.80	19250.3	18136.1	1114.2	-0.0	-0.00
25YR-72HR	11.82	19294.8	18180.2	1114.6	-0.0	-0.00
25YR-72HR	11.83	19339.4	18224.4	1115.0	-0.0	-0.00
25YR-72HR	11.85	19383.9	18268.6	1115.4	-0.0	-0.00
25YR-72HR	11.87	19428.5	18312.8	1115.7	-0.0	-0.00
25YR-72HR	11.88	19473.1	18357.0	1116.1	-0.0	-0.00
25YR-72HR	11.90	19517.7	18401.2	1116.5	-0.0	-0.00
25YR-72HR	11.92	19562.3	18445.5	1116.8	-0.0	-0.00
25YR-72HR	11.93	19607.0	18489.8	1117.2	-0.0	-0.00
25YR-72HR	11.95	19651.6	18534.1	1117.5	-0.0	-0.00
25YR-72HR	11.97	19696.3	18578.4	1117.9	-0.0	-0.00
25YR-72HR	11.98	19741.0	18622.8	1118.3	-0.0	-0.00
25YR-72HR	12.00	19785.8	18667.1	1118.6	-0.0	-0.00
25YR-72HR	12.02	19830.5	18711.5	1119.0	-0.0	-0.00
25YR-72HR	12.03	19875.3	18755.9	1119.4	-0.0	-0.00
25YR-72HR	12.05	19920.1	18800.4	1119.7	-0.0	-0.00
25YR-72HR	12.07	19964.9	18844.8	1120.1	-0.0	-0.00
25YR-72HR	12.08	20009.8	18889.3	1120.5	-0.0	-0.00
25YR-72HR	12.10	20054.6	18933.8	1120.8	-0.0	-0.00
25YR-72HR	12.12	20099.5	18978.3	1121.2	-0.0	-0.00
25YR-72HR	12.13	20144.4	19022.8	1121.5	-0.0	-0.00
25YR-72HR	12.15	20189.3	19067.4	1121.9	-0.0	-0.00
25YR-72HR	12.17	20234.2	19112.0	1122.3	-0.0	-0.00
25YR-72HR	12.18	20279.2	19156.6	1122.6	-0.0	-0.00
25YR-72HR	12.20	20324.2	19201.2	1123.0	-0.0	-0.00
25YR-72HR	12.22	20369.2	19245.8	1123.4	-0.0	-0.00
25YR-72HR	12.23	20414.2	19290.5	1123.7	-0.0	-0.00
25YR-72HR	12.25	20459.2	19335.1	1124.1	-0.0	-0.00
25YR-72HR	12.27	20504.3	19379.8	1124.4	-0.0	-0.00
25YR-72HR	12.28	20549.4	19424.6	1124.8	-0.0	-0.00
25YR-72HR	12.30	20594.5	19469.3	1125.2	-0.0	-0.00
25YR-72HR	12.32	20639.6	19514.1	1125.5	-0.0	-0.00
25YR-72HR	12.33	20684.7	19558.8	1125.9	-0.0	-0.00
25YR-72HR	12.35	20729.9	19603.6	1126.2	-0.0	-0.00
25YR-72HR	12.37	20775.0	19648.5	1126.6	-0.0	-0.00
25YR-72HR	12.38	20820.2	19693.3	1126.9	-0.0	-0.00
25YR-72HR	12.40	20865.5	19738.1	1127.3	-0.0	-0.00
25YR-72HR	12.42	20910.7	19783.0	1127.7	-0.0	-0.00
25YR-72HR	12.43	20955.9	19827.9	1128.0	-0.0	-0.00
25YR-72HR	12.45	21001.2	19872.8	1128.4	-0.0	-0.00
25YR-72HR	12.47	21046.5	19917.8	1128.7	-0.0	-0.00
25YR-72HR	12.48	21091.8	19962.7	1129.1	-0.0	-0.00
25YR-72HR	12.50	21137.1	20007.7	1129.4	-0.0	-0.00
25YR-72HR	12.52	21182.5	20052.7	1129.8	-0.0	-0.00
25YR-72HR	12.53	21227.9	20097.7	1130.2	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	12.55	21273.3	20142.8	1130.5	-0.0	-0.00
25YR-72HR	12.57	21318.7	20187.8	1130.9	-0.0	-0.00
25YR-72HR	12.58	21364.1	20232.9	1131.2	-0.0	-0.00
25YR-72HR	12.60	21409.5	20278.0	1131.6	-0.0	-0.00
25YR-72HR	12.62	21455.0	20323.1	1131.9	-0.0	-0.00
25YR-72HR	12.63	21500.5	20368.2	1132.3	-0.0	-0.00
25YR-72HR	12.65	21546.0	20413.3	1132.6	-0.0	-0.00
25YR-72HR	12.67	21591.5	20458.5	1133.0	-0.0	-0.00
25YR-72HR	12.68	21637.0	20503.7	1133.3	-0.0	-0.00
25YR-72HR	12.70	21682.6	20548.9	1133.7	-0.0	-0.00
25YR-72HR	12.72	21728.2	20594.1	1134.0	-0.0	-0.00
25YR-72HR	12.73	21773.8	20639.4	1134.4	-0.0	-0.00
25YR-72HR	12.75	21819.4	20684.6	1134.7	-0.0	-0.00
25YR-72HR	12.77	21865.0	20729.9	1135.1	-0.0	-0.00
25YR-72HR	12.78	21910.7	20775.2	1135.4	-0.0	-0.00
25YR-72HR	12.80	21956.3	20820.5	1135.8	-0.0	-0.00
25YR-72HR	12.82	22002.0	20865.9	1136.2	-0.0	-0.00
25YR-72HR	12.83	22047.7	20911.2	1136.5	-0.0	-0.00
25YR-72HR	12.85	22093.5	20956.6	1136.9	-0.0	-0.00
25YR-72HR	12.87	22139.2	21002.0	1137.2	-0.0	-0.00
25YR-72HR	12.88	22185.0	21047.4	1137.6	-0.0	-0.00
25YR-72HR	12.90	22230.7	21092.8	1137.9	-0.0	-0.00
25YR-72HR	12.92	22276.5	21138.3	1138.3	-0.0	-0.00
25YR-72HR	12.93	22322.3	21183.7	1138.6	-0.0	-0.00
25YR-72HR	12.95	22368.2	21229.2	1139.0	-0.0	-0.00
25YR-72HR	12.97	22414.0	21274.7	1139.3	-0.0	-0.00
25YR-72HR	12.98	22459.9	21320.2	1139.7	-0.0	-0.00
25YR-72HR	13.00	22505.8	21365.8	1140.0	-0.0	-0.00
25YR-72HR	13.02	22551.7	21411.3	1140.4	-0.0	-0.00
25YR-72HR	13.03	22597.6	21456.9	1140.7	-0.0	-0.00
25YR-72HR	13.05	22643.5	21502.5	1141.1	-0.0	-0.00
25YR-72HR	13.07	22689.5	21548.1	1141.4	-0.0	-0.00
25YR-72HR	13.08	22735.5	21593.7	1141.8	-0.0	-0.00
25YR-72HR	13.10	22781.5	21639.4	1142.1	-0.0	-0.00
25YR-72HR	13.12	22827.5	21685.0	1142.5	-0.0	-0.00
25YR-72HR	13.13	22873.5	21730.7	1142.8	-0.0	-0.00
25YR-72HR	13.15	22919.6	21776.4	1143.1	-0.0	-0.00
25YR-72HR	13.17	22965.6	21822.1	1143.5	-0.0	-0.00
25YR-72HR	13.18	23011.7	21867.9	1143.8	-0.0	-0.00
25YR-72HR	13.20	23057.8	21913.6	1144.2	-0.0	-0.00
25YR-72HR	13.22	23103.9	21959.4	1144.5	-0.0	-0.00
25YR-72HR	13.23	23150.0	22005.2	1144.9	-0.0	-0.00
25YR-72HR	13.25	23196.2	22051.0	1145.2	-0.0	-0.00
25YR-72HR	13.27	23242.4	22096.8	1145.6	-0.0	-0.00
25YR-72HR	13.28	23288.5	22142.7	1145.9	-0.0	-0.00
25YR-72HR	13.30	23334.8	22188.5	1146.2	-0.0	-0.00
25YR-72HR	13.32	23381.0	22234.4	1146.6	-0.0	-0.00
25YR-72HR	13.33	23427.2	22280.3	1146.9	-0.0	-0.00
25YR-72HR	13.35	23473.5	22326.2	1147.3	-0.0	-0.00
25YR-72HR	13.37	23519.7	22372.1	1147.6	-0.0	-0.00
25YR-72HR	13.38	23566.0	22418.1	1148.0	-0.0	-0.00
25YR-72HR	13.40	23612.3	22464.0	1148.3	-0.0	-0.00
25YR-72HR	13.42	23658.6	22510.0	1148.6	-0.0	-0.00
25YR-72HR	13.43	23705.0	22556.0	1149.0	-0.0	-0.00
25YR-72HR	13.45	23751.3	22602.0	1149.3	-0.0	-0.00
25YR-72HR	13.47	23797.7	22648.0	1149.7	-0.0	-0.00
25YR-72HR	13.48	23844.1	22694.1	1150.0	-0.0	-0.00
25YR-72HR	13.50	23890.5	22740.2	1150.3	-0.0	-0.00
25YR-72HR	13.52	23936.9	22786.2	1150.7	-0.0	-0.00
25YR-72HR	13.53	23983.4	22832.3	1151.0	-0.0	-0.00
25YR-72HR	13.55	24029.8	22878.4	1151.4	-0.0	-0.00
25YR-72HR	13.57	24076.3	22924.6	1151.7	-0.0	-0.00
25YR-72HR	13.58	24122.8	22970.7	1152.1	-0.0	-0.00
25YR-72HR	13.60	24169.3	23016.9	1152.4	-0.0	-0.00
25YR-72HR	13.62	24215.8	23063.1	1152.7	-0.0	-0.00
25YR-72HR	13.63	24262.3	23109.3	1153.1	-0.0	-0.00
25YR-72HR	13.65	24308.9	23155.5	1153.4	-0.0	-0.00
25YR-72HR	13.67	24355.5	23201.7	1153.7	-0.0	-0.00
25YR-72HR	13.68	24402.1	23248.0	1154.1	-0.0	-0.00
25YR-72HR	13.70	24448.7	23294.2	1154.4	-0.0	-0.00
25YR-72HR	13.72	24495.3	23340.5	1154.8	-0.0	-0.00
25YR-72HR	13.73	24541.9	23386.8	1155.1	-0.0	-0.00
25YR-72HR	13.75	24588.6	23433.1	1155.4	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	13.77	24635.2	23479.5	1155.8	-0.0	-0.00
25YR-72HR	13.78	24681.9	23525.8	1156.1	-0.0	-0.00
25YR-72HR	13.80	24728.6	23572.2	1156.5	-0.0	-0.00
25YR-72HR	13.82	24775.3	23618.5	1156.8	-0.0	-0.00
25YR-72HR	13.83	24822.1	23664.9	1157.1	-0.0	-0.00
25YR-72HR	13.85	24868.8	23711.3	1157.5	-0.0	-0.00
25YR-72HR	13.87	24915.6	23757.8	1157.8	-0.0	-0.00
25YR-72HR	13.88	24962.4	23804.2	1158.1	-0.0	-0.00
25YR-72HR	13.90	25009.2	23850.7	1158.5	-0.0	-0.00
25YR-72HR	13.92	25056.0	23897.2	1158.8	-0.0	-0.00
25YR-72HR	13.93	25102.8	23943.7	1159.1	-0.0	-0.00
25YR-72HR	13.95	25149.6	23990.2	1159.5	-0.0	-0.00
25YR-72HR	13.97	25196.5	24036.7	1159.8	-0.0	-0.00
25YR-72HR	13.98	25243.4	24083.2	1160.1	-0.0	-0.00
25YR-72HR	14.00	25290.3	24129.8	1160.5	-0.0	-0.00
25YR-72HR	14.02	25337.2	24176.4	1160.8	-0.0	-0.00
25YR-72HR	14.03	25384.1	24222.9	1161.1	-0.0	-0.00
25YR-72HR	14.05	25431.0	24269.5	1161.5	-0.0	-0.00
25YR-72HR	14.07	25478.0	24316.2	1161.8	-0.0	-0.00
25YR-72HR	14.08	25525.0	24362.8	1162.2	-0.0	-0.00
25YR-72HR	14.10	25571.9	24409.4	1162.5	-0.0	-0.00
25YR-72HR	14.12	25618.9	24456.1	1162.8	-0.0	-0.00
25YR-72HR	14.13	25665.9	24502.8	1163.2	-0.0	-0.00
25YR-72HR	14.15	25713.0	24549.5	1163.5	-0.0	-0.00
25YR-72HR	14.17	25760.0	24596.2	1163.8	-0.0	-0.00
25YR-72HR	14.18	25807.1	24642.9	1164.2	-0.0	-0.00
25YR-72HR	14.20	25854.2	24689.7	1164.5	-0.0	-0.00
25YR-72HR	14.22	25901.3	24736.4	1164.8	-0.0	-0.00
25YR-72HR	14.23	25948.4	24783.2	1165.1	-0.0	-0.00
25YR-72HR	14.25	25995.5	24830.0	1165.5	-0.0	-0.00
25YR-72HR	14.27	26042.6	24876.8	1165.8	-0.0	-0.00
25YR-72HR	14.28	26089.8	24923.6	1166.1	-0.0	-0.00
25YR-72HR	14.30	26136.9	24970.5	1166.5	-0.0	-0.00
25YR-72HR	14.32	26184.1	25017.3	1166.8	-0.0	-0.00
25YR-72HR	14.33	26231.3	25064.2	1167.1	-0.0	-0.00
25YR-72HR	14.35	26278.5	25111.1	1167.5	-0.0	-0.00
25YR-72HR	14.37	26325.8	25158.0	1167.8	-0.0	-0.00
25YR-72HR	14.38	26373.0	25204.9	1168.1	-0.0	-0.00
25YR-72HR	14.40	26420.3	25251.8	1168.5	-0.0	-0.00
25YR-72HR	14.42	26467.5	25298.7	1168.8	-0.0	-0.00
25YR-72HR	14.43	26514.8	25345.7	1169.1	-0.0	-0.00
25YR-72HR	14.45	26562.1	25392.7	1169.4	-0.0	-0.00
25YR-72HR	14.47	26609.4	25439.7	1169.8	-0.0	-0.00
25YR-72HR	14.48	26656.8	25486.7	1170.1	-0.0	-0.00
25YR-72HR	14.50	26704.1	25533.7	1170.4	-0.0	-0.00
25YR-72HR	14.52	26751.5	25580.7	1170.8	-0.0	-0.00
25YR-72HR	14.53	26798.8	25627.8	1171.1	-0.0	-0.00
25YR-72HR	14.55	26846.2	25674.8	1171.4	-0.0	-0.00
25YR-72HR	14.57	26893.6	25721.9	1171.7	-0.0	-0.00
25YR-72HR	14.58	26941.1	25769.0	1172.1	-0.0	-0.00
25YR-72HR	14.60	26988.5	25816.1	1172.4	-0.0	-0.00
25YR-72HR	14.62	27035.9	25863.2	1172.7	-0.0	-0.00
25YR-72HR	14.63	27083.4	25910.3	1173.1	-0.0	-0.00
25YR-72HR	14.65	27130.9	25957.5	1173.4	-0.0	-0.00
25YR-72HR	14.67	27178.4	26004.6	1173.7	-0.0	-0.00
25YR-72HR	14.68	27225.9	26051.8	1174.0	-0.0	-0.00
25YR-72HR	14.70	27273.4	26099.0	1174.4	-0.0	-0.00
25YR-72HR	14.72	27320.9	26146.2	1174.7	-0.0	-0.00
25YR-72HR	14.73	27368.5	26193.5	1175.0	-0.0	-0.00
25YR-72HR	14.75	27416.0	26240.7	1175.4	-0.0	-0.00
25YR-72HR	14.77	27463.6	26287.9	1175.7	-0.0	-0.00
25YR-72HR	14.78	27511.2	26335.2	1176.0	-0.0	-0.00
25YR-72HR	14.80	27558.8	26382.5	1176.3	-0.0	-0.00
25YR-72HR	14.82	27606.4	26429.8	1176.6	-0.0	-0.00
25YR-72HR	14.83	27654.1	26477.1	1177.0	-0.0	-0.00
25YR-72HR	14.85	27701.7	26524.4	1177.3	-0.0	-0.00
25YR-72HR	14.87	27749.4	26571.8	1177.6	-0.0	-0.00
25YR-72HR	14.88	27797.1	26619.1	1178.0	-0.0	-0.00
25YR-72HR	14.90	27844.7	26666.5	1178.3	-0.0	-0.00
25YR-72HR	14.92	27892.5	26713.8	1178.6	-0.0	-0.00
25YR-72HR	14.93	27940.2	26761.2	1178.9	-0.0	-0.00
25YR-72HR	14.95	27987.9	26808.6	1179.3	-0.0	-0.00
25YR-72HR	14.97	28035.6	26856.1	1179.6	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	14.98	28083.4	26903.5	1179.9	-0.0	-0.00
25YR-72HR	15.00	28131.2	26950.9	1180.2	-0.0	-0.00
25YR-72HR	15.02	28179.0	26998.4	1180.6	-0.0	-0.00
25YR-72HR	15.03	28226.8	27045.9	1180.9	-0.0	-0.00
25YR-72HR	15.05	28274.6	27093.4	1181.2	-0.0	-0.00
25YR-72HR	15.07	28322.4	27140.9	1181.5	-0.0	-0.00
25YR-72HR	15.08	28370.3	27188.4	1181.8	-0.0	-0.00
25YR-72HR	15.10	28418.1	27235.9	1182.2	-0.0	-0.00
25YR-72HR	15.12	28466.0	27283.5	1182.5	-0.0	-0.00
25YR-72HR	15.13	28513.9	27331.1	1182.8	-0.0	-0.00
25YR-72HR	15.15	28561.8	27378.6	1183.1	-0.0	-0.00
25YR-72HR	15.17	28609.7	27426.2	1183.5	-0.0	-0.00
25YR-72HR	15.18	28657.6	27473.8	1183.8	-0.0	-0.00
25YR-72HR	15.20	28705.5	27521.4	1184.1	-0.0	-0.00
25YR-72HR	15.22	28753.5	27569.0	1184.4	-0.0	-0.00
25YR-72HR	15.23	28801.4	27616.7	1184.8	-0.0	-0.00
25YR-72HR	15.25	28849.4	27664.3	1185.1	-0.0	-0.00
25YR-72HR	15.27	28897.4	27712.0	1185.4	-0.0	-0.00
25YR-72HR	15.28	28945.4	27759.7	1185.7	-0.0	-0.00
25YR-72HR	15.30	28993.4	27807.4	1186.0	-0.0	-0.00
25YR-72HR	15.32	29041.5	27855.1	1186.4	-0.0	-0.00
25YR-72HR	15.33	29089.5	27902.8	1186.7	-0.0	-0.00
25YR-72HR	15.35	29137.6	27950.6	1187.0	-0.0	-0.00
25YR-72HR	15.37	29185.6	27998.3	1187.3	-0.0	-0.00
25YR-72HR	15.38	29233.7	28046.1	1187.6	-0.0	-0.00
25YR-72HR	15.40	29281.8	28093.9	1188.0	-0.0	-0.00
25YR-72HR	15.42	29329.9	28141.7	1188.3	-0.0	-0.00
25YR-72HR	15.43	29378.1	28189.5	1188.6	-0.0	-0.00
25YR-72HR	15.45	29426.2	28237.3	1188.9	-0.0	-0.00
25YR-72HR	15.47	29474.3	28285.1	1189.2	-0.0	-0.00
25YR-72HR	15.48	29522.5	28332.9	1189.6	-0.0	-0.00
25YR-72HR	15.50	29570.7	28380.8	1189.9	-0.0	-0.00
25YR-72HR	15.52	29618.9	28428.7	1190.2	-0.0	-0.00
25YR-72HR	15.53	29667.1	28476.5	1190.5	-0.0	-0.00
25YR-72HR	15.55	29715.3	28524.4	1190.9	-0.0	-0.00
25YR-72HR	15.57	29763.5	28572.3	1191.2	-0.0	-0.00
25YR-72HR	15.58	29811.8	28620.3	1191.5	-0.0	-0.00
25YR-72HR	15.60	29860.0	28668.2	1191.8	-0.0	-0.00
25YR-72HR	15.62	29908.3	28716.1	1192.1	-0.0	-0.00
25YR-72HR	15.63	29956.6	28764.1	1192.4	-0.0	-0.00
25YR-72HR	15.65	30004.9	28812.1	1192.8	-0.0	-0.00
25YR-72HR	15.67	30053.2	28860.1	1193.1	-0.0	-0.00
25YR-72HR	15.68	30101.5	28908.1	1193.4	-0.0	-0.00
25YR-72HR	15.70	30149.8	28956.1	1193.7	-0.0	-0.00
25YR-72HR	15.72	30198.1	29004.1	1194.0	-0.0	-0.00
25YR-72HR	15.73	30246.5	29052.2	1194.3	-0.0	-0.00
25YR-72HR	15.75	30294.9	29100.2	1194.7	-0.0	-0.00
25YR-72HR	15.77	30343.3	29148.3	1195.0	-0.0	-0.00
25YR-72HR	15.78	30391.6	29196.4	1195.3	-0.0	-0.00
25YR-72HR	15.80	30440.1	29244.4	1195.6	-0.0	-0.00
25YR-72HR	15.82	30488.5	29292.5	1195.9	-0.0	-0.00
25YR-72HR	15.83	30536.9	29340.7	1196.2	-0.0	-0.00
25YR-72HR	15.85	30585.3	29388.8	1196.6	-0.0	-0.00
25YR-72HR	15.87	30633.8	29436.9	1196.9	-0.0	-0.00
25YR-72HR	15.88	30682.3	29485.1	1197.2	-0.0	-0.00
25YR-72HR	15.90	30730.8	29533.2	1197.5	-0.0	-0.00
25YR-72HR	15.92	30779.2	29581.4	1197.8	-0.0	-0.00
25YR-72HR	15.93	30827.8	29629.6	1198.2	-0.0	-0.00
25YR-72HR	15.95	30876.3	29677.8	1198.5	-0.0	-0.00
25YR-72HR	15.97	30924.8	29726.0	1198.8	-0.0	-0.00
25YR-72HR	15.98	30973.3	29774.2	1199.1	-0.0	-0.00
25YR-72HR	16.00	31021.9	29822.5	1199.4	-0.0	-0.00
25YR-72HR	16.08	31264.9	30063.9	1201.0	-0.0	-0.00
25YR-72HR	16.17	31508.1	30305.6	1202.6	-0.0	-0.00
25YR-72HR	16.25	31751.7	30547.6	1204.1	-0.0	-0.00
25YR-72HR	16.33	31995.6	30789.9	1205.7	-0.0	-0.00
25YR-72HR	16.42	32239.7	31032.5	1207.3	-0.0	-0.00
25YR-72HR	16.50	32484.2	31275.4	1208.8	-0.0	-0.00
25YR-72HR	16.58	32728.9	31518.6	1210.4	-0.0	-0.00
25YR-72HR	16.67	32974.0	31762.0	1211.9	-0.0	-0.00
25YR-72HR	16.75	33219.3	32005.8	1213.5	-0.0	-0.00
25YR-72HR	16.83	33464.9	32249.8	1215.0	-0.0	-0.00
25YR-72HR	16.92	33710.7	32494.2	1216.6	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	17.00	33956.9	32738.8	1218.1	-0.0	-0.00
25YR-72HR	17.08	34203.3	32983.7	1219.7	-0.0	-0.00
25YR-72HR	17.17	34450.0	33228.8	1221.2	-0.0	-0.00
25YR-72HR	17.25	34697.0	33474.3	1222.7	-0.0	-0.00
25YR-72HR	17.33	34944.2	33720.0	1224.2	-0.0	-0.00
25YR-72HR	17.42	35191.7	33966.0	1225.8	0.0	0.00
25YR-72HR	17.50	35439.5	34212.2	1227.3	0.0	0.00
25YR-72HR	17.58	35687.5	34458.7	1228.8	0.0	0.00
25YR-72HR	17.67	35935.8	34705.5	1230.3	0.0	0.00
25YR-72HR	17.75	36184.4	34952.5	1231.8	0.0	0.00
25YR-72HR	17.83	36433.2	35199.8	1233.4	-0.0	-0.00
25YR-72HR	17.92	36682.2	35447.3	1234.9	-0.0	-0.00
25YR-72HR	18.00	36931.5	35695.1	1236.4	-0.0	-0.00
25YR-72HR	18.08	37181.1	35943.2	1237.9	0.0	0.00
25YR-72HR	18.17	37430.8	36191.5	1239.4	0.0	0.00
25YR-72HR	18.25	37680.9	36440.0	1240.9	0.0	0.00
25YR-72HR	18.33	37931.2	36688.8	1242.4	0.0	0.00
25YR-72HR	18.42	38181.7	36937.8	1243.9	0.0	0.00
25YR-72HR	18.50	38432.4	37187.0	1245.4	0.0	0.00
25YR-72HR	18.58	38683.4	37436.5	1246.9	0.0	0.00
25YR-72HR	18.67	38934.6	37686.3	1248.4	0.0	0.00
25YR-72HR	18.75	39186.1	37936.2	1249.9	0.0	0.00
25YR-72HR	18.83	39437.7	38186.4	1251.3	0.0	0.00
25YR-72HR	18.92	39689.6	38436.8	1252.8	0.0	0.00
25YR-72HR	19.00	39941.8	38687.5	1254.3	0.0	0.00
25YR-72HR	19.08	40194.1	38938.3	1255.8	0.0	0.00
25YR-72HR	19.17	40446.7	39189.4	1257.3	0.0	0.00
25YR-72HR	19.25	40699.5	39440.8	1258.7	0.0	0.00
25YR-72HR	19.33	40952.5	39692.3	1260.2	0.0	0.00
25YR-72HR	19.42	41205.8	39944.1	1261.7	0.0	0.00
25YR-72HR	19.50	41459.2	40196.1	1263.2	0.0	0.00
25YR-72HR	19.58	41712.9	40448.2	1264.6	0.0	0.00
25YR-72HR	19.67	41966.7	40700.7	1266.1	0.0	0.00
25YR-72HR	19.75	42220.8	40953.3	1267.5	0.0	0.00
25YR-72HR	19.83	42475.1	41206.1	1269.0	0.0	0.00
25YR-72HR	19.92	42729.6	41459.2	1270.4	0.0	0.00
25YR-72HR	20.00	42984.3	41712.4	1271.9	0.0	0.00
25YR-72HR	20.08	43239.2	41965.9	1273.3	0.0	0.00
25YR-72HR	20.17	43494.3	42219.5	1274.8	0.0	0.00
25YR-72HR	20.25	43749.6	42473.3	1276.3	0.0	0.00
25YR-72HR	20.33	44005.1	42727.4	1277.7	0.0	0.00
25YR-72HR	20.42	44260.8	42981.6	1279.2	0.0	0.00
25YR-72HR	20.50	44516.7	43236.1	1280.6	0.0	0.00
25YR-72HR	20.58	44772.8	43490.8	1282.1	0.0	0.00
25YR-72HR	20.67	45029.1	43745.6	1283.5	-0.0	-0.00
25YR-72HR	20.75	45285.6	44000.6	1285.0	-0.0	-0.00
25YR-72HR	20.83	45542.3	44255.9	1286.4	-0.0	-0.00
25YR-72HR	20.92	45799.1	44511.3	1287.9	-0.0	-0.00
25YR-72HR	21.00	46056.2	44766.9	1289.3	-0.0	-0.00
25YR-72HR	21.08	46313.4	45022.6	1290.8	-0.0	-0.00
25YR-72HR	21.17	46570.8	45278.6	1292.2	-0.0	-0.00
25YR-72HR	21.25	46828.4	45534.8	1293.6	-0.0	-0.00
25YR-72HR	21.33	47086.2	45791.2	1295.0	-0.0	-0.00
25YR-72HR	21.42	47344.2	46047.7	1296.5	-0.0	-0.00
25YR-72HR	21.50	47602.3	46304.4	1297.9	-0.0	-0.00
25YR-72HR	21.58	47860.6	46561.3	1299.3	-0.0	-0.00
25YR-72HR	21.67	48119.1	46818.3	1300.8	-0.0	-0.00
25YR-72HR	21.75	48377.8	47075.6	1302.2	-0.0	-0.00
25YR-72HR	21.83	48636.6	47333.0	1303.6	-0.0	-0.00
25YR-72HR	21.92	48895.6	47590.6	1305.0	-0.0	-0.00
25YR-72HR	22.00	49154.8	47848.4	1306.4	-0.0	-0.00
25YR-72HR	22.08	49414.2	48106.3	1307.9	-0.0	-0.00
25YR-72HR	22.17	49673.7	48364.4	1309.3	-0.0	-0.00
25YR-72HR	22.25	49933.4	48622.7	1310.7	0.0	0.00
25YR-72HR	22.33	50193.3	48881.1	1312.1	0.0	0.00
25YR-72HR	22.42	50453.3	49139.7	1313.6	0.0	0.00
25YR-72HR	22.50	50713.5	49398.5	1315.0	0.0	0.00
25YR-72HR	22.58	50973.8	49657.5	1316.4	0.0	0.00
25YR-72HR	22.67	51234.3	49916.6	1317.8	0.0	0.00
25YR-72HR	22.75	51495.0	50175.8	1319.2	0.0	0.00
25YR-72HR	22.83	51755.9	50435.3	1320.6	0.0	0.00
25YR-72HR	22.92	52016.8	50694.8	1322.0	0.0	0.00
25YR-72HR	23.00	52278.0	50954.6	1323.4	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	23.08	52539.3	51214.5	1324.9	-0.0	-0.00
25YR-72HR	23.17	52800.8	51474.5	1326.3	-0.0	-0.00
25YR-72HR	23.25	53062.4	51734.7	1327.7	-0.0	-0.00
25YR-72HR	23.33	53324.2	51995.1	1329.1	-0.0	-0.00
25YR-72HR	23.42	53586.1	52255.7	1330.4	-0.0	-0.00
25YR-72HR	23.50	53848.2	52516.3	1331.8	-0.0	-0.00
25YR-72HR	23.58	54110.4	52777.2	1333.2	-0.0	-0.00
25YR-72HR	23.67	54372.8	53038.2	1334.6	-0.0	-0.00
25YR-72HR	23.75	54635.3	53299.3	1336.0	-0.0	-0.00
25YR-72HR	23.83	54898.0	53560.6	1337.5	-0.0	-0.00
25YR-72HR	23.92	55160.9	53822.0	1338.9	-0.0	-0.00
25YR-72HR	24.00	55424.0	54083.6	1340.4	-0.0	-0.00
25YR-72HR	24.25	56321.9	54925.1	1396.8	-0.0	-0.00
25YR-72HR	24.50	57375.9	55924.6	1451.3	-0.0	-0.00
25YR-72HR	24.75	58498.4	57017.9	1480.4	-0.0	-0.00
25YR-72HR	25.00	59647.7	58152.8	1495.0	-0.0	-0.00
25YR-72HR	25.25	60804.4	59301.2	1503.2	-0.0	-0.00
25YR-72HR	25.50	61963.5	60453.5	1509.9	-0.0	-0.00
25YR-72HR	25.75	63124.9	61608.2	1516.6	-0.0	-0.00
25YR-72HR	26.00	64288.6	62765.3	1523.3	-0.0	-0.00
25YR-72HR	26.25	65454.5	63924.6	1529.9	-0.0	-0.00
25YR-72HR	26.50	66622.7	65086.1	1536.5	-0.0	-0.00
25YR-72HR	26.75	67792.9	66249.8	1543.1	-0.0	-0.00
25YR-72HR	27.00	68965.2	67415.4	1549.8	-0.0	-0.00
25YR-72HR	27.25	70139.5	68583.2	1556.3	-0.0	-0.00
25YR-72HR	27.50	71315.8	69752.9	1562.9	-0.0	-0.00
25YR-72HR	27.75	72494.0	70924.6	1569.4	-0.0	-0.00
25YR-72HR	28.00	73674.1	72098.2	1575.9	-0.0	-0.00
25YR-72HR	28.25	74856.0	73273.6	1582.4	-0.0	-0.00
25YR-72HR	28.50	76039.7	74450.8	1588.9	-0.0	-0.00
25YR-72HR	28.75	77225.2	75629.8	1595.4	-0.0	-0.00
25YR-72HR	29.00	78412.3	76810.5	1601.8	-0.0	-0.00
25YR-72HR	29.25	79601.2	77992.8	1608.3	0.0	0.00
25YR-72HR	29.50	80791.6	79176.9	1614.7	-0.0	-0.00
25YR-72HR	29.75	81983.7	80362.5	1621.2	-0.0	-0.00
25YR-72HR	30.00	83177.3	81549.7	1627.6	-0.0	-0.00
25YR-72HR	30.25	84372.5	82738.5	1634.0	-0.0	-0.00
25YR-72HR	30.50	85569.1	83928.7	1640.4	0.0	0.00
25YR-72HR	30.75	86767.2	85120.5	1646.8	0.0	0.00
25YR-72HR	31.00	87966.8	86313.7	1653.1	0.0	0.00
25YR-72HR	31.25	89167.8	87508.3	1659.5	0.0	0.00
25YR-72HR	31.50	90370.1	88704.3	1665.8	0.0	0.00
25YR-72HR	31.75	91573.8	89901.6	1672.2	0.0	0.00
25YR-72HR	32.00	92778.8	91100.3	1678.5	0.0	0.00
25YR-72HR	32.25	93985.1	92300.2	1684.9	0.0	0.00
25YR-72HR	32.50	95192.7	93501.5	1691.2	0.0	0.00
25YR-72HR	32.75	96401.5	94704.0	1697.5	0.0	0.00
25YR-72HR	33.00	97611.5	95907.7	1703.8	0.0	0.00
25YR-72HR	33.25	98822.7	97112.7	1710.1	0.0	0.00
25YR-72HR	33.50	100035.1	98318.8	1716.3	0.0	0.00
25YR-72HR	33.75	101248.7	99526.1	1722.6	0.0	0.00
25YR-72HR	34.00	102463.4	100734.5	1728.9	0.0	0.00
25YR-72HR	34.25	103679.2	101944.0	1735.2	0.0	0.00
25YR-72HR	34.50	104896.1	103154.7	1741.4	0.0	0.00
25YR-72HR	34.75	106114.0	104366.4	1747.7	0.0	0.00
25YR-72HR	35.00	107333.0	105579.1	1753.9	0.0	0.00
25YR-72HR	35.25	108553.1	106793.0	1760.1	0.0	0.00
25YR-72HR	35.50	109774.1	108007.8	1766.3	0.0	0.00
25YR-72HR	35.75	110996.1	109223.6	1772.6	0.0	0.00
25YR-72HR	36.00	112219.2	110440.4	1778.8	0.0	0.00
25YR-72HR	36.25	113446.9	111660.2	1786.7	0.0	0.00
25YR-72HR	36.50	114681.0	112886.5	1794.5	0.0	0.00
25YR-72HR	36.75	115918.4	114117.0	1801.4	0.0	0.00
25YR-72HR	37.00	117157.6	115349.8	1807.8	0.0	0.00
25YR-72HR	37.25	118397.8	116583.8	1814.1	0.0	0.00
25YR-72HR	37.50	119639.0	117818.7	1820.3	0.0	0.00
25YR-72HR	37.75	120881.1	119054.6	1826.4	0.0	0.00
25YR-72HR	38.00	122124.0	120291.4	1832.6	0.0	0.00
25YR-72HR	38.25	123367.8	121529.0	1838.8	0.0	0.00
25YR-72HR	38.50	124612.4	122767.4	1844.9	0.0	0.00
25YR-72HR	38.75	125857.8	124006.7	1851.1	0.0	0.00
25YR-72HR	39.00	127104.0	125246.8	1857.3	0.0	0.00
25YR-72HR	39.25	128351.1	126487.7	1863.4	0.0	0.00

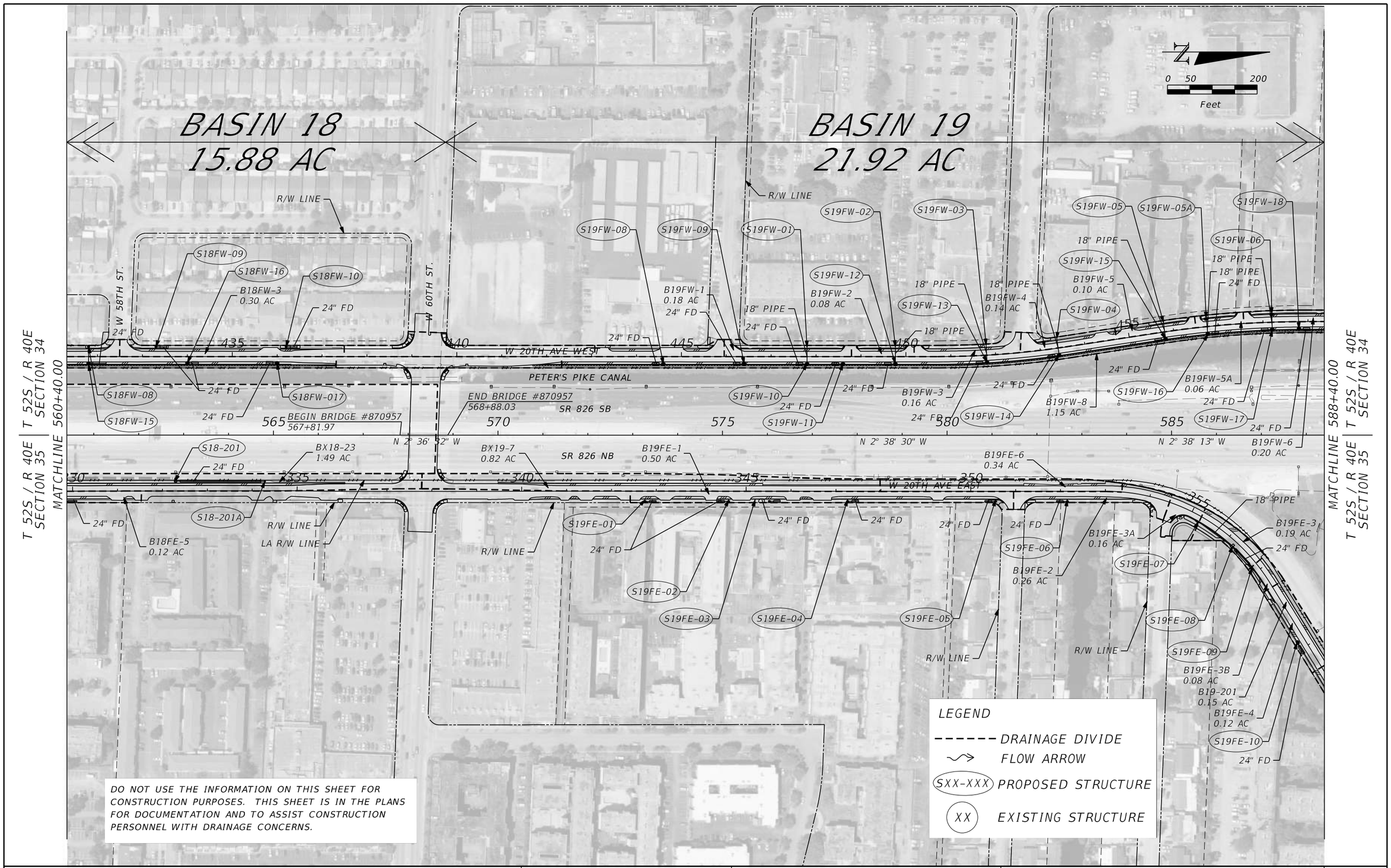
Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	39.50	129598.9	127729.4	1869.5	0.0	0.00
25YR-72HR	39.75	130847.5	128971.9	1875.6	0.0	0.00
25YR-72HR	40.00	132096.9	130215.1	1881.8	0.0	0.00
25YR-72HR	40.25	133347.0	131459.1	1887.9	0.0	0.00
25YR-72HR	40.50	134597.8	132703.8	1894.0	0.0	0.00
25YR-72HR	40.75	135849.4	133949.3	1900.2	0.0	0.00
25YR-72HR	41.00	137101.7	135195.4	1906.3	0.0	0.00
25YR-72HR	41.25	138354.7	136442.3	1912.4	0.0	0.00
25YR-72HR	41.50	139608.4	137689.9	1918.5	0.0	0.00
25YR-72HR	41.75	140862.7	138938.2	1924.6	0.0	0.00
25YR-72HR	42.00	142117.8	140187.1	1930.7	0.0	0.00
25YR-72HR	42.25	143373.5	141436.7	1936.8	0.0	0.00
25YR-72HR	42.50	144629.8	142687.0	1942.8	0.0	0.00
25YR-72HR	42.75	145886.8	143937.9	1949.0	0.0	0.00
25YR-72HR	43.00	147144.4	145189.4	1955.0	0.0	0.00
25YR-72HR	43.25	148402.7	146441.6	1961.1	0.0	0.00
25YR-72HR	43.50	149661.5	147694.3	1967.2	0.0	0.00
25YR-72HR	43.75	150921.0	148947.7	1973.3	0.0	0.00
25YR-72HR	44.00	152181.1	150201.7	1979.3	0.0	0.00
25YR-72HR	44.25	153441.7	151456.3	1985.4	0.0	0.00
25YR-72HR	44.50	154702.9	152711.5	1991.5	0.0	0.00
25YR-72HR	44.75	155964.7	153967.2	1997.5	0.0	0.00
25YR-72HR	45.00	157227.1	155223.5	2003.6	0.0	0.00
25YR-72HR	45.25	158490.0	156480.4	2009.6	0.0	0.00
25YR-72HR	45.50	159753.5	157737.8	2015.7	0.0	0.00
25YR-72HR	45.75	161017.5	158995.7	2021.7	0.0	0.00
25YR-72HR	46.00	162282.0	160254.2	2027.8	0.0	0.00
25YR-72HR	46.25	163547.1	161513.2	2033.8	0.0	0.00
25YR-72HR	46.50	164812.6	162772.8	2039.9	0.0	0.00
25YR-72HR	46.75	166078.7	164032.8	2045.9	0.0	0.00
25YR-72HR	47.00	167345.3	165293.4	2052.0	0.0	0.00
25YR-72HR	47.25	168612.4	166554.4	2058.0	0.0	0.00
25YR-72HR	47.50	169880.0	167816.0	2064.0	0.0	0.00
25YR-72HR	47.75	171148.1	169078.0	2070.0	0.0	0.00
25YR-72HR	48.00	172416.6	170340.6	2076.1	0.0	0.00
25YR-72HR	48.25	173725.1	171615.3	2109.8	0.0	0.00
25YR-72HR	48.50	175100.0	172954.7	2145.4	0.0	0.00
25YR-72HR	48.75	176500.3	174329.7	2170.6	0.0	0.00
25YR-72HR	49.00	177910.4	175719.5	2190.9	0.0	0.00
25YR-72HR	49.25	179330.8	177131.9	2198.8	0.0	0.00
25YR-72HR	49.50	180765.6	178562.9	2202.7	0.0	0.00
25YR-72HR	49.75	182206.3	180001.9	2204.4	0.0	0.00
25YR-72HR	50.00	183649.5	181444.5	2205.0	0.0	0.00
25YR-72HR	50.25	185170.0	182930.1	2239.9	0.0	0.00
25YR-72HR	50.50	186811.4	184539.9	2271.5	0.0	0.00
25YR-72HR	50.75	188498.4	186213.8	2284.6	0.0	0.00
25YR-72HR	51.00	190203.0	187913.9	2289.1	0.0	0.00
25YR-72HR	51.25	191955.9	189631.9	2324.0	0.0	0.00
25YR-72HR	51.50	193781.4	191421.3	2360.0	0.0	0.00
25YR-72HR	51.75	195634.4	193249.3	2385.1	0.0	0.00
25YR-72HR	52.00	197498.3	195093.1	2405.2	0.0	0.00
25YR-72HR	52.25	199527.4	197045.2	2482.2	0.0	0.00
25YR-72HR	52.50	201819.1	199271.6	2547.4	0.0	0.00
25YR-72HR	52.75	204209.3	201635.7	2573.6	0.0	0.00
25YR-72HR	53.00	206637.5	204054.9	2582.5	0.0	0.00
25YR-72HR	53.25	209234.5	206565.9	2668.6	0.0	0.00
25YR-72HR	53.50	212095.6	209346.7	2748.9	0.0	0.00
25YR-72HR	53.75	215056.2	212265.3	2790.9	0.0	0.00
25YR-72HR	54.00	218055.6	215239.0	2816.6	0.0	0.00
25YR-72HR	54.25	221229.1	218320.4	2908.7	0.0	0.00
25YR-72HR	54.50	224677.5	221687.3	2990.2	0.0	0.00
25YR-72HR	54.75	228229.8	225197.3	3032.5	0.0	0.00
25YR-72HR	55.00	231822.8	228764.8	3058.0	0.0	0.00
25YR-72HR	55.25	235590.0	232440.9	3149.1	0.0	0.00
25YR-72HR	55.50	239633.7	236404.7	3229.0	0.0	0.00
25YR-72HR	55.75	243782.4	240512.0	3270.4	0.0	0.00
25YR-72HR	56.00	247972.4	244677.0	3295.4	0.0	0.00
25YR-72HR	56.25	252367.3	248953.8	3413.5	0.0	0.00
25YR-72HR	56.50	257099.5	253580.3	3519.1	0.0	0.00
25YR-72HR	56.75	261957.1	258377.1	3580.0	0.0	0.00
25YR-72HR	57.00	266864.3	263242.6	3621.7	0.0	0.00
25YR-72HR	57.25	272032.0	268292.7	3739.4	0.0	0.00
25YR-72HR	57.50	277633.8	273802.5	3831.3	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	57.75	283539.9	279586.1	3953.9	0.0	0.00
25YR-72HR	58.00	289746.6	285700.9	4045.7	0.0	0.00
25YR-72HR	58.25	296241.4	292062.6	4178.8	0.0	0.00
25YR-72HR	58.50	303100.6	298818.1	4282.5	0.0	0.00
25YR-72HR	58.75	310740.3	306124.5	4615.8	0.0	0.00
25YR-72HR	59.00	319518.9	314650.5	4868.4	0.0	0.00
25YR-72HR	59.25	330182.2	324571.9	5610.4	0.0	0.00
25YR-72HR	59.50	343394.5	337261.1	6133.4	0.0	0.00
25YR-72HR	59.75	381251.5	367899.0	13352.5	0.0	0.00
25YR-72HR	60.00	459593.5	438353.9	21239.6	0.0	0.00
25YR-72HR	60.25	530311.6	507549.0	22762.6	0.0	0.00
25YR-72HR	60.50	569966.8	553898.2	16068.6	0.0	0.00
25YR-72HR	60.75	594246.3	586156.2	8090.1	0.0	0.00
25YR-72HR	61.00	608716.3	601954.7	6761.6	0.0	0.00
25YR-72HR	61.25	619868.7	613723.8	6145.0	0.0	0.00
25YR-72HR	61.50	628908.5	623058.6	5849.9	0.0	0.00
25YR-72HR	61.75	636944.6	631306.2	5638.4	0.0	0.00
25YR-72HR	62.00	644129.7	638598.2	5531.5	0.0	0.00
25YR-72HR	62.25	650525.1	645202.7	5322.4	0.0	0.00
25YR-72HR	62.50	655961.5	650766.0	5195.5	0.0	0.00
25YR-72HR	62.75	660921.9	655834.6	5087.4	0.0	0.00
25YR-72HR	63.00	665509.3	660483.3	5026.0	0.0	0.00
25YR-72HR	63.25	669984.0	664952.4	5031.6	0.0	0.00
25YR-72HR	63.50	674418.0	669363.4	5054.6	0.0	0.00
25YR-72HR	63.75	678845.1	673761.7	5083.4	0.0	0.00
25YR-72HR	64.00	683271.7	678159.1	5112.6	0.0	0.00
25YR-72HR	64.25	687193.4	682260.5	4933.0	0.0	0.00
25YR-72HR	64.50	690283.4	685496.8	4786.6	0.0	0.00
25YR-72HR	64.75	693062.7	688334.7	4728.1	0.0	0.00
25YR-72HR	65.00	695724.7	691016.3	4708.4	0.0	0.00
25YR-72HR	65.25	698374.8	693653.0	4721.8	0.0	0.00
25YR-72HR	65.50	701034.4	696295.5	4738.9	0.0	0.00
25YR-72HR	65.75	703697.6	698942.5	4755.1	0.0	0.00
25YR-72HR	66.00	706362.2	701591.5	4770.8	0.0	0.00
25YR-72HR	66.25	709027.0	704247.4	4779.6	0.0	0.00
25YR-72HR	66.50	711691.7	706904.4	4787.3	0.0	0.00
25YR-72HR	66.75	714356.4	709561.4	4795.0	0.0	0.00
25YR-72HR	67.00	717021.2	712218.4	4802.7	0.0	0.00
25YR-72HR	67.25	719686.0	714875.6	4810.4	0.0	0.00
25YR-72HR	67.50	722351.0	717532.8	4818.1	0.0	0.00
25YR-72HR	67.75	725016.0	720190.2	4825.8	0.0	0.00
25YR-72HR	68.00	727680.8	722847.5	4833.4	0.0	0.00
25YR-72HR	68.25	730082.2	725335.0	4747.1	0.0	0.00
25YR-72HR	68.50	732067.5	727389.1	4678.4	0.0	0.00
25YR-72HR	68.75	733898.0	729243.5	4654.5	0.0	0.00
25YR-72HR	69.00	735670.4	731018.8	4651.6	0.0	0.00
25YR-72HR	69.25	737434.3	732776.0	4658.3	0.0	0.00
25YR-72HR	69.50	739198.2	734532.1	4666.1	0.0	0.00
25YR-72HR	69.75	740962.2	736288.3	4673.9	0.0	0.00
25YR-72HR	70.00	742726.2	738044.4	4681.7	0.0	0.00
25YR-72HR	70.25	744493.1	739802.5	4690.6	0.0	0.00
25YR-72HR	70.50	746264.7	741565.4	4699.3	0.0	0.00
25YR-72HR	70.75	748038.1	743330.6	4707.5	0.0	0.00
25YR-72HR	71.00	749812.2	745096.7	4715.5	0.0	0.00
25YR-72HR	71.25	751586.4	746863.1	4723.3	0.0	0.00
25YR-72HR	71.50	753360.7	748629.6	4731.1	0.0	0.00
25YR-72HR	71.75	755135.0	750396.0	4738.9	0.0	0.00
25YR-72HR	72.00	756909.0	752162.5	4746.5	0.0	0.00
25YR-72HR	72.25	758170.0	753639.4	4530.5	0.0	0.00
25YR-72HR	72.50	758369.9	754118.1	4251.8	0.0	0.00
25YR-72HR	72.75	758369.9	754203.0	4166.9	0.0	0.00
25YR-72HR	73.00	758369.9	754253.5	4116.4	0.0	0.00
25YR-72HR	73.25	758369.9	754292.7	4077.2	0.0	0.00
25YR-72HR	73.50	758369.9	754327.9	4041.9	0.0	0.00
25YR-72HR	73.75	758369.9	754362.8	4007.1	0.0	0.00
25YR-72HR	74.00	758369.9	754397.3	3972.6	0.0	0.00
25YR-72HR	74.25	758369.9	754431.7	3938.2	0.0	0.00
25YR-72HR	74.50	758369.9	754466.0	3903.9	0.0	0.00
25YR-72HR	74.75	758369.9	754500.3	3869.6	0.0	0.00
25YR-72HR	75.00	758369.9	754534.5	3835.4	0.0	0.00
25YR-72HR	75.25	758369.9	754568.8	3801.1	0.0	0.00
25YR-72HR	75.50	758369.9	754603.1	3766.8	0.0	0.00
25YR-72HR	75.75	758369.9	754637.5	3732.4	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	76.00	758369.9	754671.9	3698.0	0.0	0.00
25YR-72HR	76.25	758369.9	754706.3	3663.6	0.0	0.00
25YR-72HR	76.50	758369.9	754740.8	3629.1	0.0	0.00
25YR-72HR	76.75	758369.9	754775.4	3594.5	0.0	0.00
25YR-72HR	77.00	758369.9	754810.0	3559.9	0.0	0.00
25YR-72HR	77.25	758369.9	754844.6	3525.3	0.0	0.00
25YR-72HR	77.50	758369.9	754879.3	3490.5	0.0	0.00
25YR-72HR	77.75	758369.9	754914.1	3455.8	0.0	0.00
25YR-72HR	78.00	758369.9	754949.0	3420.9	0.0	0.00
25YR-72HR	78.25	758369.9	754983.8	3386.0	0.0	0.00
25YR-72HR	78.50	758369.9	755018.8	3351.1	0.0	0.00
25YR-72HR	78.75	758369.9	755053.8	3316.1	0.0	0.00
25YR-72HR	79.00	758369.9	755088.9	3281.0	0.0	0.00
25YR-72HR	79.25	758369.9	755124.0	3245.9	0.0	0.00
25YR-72HR	79.50	758369.9	755159.2	3210.7	0.0	0.00
25YR-72HR	79.75	758369.9	755194.4	3175.5	0.0	0.00
25YR-72HR	80.00	758369.9	755229.7	3140.2	0.0	0.00
25YR-72HR	80.25	758369.9	755265.0	3104.9	0.0	0.00
25YR-72HR	80.50	758369.9	755300.4	3069.5	0.0	0.00
25YR-72HR	80.75	758369.9	755335.9	3034.0	0.0	0.00
25YR-72HR	81.00	758369.9	755371.4	2998.5	0.0	0.00
25YR-72HR	81.25	758369.9	755406.9	2963.0	0.0	0.00
25YR-72HR	81.50	758369.9	755442.5	2927.4	0.0	0.00
25YR-72HR	81.75	758369.9	755478.2	2891.7	0.0	0.00
25YR-72HR	82.00	758369.9	755513.9	2856.0	0.0	0.00
25YR-72HR	82.25	758369.9	755549.7	2820.2	0.0	0.00
25YR-72HR	82.50	758369.9	755585.5	2784.4	0.0	0.00
25YR-72HR	82.75	758369.9	755621.3	2748.6	0.0	0.00
25YR-72HR	83.00	758369.9	755657.2	2712.6	0.0	0.00
25YR-72HR	83.25	758369.9	755693.2	2676.7	0.0	0.00
25YR-72HR	83.50	758369.9	755729.2	2640.7	0.0	0.00
25YR-72HR	83.75	758369.9	755765.3	2604.6	0.0	0.00
25YR-72HR	84.00	758369.9	755801.4	2568.5	0.0	0.00
25YR-72HR	84.25	758369.9	755837.5	2532.4	0.0	0.00
25YR-72HR	84.50	758369.9	755873.7	2496.2	0.0	0.00
25YR-72HR	84.75	758369.9	755910.0	2459.9	0.0	0.00
25YR-72HR	85.00	758369.9	755946.2	2423.6	0.0	0.00
25YR-72HR	85.25	758369.9	755982.6	2387.3	0.0	0.00
25YR-72HR	85.50	758369.9	756019.0	2350.9	0.0	0.00
25YR-72HR	85.75	758369.9	756055.4	2314.5	0.0	0.00
25YR-72HR	86.00	758369.9	756091.8	2278.1	0.0	0.00
25YR-72HR	86.25	758369.9	756128.3	2241.6	0.0	0.00
25YR-72HR	86.50	758369.9	756164.9	2205.0	0.0	0.00
25YR-72HR	86.75	758369.9	756201.5	2168.4	0.0	0.00
25YR-72HR	87.00	758369.9	756238.1	2131.8	0.0	0.00
25YR-72HR	87.25	758369.9	756274.8	2095.1	0.0	0.00
25YR-72HR	87.50	758369.9	756311.5	2058.4	0.0	0.00
25YR-72HR	87.75	758369.9	756348.2	2021.7	0.0	0.00
25YR-72HR	88.00	758369.9	756385.0	1984.9	0.0	0.00
25YR-72HR	88.25	758369.9	756421.8	1948.1	0.0	0.00
25YR-72HR	88.50	758369.9	756458.7	1911.2	0.0	0.00
25YR-72HR	88.75	758369.9	756495.6	1874.3	0.0	0.00
25YR-72HR	89.00	758369.9	756532.5	1837.4	0.0	0.00
25YR-72HR	89.25	758369.9	756569.4	1800.4	0.0	0.00
25YR-72HR	89.50	758369.9	756606.4	1763.4	0.0	0.00
25YR-72HR	89.75	758369.9	756643.5	1726.4	0.0	0.00
25YR-72HR	90.00	758369.9	756680.6	1689.3	0.0	0.00
25YR-72HR	90.25	758369.9	756717.7	1652.2	0.0	0.00
25YR-72HR	90.50	758369.9	756754.8	1615.1	0.0	0.00
25YR-72HR	90.75	758369.9	756792.0	1577.9	0.0	0.00
25YR-72HR	91.00	758369.9	756829.2	1540.7	0.0	0.00
25YR-72HR	91.25	758369.9	756866.4	1503.5	0.0	0.00
25YR-72HR	91.50	758369.9	756903.7	1466.2	0.0	0.00
25YR-72HR	91.75	758369.9	756941.0	1428.9	0.0	0.00
25YR-72HR	92.00	758369.9	756978.3	1391.6	0.0	0.00
25YR-72HR	92.25	758369.9	757015.6	1354.2	0.0	0.00
25YR-72HR	92.50	758369.9	757053.0	1316.9	0.0	0.00
25YR-72HR	92.75	758369.9	757090.4	1279.4	0.0	0.00
25YR-72HR	93.00	758369.9	757127.9	1242.0	0.0	0.00
25YR-72HR	93.25	758369.9	757165.4	1204.5	0.0	0.00
25YR-72HR	93.50	758369.9	757202.9	1167.0	0.0	0.00
25YR-72HR	93.75	758369.9	757240.4	1129.5	0.0	0.00
25YR-72HR	94.00	758369.9	757277.9	1092.0	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	94.25	758369.9	757315.5	1054.4	0.0	0.00
25YR-72HR	94.50	758369.9	757353.1	1016.8	0.0	0.00
25YR-72HR	94.75	758369.9	757390.8	979.1	0.0	0.00
25YR-72HR	95.00	758369.9	757428.4	941.5	0.0	0.00
25YR-72HR	95.25	758369.9	757466.1	903.8	0.0	0.00
25YR-72HR	95.50	758369.9	757503.8	866.1	0.0	0.00
25YR-72HR	95.75	758369.9	757541.5	828.4	0.0	0.00
25YR-72HR	96.00	758369.9	757579.3	790.6	0.0	0.00
25YR-72HR	96.00	758369.9	757579.3	790.6	0.0	0.00

Basin 19



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01, 441830-1-52-01, 441831-1-52-01

DRAINAGE MAP

SHEET NO.

CALLI 12/16/2020 5:03:42 PM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\44716515201\drainage\DRMPRD06.dg

T 52S / R 40E SECTION 34

MATCHLINE 588+40.00

T 52S / R 40E SECTION 35

T 52S / R 40E SECTION 27

T 52S / R 40E SECTION 26

T 52S / R 40E SECTION 27 | T 52S / R 40E SECTION 27

R/W LINE

LA R/W LINE

BASIN 19
21.92 AC

NW 122ND ST.

NW 20TH AVE

465

S19FW-07

B19FW-6
0.20 AC

460

18" PIPE

24" FD

S19FW-19

PETER'S PIKE CANAL

B19FW-7
0.46 AC

24" FD

590 595 600 605 610 615

N 2° 37' 35" W

N 2° 37' 57" W

N 2° 40' 13" W

N 3° 58' 40" W

N 2°

SR 826 SB

SR 826 NB

R/W LINE

LA R/W LINE

R/W LINE

LA R/W LINE

S19-202

24" FD

BX19-56
1.53 AC

B19FE-5
0.07 AC

B19-202
0.33 AC

24" FD

S19FE-11

T 52S / R 40E SECTION 27 | T 52S / R 40E SECTION 27

W 20TH AVE

595

0 50 200

Feet

LEGEND

DRAINAGE DIVIDE

FLOW ARROW

SXX-XXX PROPOSED STRUCTURE

XX EXISTING STRUCTURE

DO NOT USE THE INFORMATION ON THIS SHEET FOR CONSTRUCTION PURPOSES. THIS SHEET IS IN THE PLANS FOR DOCUMENTATION AND TO ASSIST CONSTRUCTION PERSONNEL WITH DRAINAGE CONCERNS.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01, 441830-1-52-01, 441831-1-52-01

DRAINAGE MAP

SHEET NO.

CALLI 12/16/2020 5:08:33 PM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\44716515201\drainage\DRMPRD07.dgn

SUMMARY OF MAX STAGE-PROPOSED CONDITIONS-BASIN 19

NODE	100YR-1HR	100YR-24HR	100YR-8HR	10YR-1HR	10YR-24HR	10YR-8HR	25YR-72HR	Warning Stage (ft)
AREA1A	5.18	3.21	4.72	3.88	2.94	3.58	5.51	5.5
AREA1B	2.54	2.8	3.11	2.11	2.74	2.91	3.28	5.5
AREA2A	3.32	3.07	3.88	2.86	2.88	3.21	4.16	5.5
AREA2B	2.87	2.81	3.11	2.62	2.74	2.92	3.28	5.5
EX19-19	5.27	3.22	4.78	3.92	2.93	3.62	5.57	12.08
EX19-20	5.23	3.28	4.79	3.93	3	3.65	5.54	13.71
EX19-46	2.88	2.35	3.6	1.85	1.89	2.73	3.95	5.5
EX19-53	3.32	3.07	3.89	2.86	2.88	3.22	4.17	6.72
EX19-60	2.9	2.81	3.1	2.63	2.74	2.92	3.26	5.5
S19-1	22.77	22.31	22.55	22.62	22.25	22.44	22.69	27.33
S19-10	8.49	7.51	7.98	8.14	7.4	7.76	8.29	13.17
S19-10A	21.38	20.78	21.08	21.18	20.7	20.94	21.27	23.04
S19-11	9.31	8.48	8.89	9.02	8.38	8.7	9.16	13.17
S19-11A	3.3	3.06	3.87	2.85	2.88	3.21	4.15	5.5
S19-12	3.32	3.08	3.9	2.86	2.88	3.22	4.17	6.72
S19-13	3.31	3.08	3.9	2.85	2.89	3.23	4.24	6.34
S19-14	3.32	3.09	3.9	3.11	2.91	3.23	4.17	7.22
S19-16	3.06	2.81	3.16	2.78	2.74	2.94	3.38	5.86
S19-17	2.9	2.81	3.11	2.63	2.74	2.92	3.28	6.5
S19-2	22.24	21.46	21.84	21.97	21.36	21.67	22.09	26.43
S19-2A	21.24	20.46	20.84	20.97	20.37	20.67	21.09	26.1
S19-3	20.8	19.52	20.1	20.3	19.39	19.83	20.52	23.9
S19-4	17.09	14.79	15.62	15.96	14.62	15.21	16.42	19.21
S19-5	12.63	8.84	9.62	9.89	8.67	9.25	10.85	13.79
S19-6	11.12	6.93	7.82	8.87	6.74	7.39	9.8	11.71
S19-7	9.27	6.54	7.59	7.98	6.32	7.07	8.5	11.13
S19-8	7	5.19	6.08	6.36	4.99	5.66	6.66	11.3
S19-9	5.43	3.31	4.86	4	3.01	3.7	5.67	11.57

Curve Number Calculations

CN CALCULATIONS FOR PROPOSED CONDITIONS - BASIN B-19

SUB-BASIN	TOTAL DRAINAGE AREA (AC)	PERVIOUS DRAINAGE AREA (AC)	PERVIOUS AREA CURVE NUMBER	IMP. DRAINAGE AREA (AC)	IMP. AREA CURVE NUMBER	COMPOSITE CURVE NUMBER
B19-1	0.29	0	61	0.29	96	96
B19-2	0.34	0	61	0.34	96	96
B19-3	0.5	0	61	0.5	96	96
B19-4	0.6	0	61	0.6	96	96
B19-5	0.62	0	61	0.62	96	96
B19-6	0.41	0	61	0.41	96	96
B19-7	0.6	0	61	0.6	96	96
B19-8	0.24	0	61	0.24	96	96
B19-10	0.15	0	61	0.15	96	96
B19-11	0.69	0	61	0.69	96	96
B19-12	0.1	0	61	0.1	96	96
B19-14	0.18	0	61	0.18	96	96
BX19-2	0.26	0	61	0.26	96	96
BX19-4	0.32	0	61	0.32	96	96
BX19-6	0.42	0	61	0.42	96	96
BX19-7	0.82	0.5	61	0.32	96	75
BX19-9	0.55	0	61	0.55	96	96
BX19-13	0.69	0	61	0.69	96	96
BX19-16	0.86	0	61	0.86	96	96
BX19-19	0.52	0	61	0.52	96	96
BX19-20	0.49	0	61	0.49	96	96
BX19-21	0.52	0	61	0.52	96	96
B19-10A	0.43	0	61	0.43	96	96
BX19-26	1.25	1.25	61	0	96	61
BX19-28	0.17	0	61	0.17	96	96
BX19-30	0.26	0	61	0.26	96	96
BX19-32	0.63	0	61	0.63	96	96
BX19-34	0.22	0	61	0.22	96	96
BX19-36	0.43	0.04	61	0.39	96	93
BX19-39	0.19	0	61	0.19	96	96
BX19-40	0.22	0	61	0.22	96	96
BX19-42	0.02	0	61	0.02	96	96
BX19-43	0.11	0	61	0.11	96	96
BX19-44	0.07	0	61	0.07	96	96
B19-11A	3.93	3.38	61	0.55	96	66
BX19-48	0.22	0	61	0.22	96	96
BX19-53	0.24	0	61	0.24	96	96
BX19-56	1.53	0.99	61	0.54	96	73
B19-201	0.15	0.07	61	0.08	96	80
B19-202	0.33	0	61	0.33	96	96
TOTAL SUB-BASIN B-19A	20.57	6.23		14.34		

B19-15	0.82	0.82	61	0	96	61
B19-16	0.53	0	61	0.53	96	96
TOTAL SUB-BASIN B-19B	1.35	0.82		0.53		
TOTAL BASIN B-19	21.92	7.05		14.87		

Average Hydraulic Conductivity

Average Hydraulic Conductivity

Basin B-19		
Percolation Test	P-3A	P-4A
Average Flow to 10 ft. depth (gpm)	0.10	19.00
Depth to Water Table (ft)	8.00	6.00
Head Maintained (ft)	8.00	6.00
Borehole Diameter (ft)	0.500	0.500
Borehole Depth (ft)	10.00	10.00
Du (ft)	8.00	6.00
Average Flow (cfs)	0.0002	0.0423
Ds (ft)	2.00	4.00
Hydraulic Conductivity K (cfs/ft2-ft head)	2.89E-06	6.30E-04
Average Hydraulic Conductivity K	3.17E-04	

Basin B-19		
Percolation Test	P-3B	P-4B
Average Flow to 15 ft. depth (gpm)	38.00	40.00
Depth to Water Table (ft)	8.00	6.00
Head Maintained (ft)	8.00	6.00
Borehole Diameter (ft)	0.267	0.267
Borehole Depth (ft)	5.00	5.00
Du (ft)	8.00	6.00
Average Flow (cfs)	0.0847	0.0891
Ds (ft)	7.00	9.00
Hydraulic Conductivity K (cfs/ft2-ft head)	2.53E-03	3.55E-03
Average Hydraulic Conductivity K	3.04E-03	
Total Average Hydraulic Conductivity K	**1.22E-03**	

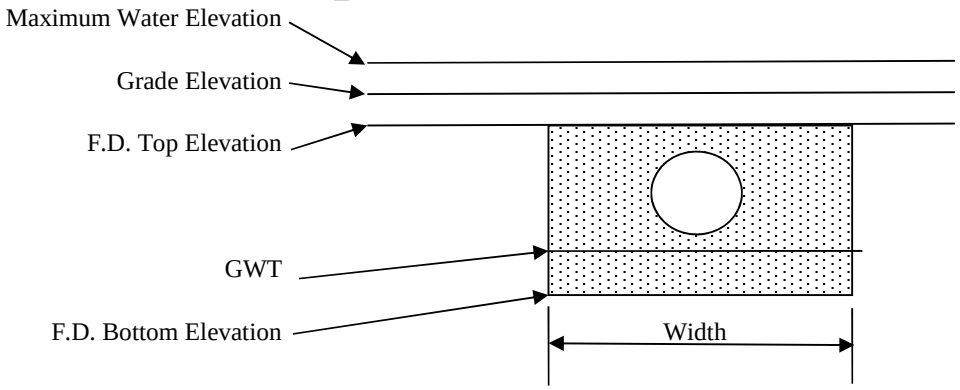
Rating Curve Calculations

Made by: _____ _____

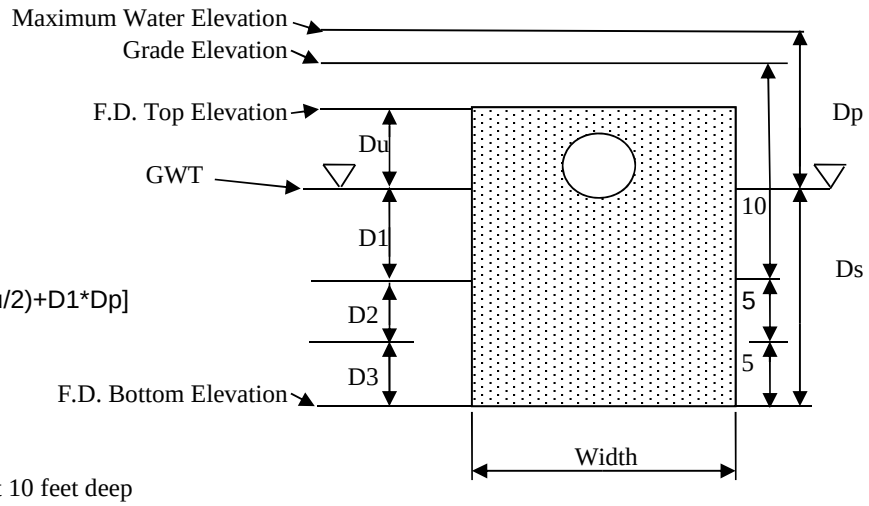
Checked by: _____ _____

Determination of Rating Curve

Proposed Exfiltration Trench: E_OPT-19



Maximum Water Elevation =	**5.45**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**1.65**	ft.NAVD	
F.D.Top Elevation =	**0.50**	ft.NAVD	
Ground Water Table =	**1.65**	ft.NAVD	
F.D. Bottom Elevation =	**-13.35**	ft.NAVD	
Width =	**4.00**	feet.	
Pipe Diameter =	**24**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**1.22E-03**	cfs/ft^2-ft head	(Ave. P-3A,P-4A)
Hydraulic Conductivity K15 =	**1.22E-03**	cfs/ft^2-ft head	(Ave. P-3A,P-4A)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____

Checked by: _____ _____

Determination of Rating Curve

Proposed Exfiltration Trench: E_OPT-19

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.65	***2.65***
(ft)	(cfs/ft)	(cfs/ft)
1.65	0.000	0.000
2.65	0.032	0.000
3.45	0.059	0.021
5.45	0.127	0.089

Rating Curve (Q)

Headwater	***Water Table Elev. (ft)***	
	1.65	***2.65***
(ft)	(cfs)	(cfs)
1.65	0.00	0.00
2.65	0.03	0.00
3.45	0.06	0.02
5.45	0.13	0.09

Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

Rating Curve Adjusted (Q)

Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.65	1.65	0.00
1.65	2.65	0.03
1.65	3.45	0.06
1.65	5.45	0.10
2.65	2.65	0.00
2.65	3.45	0.02
2.65	5.45	0.09

French Drain Length Calcs

SUMMARY OF ADDITIONAL IMP. AREA - BASIN 19

PRE-DEVELOPMENT				POST-DEVELOPMENT CONDITIONS						
SUB-BASIN	TOTAL DRAINAGE AREA (AC)	IMPERVIOUS DRAINAGE AREA (AC)	COMPOSITE CURVE NUMBER	SUB-BASIN	TOTAL DRAINAGE AREA (AC)	PERVIOUS DRAINAGE AREA (AC)	PERVIOUS AREA CURVE NUMBER	IMPERVIOUS DRAINAGE AREA (AC)	IMPERVIOUS AREA CURVE NUMBER	COMPOSITE CURVE NUMBER
BX19-7	0.82	0.26	72	BX19-7	0.82	0.50	61	0.32	96	75
BX19-56	1.53	0.50	72	BX19-56	1.53	0.99	61	0.54	96	73
BX19-201	0.15	0.07	77	B19-201	0.15	0.07	61	0.08	96	80
BX19-202	0.33	0.33	96	B19-202	0.33	0.00	61	0.33	96	96
TOTAL SUB-BASIN B-19	2.83	1.16			2.83			1.27		

Total Additional Imp. Area for Basin 19= 0.11 ac

Note: This table is for additional imp area calculations only

Volume to hold in French Drain - Basin 19

Added Impervious Area = 0.11 ac

Requiered Treatment Volume

2.5" of Impervious area

Required Treatment Volume = 0.02 ac-ft (A)

Required Attenation Volume

$$Q = \frac{(P - 0.2S)^2}{(P + 0.8S)}$$

Q = Runoff (in) 13.51 in

P = Rainfall 25YR-72HR (in) = 14 in

S= maximum retention after runoff begins (in) 0.42 in

$$S = \frac{1000}{CN} - 10$$

CN = 96

Total Q in ac-ft 0.12 ac-ft (B)

Q (in) X Added Imp. Area/12

Volume Considered to size French Drain =

maximum of (A) or (B) 0.12 ac-ft

Factor of Safety (F.S.) = 2

Required Volume in French Drain = 0.25 ac-ft

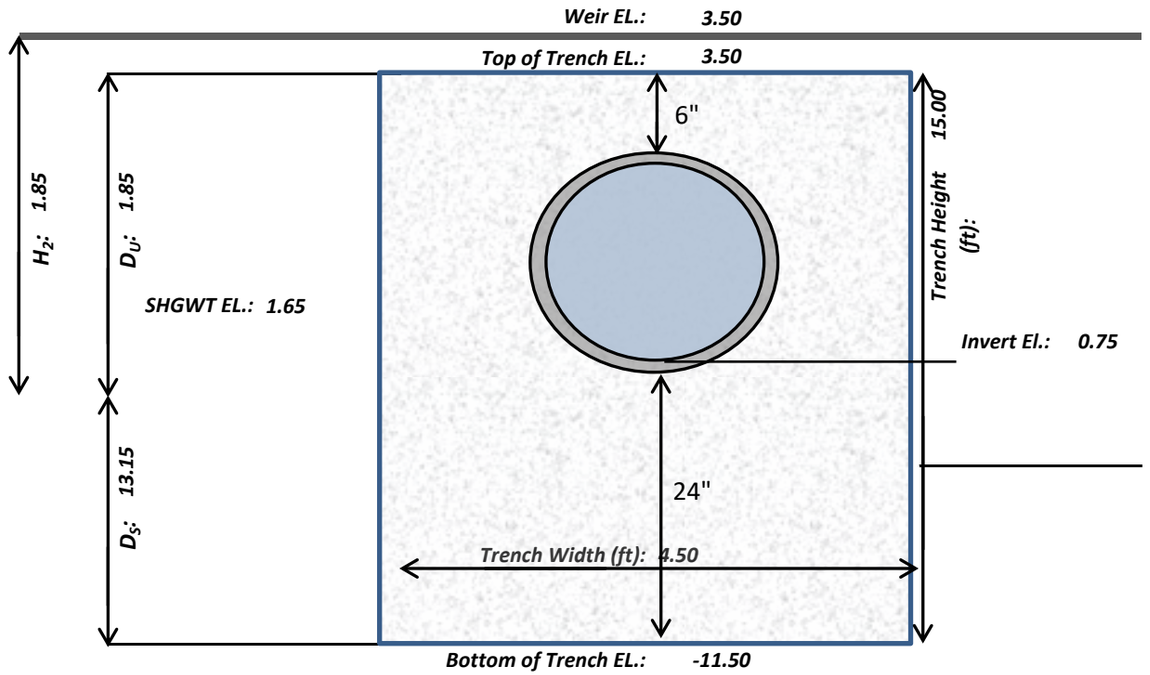
Provided in Volume in French Drain = 0.27 ac-ft

Basin 19

Palmetto Expressway Improvments

FRENCH DRAIN DESIGN VOLUMES

French Drain (ICPR Link Name):	S19-202_EXF
Location	
SHGWT EL. (ft-NAVD):	1.65
Pipe Size (in):	24
Length of French Drain, L (LF):	50
Pipe Thickness (in):	3.00
Pipe Invert EL. (ft-NAVD):	0.75
Top of Trench EL. (ft-NAVD):	3.50
Bottom of Trench EL. (ft-NAVD):	-11.50
Trench Height, H_T (ft):	15.00
Weir EL. (ft-NAVD):	4.45
Trench Width, W (ft):	4.50
Average Hydraulic Conductivity, K_{10} (cfs/ft^2/ft-head):	1.220E-03
Depth to Water Table, H_2 (ft):	1.85
Non-Saturated Trench Depth, D_U (ft):	1.85
Saturated Trench Depth, D_S (ft):	13.15
H_2W:	8.33
$2H_2D_U$:	6.85
D_U^2:	3.42
$2H_2D_S$:	48.66
$(1.39x10^{-4})WD_U$:	0.001157
If $D_U > D_S$ and $W < 2H_T$, Treatment Provided, V (ac-in):	3.74
If $D_S > D_U$ and/or $W > 2H_T$, Treatment Provided, V (ac-in):	3.23
$D_U > D_S$ and $W < 2H_T$ (Yes/No):	No
Treatment Volume Provided, V (Ac-ft):	**0.270**

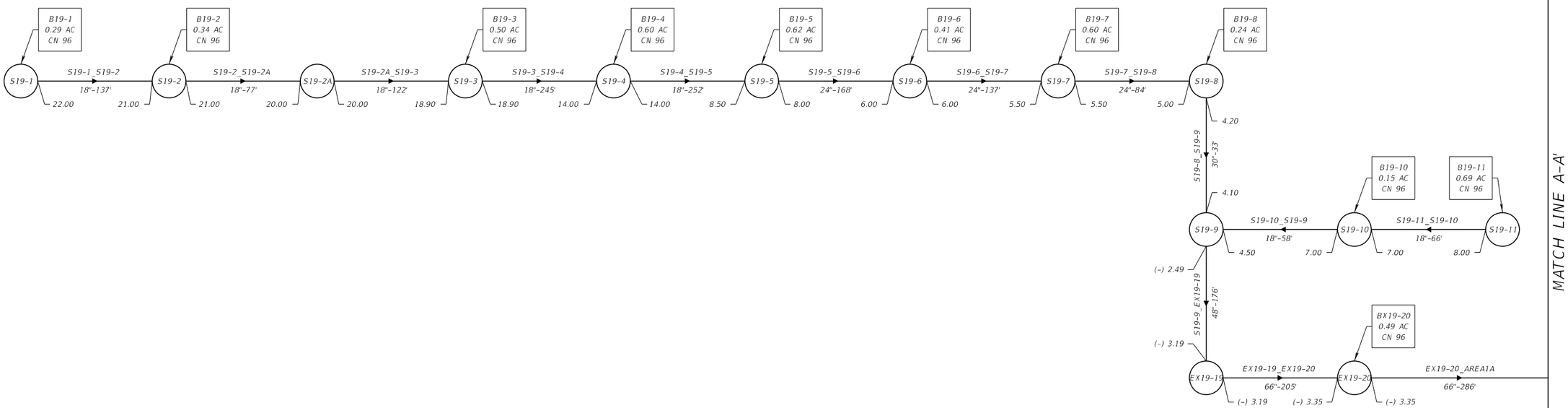


$$V = L[K_{10}(H_2W + 2H_2D_U - D_U^2 + 2H_2D_S) + (1.39x10^{-4})WD_U]$$

$$V = L[K_{10}(2H_2D_U - D_U^2 + 2H_2D_S) + (1.39x10^{-4})WD_U]$$

Nodal Diagram

POST-DEVELOPMENT CONDITIONS



LEGEND	
B18-1 0.12 AC CN 96	CONTRIBUTING BASIN BASIN NAME BASIN AREA CURVE NUMBER
S18-2	NODE NAME
58ST_CANAL	BOUNDARY NODE WITH CONSTANT TAILWATER
GWT 6-12	BOUNDARY NODE WITH VARIABLE TAILWATER
S18-3_S18-4 18"-42' 21.50 21.40	PIPE LINK WITH (QUANTITY)SIZE-LENGTH INVERT ELEVATIONS
WEX18_14	WEIR LINK
AREA 1_EXF	RATING CURVE LINK

PROPOSED DESIGN

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

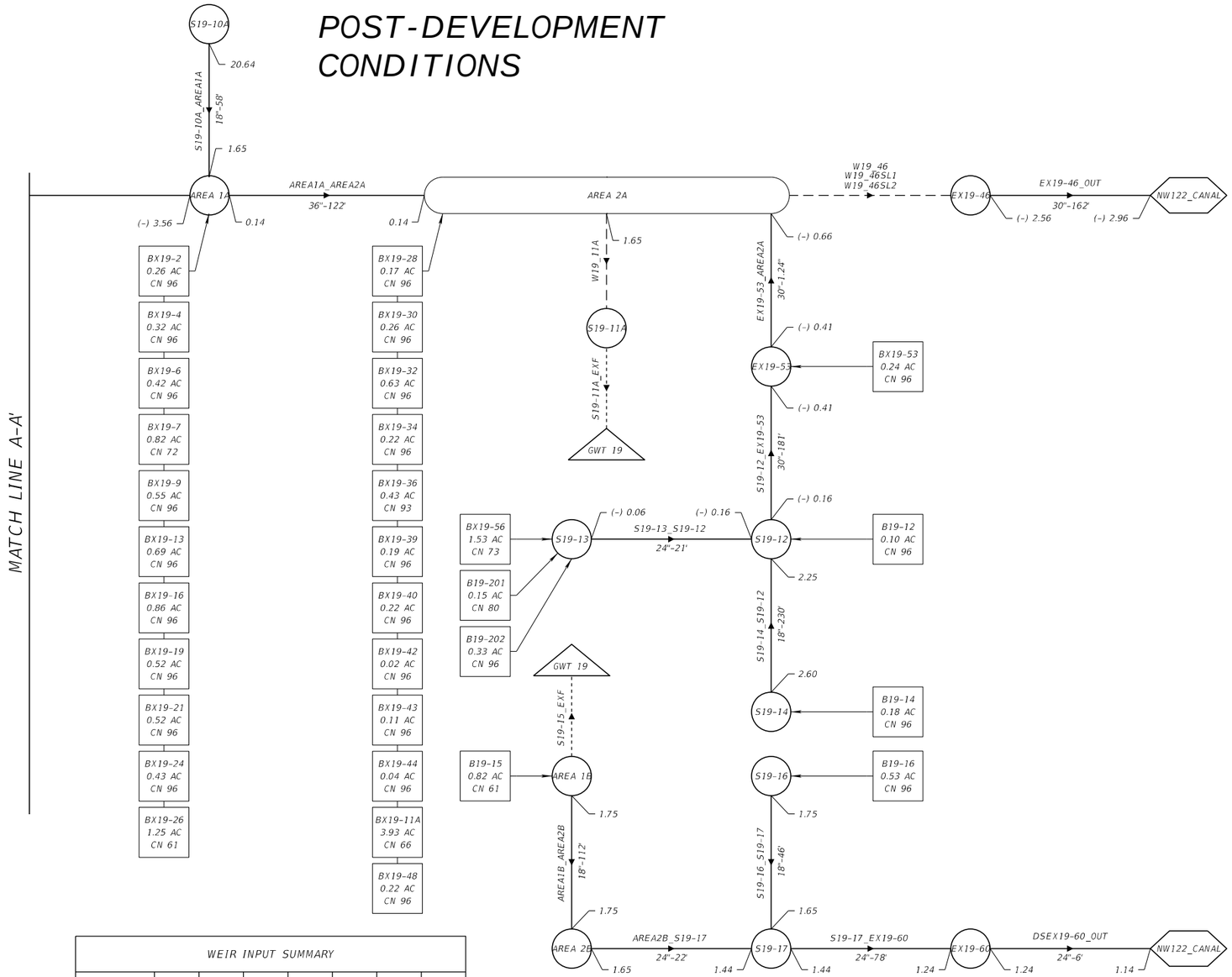
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01 441830-1-52-01 441831-1-52-01

NODAL DIAGRAM
BASIN 19

SHEET NO.

POST-DEVELOPMENT CONDITIONS



WEIR INPUT SUMMARY							
WEIR	VERT. TYPE	HORIZ.	CIRC.	RECT.	INV.	SPAN	RISE
W19-46	-	-	-	X	3.95'	49"	37"
W19-46SL1	MAVIS	-	-	X	2.45'	15"	7"
W19-46SL2	MAVIS	-	-	X	2.45'	49"	17"
W19-11A	-	-	-	X	1.65'	63"	57"
DSEX19-60_OUT	MAVIS	-	-	X	2.85'	48"	6"

LEGEND

- B18-1 / 0.12 AC / CN 96 — CONTRIBUTING BASIN, BASIN NAME, BASIN AREA, CURVE NUMBER
- S18-2 — NODE NAME
- 58ST_CANAL — BOUNDARY NODE WITH CONSTANT TAILWATER
- GWT 6-12 — BOUNDARY NODE WITH VARIABLE TAILWATER
- S18-3_S18-4 / 18"-42" / 21.50 / 21.40 — PIPE LINK WITH (QUANTITY)SIZE-LENGTH INVERT ELEVATIONS
- WEX18_14 — WEIR LINK
- AREA 1_EXF — RATING CURVE LINK

PROPOSED DESIGN

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01 441830-1-52-01 441831-1-52-01

NODAL DIAGRAM
BASIN 19

SHEET NO.

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
AREA1A	Basin 19	100YR-1HR	0.89	5.18	5.50	0.0028	15941	0.67	76.06	0.89	55.77
AREA1B	Basin 19	100YR-1HR	0.96	2.54	5.50	0.0009	2584	0.73	2.12	1.08	1.40
AREA2A	Basin 19	100YR-1HR	1.26	3.32	5.50	0.0011	99084	0.79	90.03	1.26	34.01
AREA2B	Basin 19	100YR-1HR	0.87	2.87	5.50	0.0009	3195	0.00	0.00	0.00	0.00
EX19-19	Basin 19	100YR-1HR	0.88	5.27	12.08	0.0302	159	0.68	31.95	0.43	77.05
EX19-20	Basin 19	100YR-1HR	0.88	5.23	13.71	0.0330	181	0.43	79.28	0.67	35.29
EX19-46	Basin 19	100YR-1HR	1.26	2.88	5.50	0.0013	123	1.26	26.27	1.26	26.27
EX19-53	Basin 19	100YR-1HR	1.25	3.32	6.72	-0.0036	132	0.67	11.32	0.67	11.21
EX19-60	Basin 19	100YR-1HR	0.86	2.90	5.50	0.0017	174	0.77	1.12	0.86	0.13
GWT_20	Basin 19	100YR-1HR	0.00	1.65	99.00	0.0000	0	1.14	13.58	0.00	0.00
NW122_CANAL	Basin 19	100YR-1HR	0.00	1.65	99.00	0.0000	10	1.26	26.27	0.00	0.00
S19-1	Basin 19	100YR-1HR	0.65	22.77	27.33	-0.0007	214	0.65	2.18	0.65	2.18
S19-10	Basin 19	100YR-1HR	0.66	8.49	13.17	-0.0008	174	0.65	6.32	0.65	6.31
S19-10A	Basin 19	100YR-1HR	0.65	21.38	23.04	-0.0013	153	0.65	3.24	0.65	3.23
S19-11	Basin 19	100YR-1HR	0.65	9.31	13.17	-0.0018	150	0.65	5.19	0.65	5.19
S19-11A	Basin 19	100YR-1HR	1.26	3.30	5.50	0.0011	113	1.26	7.74	1.26	7.74
S19-12	Basin 19	100YR-1HR	1.26	3.32	6.72	0.0027	286	0.67	9.76	0.67	9.52
S19-13	Basin 19	100YR-1HR	1.25	3.31	6.34	-0.0036	114	0.67	9.55	0.67	9.46
S19-14	Basin 19	100YR-1HR	1.26	3.32	7.22	-0.0005	281	0.65	1.35	0.70	1.36
S19-16	Basin 19	100YR-1HR	0.77	3.06	5.86	-0.0013	137	0.65	3.99	0.64	3.98
S19-17	Basin 19	100YR-1HR	0.86	2.90	6.50	0.0016	225	0.37	0.47	0.77	1.12
S19-2	Basin 19	100YR-1HR	0.66	22.24	26.43	-0.0007	258	0.65	4.74	0.66	4.73
S19-2A	Basin 19	100YR-1HR	0.67	21.24	26.10	0.0006	242	0.66	4.73	0.67	4.72
S19-3	Basin 19	100YR-1HR	0.67	20.80	23.90	0.0009	252	0.66	8.47	0.67	8.45
S19-4	Basin 19	100YR-1HR	0.68	17.09	19.21	-0.0016	305	0.66	12.94	0.68	12.85
S19-5	Basin 19	100YR-1HR	0.72	12.63	13.79	-0.0041	259	0.67	17.44	0.72	17.10
S19-6	Basin 19	100YR-1HR	0.72	11.12	11.71	0.0130	128	0.69	20.05	0.74	20.05
S19-7	Basin 19	100YR-1HR	0.72	9.27	11.13	-0.0190	124	0.69	24.32	0.72	24.58
S19-8	Basin 19	100YR-1HR	0.71	7.00	11.30	-0.0049	125	0.71	26.29	0.71	25.99
S19-9	Basin 19	100YR-1HR	0.86	5.43	11.57	0.0159	196	0.68	32.24	0.68	31.95
AREA1A	Basin 19	100YR-24HR	12.08	3.21	5.50	-0.0001	13933	12.00	40.76	12.04	14.58
AREA1B	Basin 19	100YR-24HR	19.15	2.80	5.50	0.0016	2674	12.00	0.80	12.07	0.70
AREA2A	Basin 19	100YR-24HR	12.18	3.07	5.50	0.0000	98566	12.00	24.29	12.17	22.34
AREA2B	Basin 19	100YR-24HR	19.15	2.81	5.50	0.0000	3131	2.29	0.07	24.34	0.35
EX19-19	Basin 19	100YR-24HR	12.08	3.22	12.08	0.0130	159	5.67	22.30	0.00	0.00
EX19-20	Basin 19	100YR-24HR	12.08	3.28	13.71	0.0114	181	0.00	0.00	5.67	35.93
EX19-46	Basin 19	100YR-24HR	12.18	2.35	5.50	-0.0004	123	12.18	19.75	12.18	19.75
EX19-53	Basin 19	100YR-24HR	12.15	3.07	6.72	0.0015	132	5.68	2.33	12.00	2.15
EX19-60	Basin 19	100YR-24HR	19.15	2.81	5.50	-0.0001	179	1.88	0.02	0.00	0.00
GWT_20	Basin 19	100YR-24HR	24.00	2.70	99.00	0.3000	0	12.10	4.83	0.00	0.00
NW122_CANAL	Basin 19	100YR-24HR	0.00	1.65	99.00	0.0000	10	12.18	19.75	0.00	0.00
S19-1	Basin 19	100YR-24HR	12.00	22.31	27.33	-0.0001	193	11.98	0.39	11.95	0.39
S19-10	Basin 19	100YR-24HR	12.01	7.51	13.17	-0.0001	191	11.98	1.13	11.96	1.13
S19-10A	Basin 19	100YR-24HR	11.96	20.78	23.04	-0.0005	137	11.98	0.58	11.96	0.58
S19-11	Basin 19	100YR-24HR	12.00	8.48	13.17	-0.0001	157	11.98	0.93	11.95	0.93
S19-11A	Basin 19	100YR-24HR	12.18	3.06	5.50	0.0057	113	12.08	2.60	12.09	2.60
S19-12	Basin 19	100YR-24HR	12.12	3.08	6.72	0.0047	294	12.00	1.83	5.68	2.20
S19-13	Basin 19	100YR-24HR	12.09	3.08	6.34	0.0039	114	12.00	2.41	12.00	2.41
S19-14	Basin 19	100YR-24HR	12.09	3.09	7.22	-0.0000	277	11.98	0.24	12.01	0.24
S19-16	Basin 19	100YR-24HR	19.14	2.81	5.86	0.0001	144	11.98	0.72	12.00	0.72
S19-17	Basin 19	100YR-24HR	19.15	2.81	6.50	-0.0001	234	22.12	0.52	1.88	0.02

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S19-2	Basin 19	100YR-24HR	11.98	21.46	26.43	-0.0001	237	11.98	0.85	11.98	0.85
S19-2A	Basin 19	100YR-24HR	12.01	20.46	26.10	0.0000	240	11.98	0.85	11.99	0.85
S19-3	Basin 19	100YR-24HR	12.01	19.52	23.90	-0.0001	361	11.99	1.52	11.97	1.52
S19-4	Basin 19	100YR-24HR	12.00	14.79	19.21	-0.0001	453	11.98	2.33	11.98	2.33
S19-5	Basin 19	100YR-24HR	12.01	8.84	13.79	-0.0001	443	11.98	3.17	11.99	3.17
S19-6	Basin 19	100YR-24HR	12.01	6.93	11.71	-0.0001	396	11.99	3.72	11.99	3.72
S19-7	Basin 19	100YR-24HR	12.00	6.54	11.13	-0.0001	327	11.99	4.53	12.00	4.53
S19-8	Basin 19	100YR-24HR	12.01	5.19	11.30	-0.0001	233	12.00	4.85	11.99	4.85
S19-9	Basin 19	100YR-24HR	12.07	3.31	11.57	0.0042	202	11.99	5.99	5.67	22.30
AREA1A	Basin 19	100YR-8HR	4.13	4.72	5.50	0.0006	15474	3.61	56.17	4.07	37.88
AREA1B	Basin 19	100YR-8HR	4.10	3.11	5.50	0.0016	3335	4.02	2.14	4.08	1.94
AREA2A	Basin 19	100YR-8HR	4.51	3.88	5.50	0.0002	100329	4.02	66.11	4.47	38.58
AREA2B	Basin 19	100YR-8HR	4.10	3.11	5.50	0.0002	3689	1.10	0.07	4.17	0.40
EX19-19	Basin 19	100YR-8HR	4.13	4.78	12.08	0.0192	159	2.47	24.69	3.61	18.29
EX19-20	Basin 19	100YR-8HR	4.13	4.79	13.71	0.0320	181	3.61	20.17	2.47	38.94
EX19-46	Basin 19	100YR-8HR	4.51	3.60	5.50	0.0007	123	4.50	33.04	4.51	33.04
EX19-53	Basin 19	100YR-8HR	4.49	3.89	6.72	0.0014	132	4.00	6.89	4.00	6.85
EX19-60	Basin 19	100YR-8HR	4.10	3.10	5.50	0.0004	157	4.09	1.58	4.10	1.58
GWT_20	Basin 19	100YR-8HR	8.00	2.70	99.00	0.3000	0	4.28	9.49	0.00	0.00
NW122_CANAL	Basin 19	100YR-8HR	0.00	1.65	99.00	0.0000	10	4.38	33.94	0.00	0.00
S19-1	Basin 19	100YR-8HR	4.00	22.55	27.33	0.0001	209	4.00	1.17	3.98	1.17
S19-10	Basin 19	100YR-8HR	4.00	7.98	13.17	0.0002	200	4.00	3.40	4.00	3.40
S19-10A	Basin 19	100YR-8HR	4.00	21.08	23.04	0.0005	150	4.00	1.74	3.98	1.74
S19-11	Basin 19	100YR-8HR	4.00	8.89	13.17	-0.0002	161	4.00	2.79	4.00	2.79
S19-11A	Basin 19	100YR-8HR	4.51	3.87	5.50	0.0058	113	4.41	5.56	4.42	5.55
S19-12	Basin 19	100YR-8HR	4.47	3.90	6.72	0.0047	161	3.99	5.98	4.00	5.92
S19-13	Basin 19	100YR-8HR	4.46	3.90	6.34	0.0039	114	4.00	6.92	4.00	6.88
S19-14	Basin 19	100YR-8HR	4.47	3.90	7.22	-0.0003	204	4.00	0.73	4.02	0.66
S19-16	Basin 19	100YR-8HR	4.06	3.16	5.86	0.0002	128	4.00	2.14	4.00	2.13
S19-17	Basin 19	100YR-8HR	4.10	3.11	6.50	0.0003	197	4.15	2.00	4.09	1.58
S19-2	Basin 19	100YR-8HR	4.00	21.84	26.43	0.0002	259	4.00	2.55	4.00	2.55
S19-2A	Basin 19	100YR-8HR	4.01	20.84	26.10	0.0002	257	4.00	2.55	4.00	2.55
S19-3	Basin 19	100YR-8HR	4.00	20.10	23.90	-0.0003	354	4.00	4.57	3.99	4.56
S19-4	Basin 19	100YR-8HR	4.00	15.62	19.21	-0.0004	336	4.00	6.99	4.00	6.99
S19-5	Basin 19	100YR-8HR	4.00	9.62	13.79	-0.0003	396	4.00	9.49	4.00	9.49
S19-6	Basin 19	100YR-8HR	4.01	7.82	11.71	-0.0004	362	4.00	11.15	4.00	11.14
S19-7	Basin 19	100YR-8HR	4.00	7.59	11.13	-0.0005	254	4.00	13.57	4.00	13.57
S19-8	Basin 19	100YR-8HR	4.00	6.08	11.30	-0.0004	212	4.00	14.54	4.00	14.54
S19-9	Basin 19	100YR-8HR	4.13	4.86	11.57	0.0205	209	4.00	17.93	2.47	24.69
AREA1A	Basin 19	10YR-1HR	0.88	3.88	5.50	0.0016	14643	0.69	50.92	0.90	37.79
AREA1B	Basin 19	10YR-1HR	1.01	2.11	5.50	0.0004	2422	0.77	0.93	1.18	0.56
AREA2A	Basin 19	10YR-1HR	1.29	2.86	5.50	0.0006	98154	0.80	58.23	1.29	15.84
AREA2B	Basin 19	10YR-1HR	0.94	2.62	5.50	0.0007	3068	0.00	0.00	0.00	0.00
EX19-19	Basin 19	10YR-1HR	0.91	3.92	12.08	0.0350	159	0.70	22.32	0.49	79.98
EX19-20	Basin 19	10YR-1HR	0.91	3.93	13.71	0.0394	181	0.49	81.89	3.54	33.99
EX19-46	Basin 19	10YR-1HR	1.29	1.85	5.50	-0.0004	123	1.29	10.53	1.29	10.53
EX19-53	Basin 19	10YR-1HR	1.29	2.86	6.72	-0.0019	132	0.67	6.94	0.67	6.85
EX19-60	Basin 19	10YR-1HR	0.92	2.63	5.50	0.0006	186	0.69	0.43	0.00	0.00
GWT_20	Basin 19	10YR-1HR	0.00	1.65	99.00	0.0000	0	1.21	8.80	0.00	0.00
NW122_CANAL	Basin 19	10YR-1HR	0.00	1.65	99.00	0.0000	10	1.29	10.53	0.00	0.00
S19-1	Basin 19	10YR-1HR	0.66	22.62	27.33	-0.0005	212	0.65	1.48	0.65	1.48

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S19-10	Basin 19	10YR-1HR	0.66	8.14	13.17	0.0006	198	0.65	4.29	0.66	4.29
S19-10A	Basin 19	10YR-1HR	0.65	21.18	23.04	-0.0006	151	0.65	2.20	0.65	2.20
S19-11	Basin 19	10YR-1HR	0.65	9.02	13.17	-0.0013	159	0.65	3.53	0.65	3.53
S19-11A	Basin 19	10YR-1HR	1.29	2.85	5.50	0.0008	113	1.29	5.31	1.29	5.31
S19-12	Basin 19	10YR-1HR	1.28	2.86	6.72	0.0016	286	0.67	5.92	0.67	5.72
S19-13	Basin 19	10YR-1HR	1.28	2.85	6.34	-0.0021	114	0.68	5.41	0.68	5.35
S19-14	Basin 19	10YR-1HR	0.67	3.11	7.22	0.0003	272	0.65	0.92	0.67	0.92
S19-16	Basin 19	10YR-1HR	0.65	2.78	5.86	-0.0009	146	0.65	2.71	0.65	2.71
S19-17	Basin 19	10YR-1HR	0.92	2.63	6.50	0.0005	243	0.40	0.41	0.69	0.43
S19-2	Basin 19	10YR-1HR	0.67	21.97	26.43	-0.0005	261	0.65	3.22	0.66	3.21
S19-2A	Basin 19	10YR-1HR	0.68	20.97	26.10	0.0005	256	0.66	3.21	0.67	3.21
S19-3	Basin 19	10YR-1HR	0.68	20.30	23.90	0.0007	314	0.67	5.75	0.67	5.73
S19-4	Basin 19	10YR-1HR	0.68	15.96	19.21	0.0009	326	0.67	8.79	0.68	8.74
S19-5	Basin 19	10YR-1HR	0.68	9.89	13.79	0.0009	356	0.67	11.87	0.68	11.86
S19-6	Basin 19	10YR-1HR	0.70	8.87	11.71	0.0120	265	0.68	13.92	0.70	13.86
S19-7	Basin 19	10YR-1HR	0.70	7.98	11.13	-0.0210	142	0.69	16.83	0.70	16.83
S19-8	Basin 19	10YR-1HR	0.70	6.36	11.30	-0.0022	201	0.69	18.02	0.70	18.02
S19-9	Basin 19	10YR-1HR	0.91	4.00	11.57	0.0202	209	0.69	22.25	0.70	22.32
AREA1A	Basin 19	10YR-24HR	12.10	2.94	5.50	-0.0002	13722	7.35	37.08	12.03	9.30
AREA1B	Basin 19	10YR-24HR	21.01	2.74	5.50	0.0015	2652	12.00	0.41	12.11	0.34
AREA2A	Basin 19	10YR-24HR	12.22	2.88	5.50	0.0000	98207	12.00	15.02	12.21	13.36
AREA2B	Basin 19	10YR-24HR	21.01	2.74	5.50	0.0000	3110	2.66	0.08	24.34	0.35
EX19-19	Basin 19	10YR-24HR	12.09	2.93	12.08	0.0129	159	7.35	21.72	0.00	0.00
EX19-20	Basin 19	10YR-24HR	12.10	3.00	13.71	0.0114	181	0.00	0.00	7.35	35.21
EX19-46	Basin 19	10YR-24HR	12.22	1.89	5.50	0.0004	123	12.22	11.47	12.22	11.47
EX19-53	Basin 19	10YR-24HR	12.21	2.88	6.72	0.0015	132	7.25	2.20	12.00	1.21
EX19-60	Basin 19	10YR-24HR	21.02	2.74	5.50	-0.0001	182	1.70	0.01	0.00	0.00
GWT_20	Basin 19	10YR-24HR	24.00	2.70	99.00	0.3000	0	12.11	3.28	0.00	0.00
NW122_CANAL	Basin 19	10YR-24HR	0.00	1.65	99.00	0.0000	10	12.22	11.47	0.00	0.00
S19-1	Basin 19	10YR-24HR	11.96	22.25	27.33	-0.0000	186	11.98	0.26	11.96	0.26
S19-10	Basin 19	10YR-24HR	12.00	7.40	13.17	-0.0000	186	11.99	0.75	11.99	0.75
S19-10A	Basin 19	10YR-24HR	12.00	20.70	23.04	-0.0005	131	11.98	0.38	11.93	0.38
S19-11	Basin 19	10YR-24HR	11.99	8.38	13.17	-0.0001	154	11.98	0.61	11.99	0.61
S19-11A	Basin 19	10YR-24HR	12.22	2.88	5.50	0.0058	113	11.83	1.90	12.09	1.90
S19-12	Basin 19	10YR-24HR	12.20	2.88	6.72	0.0044	288	12.00	1.01	33.69	2.17
S19-13	Basin 19	10YR-24HR	12.19	2.89	6.34	0.0037	114	12.00	1.44	12.00	1.44
S19-14	Basin 19	10YR-24HR	12.09	2.91	7.22	-0.0000	260	11.98	0.16	12.01	0.16
S19-16	Basin 19	10YR-24HR	21.01	2.74	5.86	0.0001	145	11.98	0.47	12.00	0.47
S19-17	Basin 19	10YR-24HR	21.01	2.74	6.50	-0.0001	238	23.99	0.51	1.70	0.01
S19-2	Basin 19	10YR-24HR	12.01	21.36	26.43	-0.0000	228	11.98	0.56	11.95	0.56
S19-2A	Basin 19	10YR-24HR	12.02	20.37	26.10	-0.0000	231	11.95	0.56	11.97	0.56
S19-3	Basin 19	10YR-24HR	12.00	19.39	23.90	-0.0001	346	11.98	1.00	11.98	1.00
S19-4	Basin 19	10YR-24HR	12.01	14.62	19.21	-0.0001	437	11.98	1.54	12.01	1.54
S19-5	Basin 19	10YR-24HR	12.01	8.67	13.79	-0.0001	426	12.01	2.09	12.00	2.09
S19-6	Basin 19	10YR-24HR	12.01	6.74	11.71	-0.0001	381	12.00	2.45	12.00	2.45
S19-7	Basin 19	10YR-24HR	12.01	6.32	11.13	-0.0001	318	12.00	2.98	12.00	2.98
S19-8	Basin 19	10YR-24HR	12.01	4.99	11.30	-0.0001	227	12.00	3.19	12.00	3.19
S19-9	Basin 19	10YR-24HR	12.09	3.01	11.57	0.0047	198	12.00	3.94	7.35	21.72
AREA1A	Basin 19	10YR-8HR	4.13	3.58	5.50	0.0002	14298	4.00	48.75	4.05	25.12
AREA1B	Basin 19	10YR-8HR	4.22	2.91	5.50	0.0015	2846	4.02	1.06	4.19	0.76
AREA2A	Basin 19	10YR-8HR	4.39	3.21	5.50	0.0001	98845	4.02	42.23	4.37	27.05

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
AREA2B	Basin 19	10YR-8HR	4.21	2.92	5.50	0.0001	3300	1.10	0.07	8.34	0.35
EX19-19	Basin 19	10YR-8HR	4.12	3.62	12.08	0.0139	159	3.10	23.96	0.00	0.00
EX19-20	Basin 19	10YR-8HR	4.13	3.65	13.71	0.0118	181	0.00	0.00	3.10	38.04
EX19-46	Basin 19	10YR-8HR	4.39	2.73	5.50	0.0004	123	4.39	24.58	4.39	24.58
EX19-53	Basin 19	10YR-8HR	4.38	3.22	6.72	-0.0014	132	4.00	4.46	4.00	4.43
EX19-60	Basin 19	10YR-8HR	4.21	2.92	5.50	0.0001	173	1.75	0.03	4.21	0.25
GWT_20	Basin 19	10YR-8HR	8.00	2.70	99.00	0.3000	0	4.22	4.85	0.00	0.00
NW122_CANAL	Basin 19	10YR-8HR	0.00	1.65	99.00	0.0000	10	4.38	24.77	0.00	0.00
S19-1	Basin 19	10YR-8HR	4.00	22.44	27.33	0.0001	203	4.00	0.78	4.00	0.78
S19-10	Basin 19	10YR-8HR	4.00	7.76	13.17	0.0002	199	4.00	2.25	4.00	2.25
S19-10A	Basin 19	10YR-8HR	4.00	20.94	23.04	-0.0005	145	4.00	1.15	4.00	1.15
S19-11	Basin 19	10YR-8HR	4.00	8.70	13.17	-0.0002	161	4.00	1.85	3.98	1.85
S19-11A	Basin 19	10YR-8HR	4.39	3.21	5.50	0.0059	113	4.29	2.49	4.30	2.48
S19-12	Basin 19	10YR-8HR	4.36	3.22	6.72	0.0044	291	4.00	3.88	4.00	3.82
S19-13	Basin 19	10YR-8HR	4.34	3.23	6.34	0.0037	114	4.00	4.08	4.00	4.06
S19-14	Basin 19	10YR-8HR	4.35	3.23	7.22	0.0001	282	4.00	0.48	3.60	0.45
S19-16	Basin 19	10YR-8HR	4.16	2.94	5.86	0.0001	140	4.00	1.42	4.00	1.40
S19-17	Basin 19	10YR-8HR	4.21	2.92	6.50	0.0001	224	8.34	0.52	1.75	0.03
S19-2	Basin 19	10YR-8HR	4.00	21.67	26.43	0.0001	252	4.00	1.69	3.99	1.69
S19-2A	Basin 19	10YR-8HR	4.01	20.67	26.10	0.0001	253	3.99	1.69	4.00	1.69
S19-3	Basin 19	10YR-8HR	4.01	19.83	23.90	0.0002	372	4.00	3.03	4.00	3.02
S19-4	Basin 19	10YR-8HR	4.01	15.21	19.21	0.0002	440	4.00	4.63	4.01	4.63
S19-5	Basin 19	10YR-8HR	4.01	9.25	13.79	0.0002	448	4.00	6.29	4.01	6.29
S19-6	Basin 19	10YR-8HR	4.01	7.39	11.71	0.0003	401	4.00	7.38	4.00	7.38
S19-7	Basin 19	10YR-8HR	4.01	7.07	11.13	0.0003	320	4.00	8.99	4.01	8.98
S19-8	Basin 19	10YR-8HR	4.01	5.66	11.30	0.0003	234	4.00	9.63	4.00	9.62
S19-9	Basin 19	10YR-8HR	4.12	3.70	11.57	0.0047	208	4.00	11.87	3.10	23.96
AREA1A	Basin 19	25YR-72HR	60.20	5.51	5.50	0.0018	16202	60.01	69.00	60.14	48.73
AREA1B	Basin 19	25YR-72HR	60.12	3.28	5.50	0.0015	3760	60.02	4.05	60.10	3.35
AREA2A	Basin 19	25YR-72HR	60.61	4.16	5.50	0.0007	100952	60.04	94.35	60.45	43.79
AREA2B	Basin 19	25YR-72HR	60.12	3.28	5.50	0.0005	4025	60.08	0.59	60.12	1.76
EX19-19	Basin 19	25YR-72HR	60.19	5.57	12.08	0.0194	159	60.05	26.99	60.06	28.23
EX19-20	Basin 19	25YR-72HR	60.19	5.54	13.71	0.0320	181	60.06	31.18	42.05	34.05
EX19-46	Basin 19	25YR-72HR	60.61	3.95	5.50	-0.0089	123	60.45	37.09	60.61	35.89
EX19-53	Basin 19	25YR-72HR	60.58	4.17	6.72	-0.0018	132	60.02	11.91	60.02	11.83
EX19-60	Basin 19	25YR-72HR	60.12	3.26	5.50	0.0007	127	60.11	3.30	60.12	3.24
GWT_20	Basin 19	25YR-72HR	72.00	2.70	99.00	0.3000	0	60.46	11.27	0.00	0.00
NW122_CANAL	Basin 19	25YR-72HR	0.00	1.65	99.00	0.0000	10	60.47	37.32	0.00	0.00
S19-1	Basin 19	25YR-72HR	60.02	22.69	27.33	-0.0003	213	60.02	1.80	60.02	1.70
S19-10	Basin 19	25YR-72HR	60.03	8.29	13.17	-0.0006	192	60.02	5.21	60.02	5.20
S19-10A	Basin 19	25YR-72HR	60.02	21.27	23.04	-0.0005	153	60.02	2.67	60.02	2.66
S19-11	Basin 19	25YR-72HR	60.02	9.16	13.17	-0.0005	156	60.02	4.28	60.02	4.28
S19-11A	Basin 19	25YR-72HR	60.61	4.15	5.50	0.0058	113	60.59	6.85	60.59	6.85
S19-12	Basin 19	25YR-72HR	60.56	4.17	6.72	0.0044	134	60.01	10.52	60.02	10.42
S19-13	Basin 19	25YR-72HR	60.07	4.24	6.34	0.0037	114	60.02	11.53	60.02	11.46
S19-14	Basin 19	25YR-72HR	60.56	4.17	7.22	0.0009	122	60.02	1.12	60.06	1.04
S19-16	Basin 19	25YR-72HR	60.07	3.38	5.86	0.0005	115	60.02	3.29	60.04	3.27
S19-17	Basin 19	25YR-72HR	60.12	3.28	6.50	0.0031	161	60.10	4.54	60.11	3.30
S19-2	Basin 19	25YR-72HR	60.03	22.09	26.43	-0.0005	261	60.02	3.90	60.03	3.89
S19-2A	Basin 19	25YR-72HR	60.04	21.09	26.10	-0.0005	251	60.03	3.89	60.04	3.89
S19-3	Basin 19	25YR-72HR	60.04	20.52	23.90	-0.0008	254	60.03	6.97	60.04	6.96

Qpost = 37.32 cfs <
Qpre = 37.79 cfs

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S19-4	Basin 19	25YR-72HR	60.05	16.42	19.21	-0.0015	306	60.03	10.66	60.05	10.61
S19-5	Basin 19	25YR-72HR	60.06	10.85	13.79	-0.0031	264	60.03	14.41	60.07	14.28
S19-6	Basin 19	25YR-72HR	60.06	9.80	11.71	0.0121	128	60.05	16.73	60.07	16.73
S19-7	Basin 19	25YR-72HR	60.06	8.50	11.13	-0.0208	134	60.05	20.33	60.06	20.32
S19-8	Basin 19	25YR-72HR	60.06	6.66	11.30	-0.0021	163	60.05	21.77	60.05	21.77
S19-9	Basin 19	25YR-72HR	60.17	5.67	11.57	0.0204	206	60.05	26.93	60.05	26.99

==========
==== Basins ====
==========

Name: B19-1 Node: S19-1 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.290 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19-10 Node: S19-10 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.150 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19-10A Node: S19-10A Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.430 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19-11 Node: S19-11 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.690 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19-11A Node: AREA2A Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 3.930 Time Shift(hrs): 0.00
Curve Number: 66.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19-12 Node: S19-12 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00

Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.100 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19-14 Node: S19-14 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.180 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19-15 Node: AREA1B Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.820 Time Shift(hrs): 0.00
Curve Number: 61.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19-16 Node: S19-16 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.530 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19-2 Node: S19-2 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.340 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19-201 Node: S19-13 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.150 Time Shift(hrs): 0.00
Curve Number: 80.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19-202 Node: S19-13 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

```
        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.330                   Time Shift(hrs): 0.00
           Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B19-3                    Node: S19-3                  Status: Onsite
        Group: Basin 19                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.500                   Time Shift(hrs): 0.00
           Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B19-4                    Node: S19-4                  Status: Onsite
        Group: Basin 19                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.600                   Time Shift(hrs): 0.00
           Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B19-5                    Node: S19-5                  Status: Onsite
        Group: Basin 19                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.620                   Time Shift(hrs): 0.00
           Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B19-6                    Node: S19-6                  Status: Onsite
        Group: Basin 19                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.410                   Time Shift(hrs): 0.00
           Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: B19-7                    Node: S19-7                  Status: Onsite
        Group: Basin 19                 Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
                Area(ac): 0.600                   Time Shift(hrs): 0.00
           Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
                DCIA(%): 0.00
```

```
--------------------------------------------------------------------------------------------
         Name: B19-8                   Node: S19-8                  Status: Onsite
        Group: Basin 19                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                 Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
              Area(ac): 0.240                Time Shift(hrs): 0.00
          Curve Number: 96.00            Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------------------
         Name: BX19-13                 Node: AREA1A                 Status: Onsite
        Group: Basin 19                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                 Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
              Area(ac): 0.690                Time Shift(hrs): 0.00
          Curve Number: 96.00            Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------------------
         Name: BX19-16                 Node: AREA1A                 Status: Onsite
        Group: Basin 19                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                 Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
              Area(ac): 0.860                Time Shift(hrs): 0.00
          Curve Number: 96.00            Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------------------
         Name: BX19-19                 Node: AREA1A                 Status: Onsite
        Group: Basin 19                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                 Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
              Area(ac): 0.520                Time Shift(hrs): 0.00
          Curve Number: 96.00            Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------------------
         Name: BX19-2                  Node: AREA1A                 Status: Onsite
        Group: Basin 19                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                 Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
              Area(ac): 0.260                Time Shift(hrs): 0.00
          Curve Number: 96.00            Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


--------------------------------------------------------------------------------------------
         Name: BX19-20                 Node: EX19-20                Status: Onsite
        Group: Basin 19                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                 Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
              Area(ac): 0.490                Time Shift(hrs): 0.00
          Curve Number: 96.00            Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00
```

```
---------------------------------------------------------------------------------------------------
        Name: BX19-21                 Node: AREA1A                Status: Onsite
       Group: Basin 19                Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                 Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
            Area(ac): 0.520                Time Shift(hrs): 0.00
        Curve Number: 96.00            Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


---------------------------------------------------------------------------------------------------
        Name: BX19-26                 Node: AREA1A                Status: Onsite
       Group: Basin 19                Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                 Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
            Area(ac): 1.250                Time Shift(hrs): 0.00
        Curve Number: 61.00            Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


---------------------------------------------------------------------------------------------------
        Name: BX19-28                 Node: AREA2A                Status: Onsite
       Group: Basin 19                Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                 Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
            Area(ac): 0.170                Time Shift(hrs): 0.00
        Curve Number: 96.00            Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


---------------------------------------------------------------------------------------------------
        Name: BX19-30                 Node: AREA2A                Status: Onsite
       Group: Basin 19                Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                 Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
            Area(ac): 0.260                Time Shift(hrs): 0.00
        Curve Number: 96.00            Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


---------------------------------------------------------------------------------------------------
        Name: BX19-32                 Node: AREA2A                Status: Onsite
       Group: Basin 19                Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                 Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
            Area(ac): 0.630                Time Shift(hrs): 0.00
        Curve Number: 96.00            Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


---------------------------------------------------------------------------------------------------
        Name: BX19-34                 Node: AREA2A                Status: Onsite
       Group: Basin 19                Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                 Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000             Time of Conc(min): 10.00
```

```
            Area(ac): 0.220                 Time Shift(hrs): 0.00
       Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
            DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
        Name: BX19-36                Node: AREA2A                Status: Onsite
       Group: Basin 19               Type: SCS Unit Hydrograph CN

      Unit Hydrograph: Uh256                 Peaking Factor: 256.0
        Rainfall File:                    Storm Duration(hrs): 0.00
  Rainfall Amount(in): 0.000                Time of Conc(min): 10.00
            Area(ac): 0.430                 Time Shift(hrs): 0.00
       Curve Number: 93.00             Max Allowable Q(cfs): 999999.000
            DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
        Name: BX19-39                Node: AREA2A                Status: Onsite
       Group: Basin 19               Type: SCS Unit Hydrograph CN

      Unit Hydrograph: Uh256                 Peaking Factor: 256.0
        Rainfall File:                    Storm Duration(hrs): 0.00
  Rainfall Amount(in): 0.000                Time of Conc(min): 10.00
            Area(ac): 0.190                 Time Shift(hrs): 0.00
       Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
            DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
        Name: BX19-4                 Node: AREA1A                Status: Onsite
       Group: Basin 19               Type: SCS Unit Hydrograph CN

      Unit Hydrograph: Uh256                 Peaking Factor: 256.0
        Rainfall File:                    Storm Duration(hrs): 0.00
  Rainfall Amount(in): 0.000                Time of Conc(min): 10.00
            Area(ac): 0.320                 Time Shift(hrs): 0.00
       Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
            DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
        Name: BX19-40                Node: AREA2A                Status: Onsite
       Group: Basin 19               Type: SCS Unit Hydrograph CN

      Unit Hydrograph: Uh256                 Peaking Factor: 256.0
        Rainfall File:                    Storm Duration(hrs): 0.00
  Rainfall Amount(in): 0.000                Time of Conc(min): 10.00
            Area(ac): 0.220                 Time Shift(hrs): 0.00
       Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
            DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
        Name: BX19-42                Node: AREA2A                Status: Onsite
       Group: Basin 19               Type: SCS Unit Hydrograph CN

      Unit Hydrograph: Uh256                 Peaking Factor: 256.0
        Rainfall File:                    Storm Duration(hrs): 0.00
  Rainfall Amount(in): 0.000                Time of Conc(min): 10.00
            Area(ac): 0.020                 Time Shift(hrs): 0.00
       Curve Number: 96.00             Max Allowable Q(cfs): 999999.000
            DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
        Name: BX19-43                Node: AREA2A                Status: Onsite
       Group: Basin 19               Type: SCS Unit Hydrograph CN
```

```
        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
              Area(ac): 0.110                    Time Shift(hrs): 0.00
          Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: BX19-44                 Node: AREA2A                Status: Onsite
        Group: Basin 19                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
              Area(ac): 0.070                    Time Shift(hrs): 0.00
          Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: BX19-48                 Node: AREA2A                Status: Onsite
        Group: Basin 19                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
              Area(ac): 0.220                    Time Shift(hrs): 0.00
          Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: BX19-53                 Node: EX19-53               Status: Onsite
        Group: Basin 19                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
              Area(ac): 0.240                    Time Shift(hrs): 0.00
          Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: BX19-56                 Node: S19-13                Status: Onsite
        Group: Basin 19                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
              Area(ac): 1.530                    Time Shift(hrs): 0.00
          Curve Number: 73.00               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
         Name: BX19-6                  Node: AREA1A                Status: Onsite
        Group: Basin 19                Type: SCS Unit Hydrograph CN

        Unit Hydrograph: Uh256                  Peaking Factor: 256.0
          Rainfall File:                     Storm Duration(hrs): 0.00
    Rainfall Amount(in): 0.000                 Time of Conc(min): 10.00
              Area(ac): 0.420                    Time Shift(hrs): 0.00
          Curve Number: 96.00               Max Allowable Q(cfs): 999999.000
               DCIA(%): 0.00


-------------------------------------------------------------------------------------------------
```

Name: BX19-7 Node: AREA1A Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.820 Time Shift(hrs): 0.00
Curve Number: 74.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: BX19-9 Node: AREA1A Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.550 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

==========
==== Nodes ==========
==========

Name: AREA1A Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 5.500
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.2800
2.450	0.3000
5.000	0.3600
6.000	0.3800

Name: AREA1B Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 5.500
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0500
2.850	0.0600
5.000	0.1900
6.000	0.2500

Name: AREA2A Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 5.500
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	2.1900
2.450	2.2300
5.000	2.3600
6.000	2.4200

Name: AREA2B Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 5.500
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0600
2.850	0.0700
5.000	0.1800
6.000	0.2400

Name: EX19-19 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 12.080
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
12.080	0.0004

Name: EX19-20 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 13.710
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
13.710	0.0004

Name: EX19-46 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 5.500
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
3.950	0.0004

Name: EX19-53 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 6.720
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
6.720	0.0004

Name: EX19-60 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 5.500
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
5.500	0.0004

Name: GWT_20 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	1.650
108.00	1.650

Name: NW122_CANAL Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	1.650
108.00	1.650

Name: S19-1 Base Flow(cfs): 0.000 Init Stage(ft): 22.000
Group: Basin 19 Warn Stage(ft): 27.330
Type: Stage/Area

Stage(ft)	Area(ac)
20.000	0.0004
27.330	0.0004

Name: S19-10 Base Flow(cfs): 0.000 Init Stage(ft): 7.000
Group: Basin 19 Warn Stage(ft): 13.170
Type: Stage/Area

Stage(ft)	Area(ac)
5.000	0.0004
13.170	0.0004

Name: S19-10A Base Flow(cfs): 0.000 Init Stage(ft): 20.640
Group: Basin 19 Warn Stage(ft): 23.040
Type: Stage/Area

Stage(ft)	Area(ac)
18.640	0.0004
23.040	0.0004

Name: S19-11 Base Flow(cfs): 0.000 Init Stage(ft): 8.000
Group: Basin 19 Warn Stage(ft): 13.170
Type: Stage/Area

Stage(ft)	Area(ac)
6.000	0.0004
13.170	0.0004

Name: S19-11A Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 19 Warn Stage(ft): 5.500
Type: Stage/Area

Stage(ft)	Area(ac)

1.000	0.0004
1.640	0.0004

Name: S19-12 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 6.720
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
6.720	0.0004

Name: S19-13 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 6.340
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
6.340	0.0004

Name: S19-14 Base Flow(cfs): 0.000 Init Stage(ft): 2.600
Group: Basin 19 Warn Stage(ft): 7.220
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
7.220	0.0004

Name: S19-16 Base Flow(cfs): 0.000 Init Stage(ft): 1.750
Group: Basin 19 Warn Stage(ft): 5.860
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
5.860	0.0004

Name: S19-17 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 6.500
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
6.500	0.0004

Name: S19-2 Base Flow(cfs): 0.000 Init Stage(ft): 21.000
Group: Basin 19 Warn Stage(ft): 26.430
Type: Stage/Area

Stage(ft)	Area(ac)
19.000	0.0004
26.430	0.0004

Name: S19-2A Base Flow(cfs): 0.000 Init Stage(ft): 20.000
Group: Basin 19 Warn Stage(ft): 26.100
Type: Stage/Area

Stage(ft)	Area(ac)
19.000	0.0004
26.100	0.0004

Name: S19-3 Base Flow(cfs): 0.000 Init Stage(ft): 18.900
Group: Basin 19 Warn Stage(ft): 23.900
Type: Stage/Area

Stage(ft)	Area(ac)
16.900	0.0004
23.900	0.0004

Name: S19-4 Base Flow(cfs): 0.000 Init Stage(ft): 14.000
Group: Basin 19 Warn Stage(ft): 19.210
Type: Stage/Area

Stage(ft)	Area(ac)
12.000	0.0004
19.210	0.0004

Name: S19-5 Base Flow(cfs): 0.000 Init Stage(ft): 8.000
Group: Basin 19 Warn Stage(ft): 13.790
Type: Stage/Area

Stage(ft)	Area(ac)
6.000	0.0004
13.790	0.0004

Name: S19-6 Base Flow(cfs): 0.000 Init Stage(ft): 6.000
Group: Basin 19 Warn Stage(ft): 11.710
Type: Stage/Area

Stage(ft)	Area(ac)
4.000	0.0004
11.710	0.0004

Name: S19-7 Base Flow(cfs): 0.000 Init Stage(ft): 5.500
Group: Basin 19 Warn Stage(ft): 11.130
Type: Stage/Area

Stage(ft)	Area(ac)
3.500	0.0004
11.130	0.0004

Name: S19-8 Base Flow(cfs): 0.000 Init Stage(ft): 4.200
Group: Basin 19 Warn Stage(ft): 11.300

Type: Stage/Area

Stage(ft)	Area(ac)
2.200	0.0004
11.300	0.0004

Name: S19-9 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 11.570
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
11.570	0.0004

Operating Tables

Name: E_OPT-19 Group: Basin 19
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.650	1.65	0.00
1.650	2.65	0.03
1.650	3.45	0.06
1.650	5.45	0.10
2.650	2.65	0.00
2.650	3.45	0.02
2.650	5.45	0.09

Pipes

Name: AREA1A_AREA2A From Node: AREA1A Length(ft): 122.00
Group: Basin 19 To Node: AREA2A Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	36.00	36.00	Flow:	Both
Rise(in):	36.00	36.00	Entrance Loss Coef:	0.50
Invert(ft):	0.140	0.140	Exit Loss Coef:	1.00
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: AREA1B_AREA2B From Node: AREA1B Length(ft): 112.00
Group: Basin 19 To Node: AREA2B Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Most Restrictive
Span(in):	18.00	18.00	Flow:	Both
Rise(in):	18.00	18.00	Entrance Loss Coef:	0.50
			Exit Loss Coef:	1.00

Invert(ft):	1.750	1.750	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	AREA2B_S19-17	From Node: AREA2B	Length(ft):	22.00
Group:	Basin 19	To Node: S19-17	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	24.00	24.00	Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00	Exit Loss Coef:	0.10
Invert(ft):	1.650	1.440	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX19-19_EX19-20	From Node: EX19-19	Length(ft):	205.00
Group:	Basin 19	To Node: EX19-20	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	66.00	66.00	Entrance Loss Coef:	0.50
Rise(in):	66.00	66.00	Exit Loss Coef:	0.10
Invert(ft):	-3.190	-3.350	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX19-20_AREA1A	From Node: EX19-20	Length(ft):	286.00
Group:	Basin 19	To Node: AREA1A	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular	Flow:	Both
Span(in):	66.00	66.00	Entrance Loss Coef:	0.50
Rise(in):	66.00	66.00	Exit Loss Coef:	1.00
Invert(ft):	-3.350	-3.560	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX19-46_OUT	From Node:	EX19-46	Length(ft): 162.00
Group:	Basin 19	To Node:	NW122_CANAL	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	30.00	30.00		Entrance Loss Coef: 0.50
Rise(in):	30.00	30.00		Exit Loss Coef: 1.00
Invert(ft):	-2.560	-2.960		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	EX19-53_AREA2A	From Node:	EX19-53	Length(ft): 124.00
Group:	Basin 19	To Node:	AREA2A	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	30.00	30.00		Entrance Loss Coef: 0.50
Rise(in):	30.00	30.00		Exit Loss Coef: 1.00
Invert(ft):	-0.410	-0.660		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S19-10_AREA1A	From Node:	S19-10A	Length(ft): 58.00
Group:	Basin 19	To Node:	AREA1A	Count: 1
				Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular		Flow: Both
Span(in):	18.00	18.00		Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00		Exit Loss Coef: 1.00
Invert(ft):	20.640	1.650		Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S19-10_S19-9	From Node: S19-10	Length(ft): 58.00
Group:	Basin 19	To Node: S19-9	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Always Inlet
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 1.46
Invert(ft):	7.000	4.500	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S19-11_S19-10	From Node: S19-11	Length(ft): 66.00
Group:	Basin 19	To Node: S19-10	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Always Inlet
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.10
Invert(ft):	8.000	7.000	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S19-12_EX19-53	From Node: S19-12	Length(ft): 181.00
Group:	Basin 19	To Node: EX19-53	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	30.00	30.00	Entrance Loss Coef: 0.50
Rise(in):	30.00	30.00	Exit Loss Coef: 0.10
Invert(ft):	-0.160	-0.410	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S19-13_S19-12	From Node: S19-13	Length(ft): 21.00
Group:	Basin 19	To Node: S19-12	Count: 1

```
                                                    Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM             Solution Algorithm: Most Restrictive
    Geometry: Circular       Circular                     Flow: Both
    Span(in): 24.00          24.00                  Entrance Loss Coef: 0.50
    Rise(in): 24.00          24.00                      Exit Loss Coef: 1.46
   Invert(ft): -0.060        -0.160                     Bend Loss Coef: 0.00
  Manning's N: 0.012000      0.012000                Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                    Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000         0.000                   Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: S19-14_S19-12       From Node: S19-14            Length(ft): 230.00
        Group: Basin 19              To Node: S19-12                 Count: 1
                                                    Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM             Solution Algorithm: Most Restrictive
    Geometry: Circular       Circular                     Flow: Both
    Span(in): 18.00          18.00                  Entrance Loss Coef: 0.50
    Rise(in): 18.00          18.00                      Exit Loss Coef: 0.10
   Invert(ft): 2.600         2.250                      Bend Loss Coef: 0.00
  Manning's N: 0.012000      0.012000                Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                    Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000         0.000                   Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: S19-16_S19-17       From Node: S19-16            Length(ft): 46.00
        Group: Basin 19              To Node: S19-17                 Count: 1
                                                    Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM             Solution Algorithm: Most Restrictive
    Geometry: Circular       Circular                     Flow: Both
    Span(in): 18.00          18.00                  Entrance Loss Coef: 0.50
    Rise(in): 18.00          18.00                      Exit Loss Coef: 1.46
   Invert(ft): 1.750         1.650                      Bend Loss Coef: 0.00
  Manning's N: 0.012000      0.012000                Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000         0.000                    Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000         0.000                   Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


-------------------------------------------------------------------------------------------------
         Name: S19-17_EX19-60      From Node: S19-17            Length(ft): 78.00
        Group: Basin 19              To Node: EX19-60                Count: 1
                                                    Friction Equation: Automatic
              UPSTREAM       DOWNSTREAM             Solution Algorithm: Most Restrictive
    Geometry: Circular       Circular                     Flow: Both
    Span(in): 24.00          24.00                  Entrance Loss Coef: 0.50
    Rise(in): 24.00          24.00                      Exit Loss Coef: 0.10
   Invert(ft): 1.440         1.240                      Bend Loss Coef: 0.00
```

Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S19-1_S19-2	From Node: S19-1	Length(ft): 137.00
Group:	Basin 19	To Node: S19-2	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.10
Invert(ft):	22.000	21.000	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S19-2_S19-2A	From Node: S19-2	Length(ft): 77.00
Group:	Basin 19	To Node: S19-2A	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.10
Invert(ft):	21.000	20.000	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S19-2A_S19-3	From Node: S19-2A	Length(ft): 122.00
Group:	Basin 19	To Node: S19-3	Count: 1
			Friction Equation: Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Most Restrictive
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.10
Invert(ft):	20.000	18.900	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dn
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S19-3_S19-4	From Node:	S19-3	Length(ft):	245.00
Group:	Basin 19	To Node:	S19-4	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	0.10
Invert(ft):	18.900	14.000		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S19-4_S19-5	From Node:	S19-4	Length(ft):	252.00
Group:	Basin 19	To Node:	S19-5	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	18.00	18.00		Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00		Exit Loss Coef:	0.10
Invert(ft):	14.000	8.500		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	S19-5_S19-6	From Node:	S19-5	Length(ft):	168.00
Group:	Basin 19	To Node:	S19-6	Count:	1
				Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM		Solution Algorithm:	Most Restrictive
Geometry:	Circular	Circular		Flow:	Both
Span(in):	24.00	24.00		Entrance Loss Coef:	0.50
Rise(in):	24.00	24.00		Exit Loss Coef:	0.10
Invert(ft):	8.000	6.000		Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000		Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000		Inlet Ctrl Spec:	Use dn
Bot Clip(in):	0.000	0.000		Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

```
---------------------------------------------------------------------------------------------------
         Name: S19-6_S19-7         From Node: S19-6              Length(ft): 137.00
        Group: Basin 19              To Node: S19-7                   Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Always Inlet
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 24.00          24.00                    Entrance Loss Coef: 0.50
     Rise(in): 24.00          24.00                        Exit Loss Coef: 0.10
   Invert(ft): 6.000          5.500                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                      Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                    Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


---------------------------------------------------------------------------------------------------
         Name: S19-7_S19-8         From Node: S19-7              Length(ft): 84.00
        Group: Basin 19              To Node: S19-8                   Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Always Inlet
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 24.00          24.00                    Entrance Loss Coef: 0.50
     Rise(in): 24.00          24.00                        Exit Loss Coef: 1.46
   Invert(ft): 5.500          5.000                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                      Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                    Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


---------------------------------------------------------------------------------------------------
         Name: S19-8_S19-9         From Node: S19-8              Length(ft): 33.00
        Group: Basin 19              To Node: S19-9                   Count: 1
                                                          Friction Equation: Automatic
               UPSTREAM       DOWNSTREAM                Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                         Flow: Both
     Span(in): 30.00          30.00                    Entrance Loss Coef: 0.50
     Rise(in): 30.00          30.00                        Exit Loss Coef: 0.10
   Invert(ft): 4.200          4.100                        Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                  Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                      Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                    Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall


---------------------------------------------------------------------------------------------------
         Name: S19-9_EX19-19       From Node: S19-9              Length(ft): 176.00
        Group: Basin 19              To Node: EX19-19                 Count: 1
                                                          Friction Equation: Automatic
```

```
              UPSTREAM       DOWNSTREAM               Solution Algorithm: Most Restrictive
     Geometry: Circular       Circular                              Flow: Both
     Span(in): 48.00          48.00                  Entrance Loss Coef: 0.50
     Rise(in): 48.00          48.00                      Exit Loss Coef: 1.46
   Invert(ft): -2.490         -3.190                     Bend Loss Coef: 0.00
  Manning's N: 0.012000       0.012000                 Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                     Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                  Stabilizer Option: None


Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall



================================================================================
==== Drop Structures ===========================================================
================================================================================

         Name: DSEX19-60_OUT       From Node: EX19-60            Length(ft): 6.00
        Group: Basin 19              To Node: NW122_CANAL             Count: 1

              UPSTREAM       DOWNSTREAM                Friction Equation: Automatic
     Geometry: Circular       Circular                Solution Algorithm: Most Restrictive
     Span(in): 24.00          24.00                                 Flow: Both
     Rise(in): 24.00          24.00                  Entrance Loss Coef: 0.500
   Invert(ft): 1.240          1.140                      Exit Loss Coef: 1.000
  Manning's N: 0.012000       0.012000                 Outlet Ctrl Spec: Use dc or tw
 Top Clip(in): 0.000          0.000                     Inlet Ctrl Spec: Use dn
 Bot Clip(in): 0.000          0.000                       Solution Incs: 10

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall



*** Weir 1 of 1 for Drop Structure DSEX19-60_OUT ***
                                                                          TABLE
                Count: 1                      Bottom Clip(in): 0.000
                 Type: Vertical: Mavis           Top Clip(in): 0.000
                 Flow: Both                   Weir Disc Coef: 3.130
             Geometry: Rectangular          Orifice Disc Coef: 0.600

             Span(in): 48.00                       Invert(ft): 2.850
             Rise(in): 6.00                 Control Elev(ft): 2.850


================================================================================
==== Weirs =====================================================================
================================================================================

         Name: W19-11A             From Node: AREA2A
        Group: Basin 19              To Node: S19-11A
         Flow: Both                    Count: 1
         Type: Horizontal           Geometry: Rectangular

                    Span(in): 63.00
                    Rise(in): 57.00
                  Invert(ft): 1.650
       Control Elevation(ft): 1.650
                                          TABLE
              Bottom Clip(in): 0.000
                 Top Clip(in): 0.000
          Weir Discharge Coef: 3.200
       Orifice Discharge Coef: 0.600
```

```
---------------------------------------------------------------------------------------------
         Name: W19-46              From Node: AREA2A
        Group: Basin 19              To Node: EX19-46
         Flow: Both                    Count: 1
         Type: Horizontal          Geometry: Rectangular

                    Span(in): 49.00
                    Rise(in): 37.00
                  Invert(ft): 3.950
       Control Elevation(ft): 3.950
                                          TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 3.130
      Orifice Discharge Coef: 0.600



---------------------------------------------------------------------------------------------
         Name: W19-46SL1           From Node: AREA2A
        Group: Basin 19              To Node: EX19-46
         Flow: Both                    Count: 4
         Type: Vertical: Mavis     Geometry: Rectangular

                    Span(in): 15.00
                    Rise(in): 7.00
                  Invert(ft): 2.450
       Control Elevation(ft): 2.450
                                          TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 3.130
      Orifice Discharge Coef: 0.600



---------------------------------------------------------------------------------------------
         Name: W19-46SL2           From Node: AREA2A
        Group: Basin 19              To Node: EX19-46
         Flow: Both                    Count: 2
         Type: Vertical: Mavis     Geometry: Rectangular

                    Span(in): 49.00
                    Rise(in): 17.00
                  Invert(ft): 2.460
       Control Elevation(ft): 2.460
                                          TABLE
             Bottom Clip(in): 0.000
                Top Clip(in): 0.000
          Weir Discharge Coef: 3.130
      Orifice Discharge Coef: 0.600



=============================================================================================
==== Rating Curves ==========================================================================
=============================================================================================

         Name: S19-11A_EXF         From Node: S19-11A                Count: 142
        Group: Basin 19              To Node: GWT_20                  Flow: Both

              TABLE           ELEV ON(ft)     ELEV OFF(ft)
          #1: E_OPT-19        1.650           1.650
          #2:                 0.000           0.000
          #3:                 0.000           0.000
          #4:                 0.000           0.000



---------------------------------------------------------------------------------------------
         Name: S19-15_EXF          From Node: AREA1B                 Count: 142
        Group: Basin 19              To Node: GWT_20                  Flow: Both

              TABLE           ELEV ON(ft)     ELEV OFF(ft)
          #1: E_OPT-19        1.650           1.650
```

#2:	0.000	0.000
#3:	0.000	0.000
#4:	0.000	0.000

Name: S19-202_EXF From Node: S19-13 Count: 50
Group: Basin 19 To Node: GWT_20 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-19	1.650	1.650
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

==========
==== Hydrology Simulations ==========
==========

Name: 100YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 5.00

Time(hrs)	Print Inc(min)
1.000	1.00
1.330	1.00

Name: 100YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 13.44

Time(hrs)	Print Inc(min)
8.000	5.00
16.000	1.00
24.000	5.00
24.330	5.00

Name: 100YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 9.60

Time(hrs)	Print Inc(min)
2.000	5.00
6.000	1.00
8.000	5.00
8.330	5.00

Name: 10YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 3.50

Time(hrs)	Print Inc(min)
1.000	1.00
1.330	1.00

Name: 10YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 8.88

Time(hrs)	Print Inc(min)
8.000	5.00
16.000	1.00
24.000	5.00
24.330	5.00

Name: 10YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 6.40

Time(hrs)	Print Inc(min)
2.000	5.00
6.000	1.00
8.000	5.00
8.330	5.00

Name: 25YR-72HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Sfwmd72
Rainfall Amount(in): 14.00

Time(hrs)	Print Inc(min)
48.000	15.00
56.000	5.00
64.000	1.00
72.000	5.00
72.330	5.00

==========
==== Routing Simulations ==========
==========

Name: 100YR-1HR Hydrology Sim: 100YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 25.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)

1.000 1.000
25.000 15.000

Group	Run
Basin 19	Yes

Name: 100YR-24HR Hydrology Sim: 100YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 48.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 10.0000
Boundary Stages: 24HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
48.000	15.000

Group	Run
Basin 19	Yes

Name: 100YR-8HR Hydrology Sim: 100YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 36.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 10.0000
Boundary Stages: 8HR Boundary Flows:

Time(hrs)	Print Inc(min)
2.000	5.000
6.000	1.000
8.000	5.000
36.000	15.000

Group	Run
Basin 19	Yes

Name: 10YR-1HR Hydrology Sim: 10YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 25.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
1.000	1.000
25.000	15.000

Group	Run
Basin 19	Yes

Name: 10YR-24HR Hydrology Sim: 10YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 48.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 24HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
48.000	15.000

Group	Run
Basin 19	Yes

Name: 10YR-8HR Hydrology Sim: 10YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 36.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 8HR Boundary Flows:

Time(hrs)	Print Inc(min)
2.000	5.000
6.000	1.000
8.000	5.000
36.000	15.000

Group	Run
Basin 19	Yes

Name: 25YR-72HR Hydrology Sim: 25YR-72HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000

Start Time(hrs): 0.000 End Time(hrs): 96.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 72HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
96.000	15.000

Group	Run
Basin 19	Yes

Boundary Conditions

Name: 8HR Node: GWT_20 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.950
1.000	1.970
1.950	1.950
2.000	2.050
3.000	2.160
4.000	2.480
5.000	2.600
6.000	2.640
7.000	2.680
8.000	2.700
12.000	1.950
36.000	1.950

Name: 24HR Node: GWT_20 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.950
1.000	1.960
2.000	1.970
3.000	2.000
4.000	2.020
5.000	2.040
6.000	2.070
7.000	2.100
8.000	2.130
9.000	2.180
10.000	2.220
11.000	2.280
12.000	2.360
13.000	2.410
14.000	2.450
15.000	2.500
16.000	2.540
17.000	2.570
18.000	2.600
19.000	2.630
20.000	2.650
21.000	2.670
22.000	2.690
23.000	2.690
24.000	2.700
36.000	1.950
48.000	1.950

Name: 72HR Node: GWT_20 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.950
24.000	2.030
36.000	2.090
48.000	2.150
49.000	2.150
50.000	2.160
51.000	2.170
52.000	2.170
53.000	2.180
54.000	2.190
55.000	2.210
56.000	2.220
57.000	2.240
57.500	2.250
58.000	2.270
58.500	2.280
59.000	2.300
59.500	2.320
60.000	2.510
60.500	2.550
61.000	2.570
61.500	2.590
62.000	2.600
62.500	2.610
63.000	2.620
64.000	2.630
65.000	2.640
66.000	2.650
68.000	2.670
70.000	2.690
72.000	2.700
96.000	1.950

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	0.00	0.0	0.0	0.0	0.0	0.00
25YR-72HR	0.08	0.0	-422.3	422.3	-0.0	-0.00
25YR-72HR	0.17	0.0	-718.0	718.0	-0.0	-0.00
25YR-72HR	0.25	0.0	-946.9	946.9	-0.0	-0.00
25YR-72HR	0.33	0.0	-1139.5	1139.5	-0.0	-0.00
25YR-72HR	0.42	0.0	-1312.2	1312.2	-0.0	-0.00
25YR-72HR	0.50	0.0	-1620.4	1620.4	-0.0	-0.00
25YR-72HR	0.58	0.0	-2075.1	2075.1	0.0	0.00
25YR-72HR	0.67	0.0	-2524.4	2524.4	-0.0	-0.00
25YR-72HR	0.75	0.0	-2969.7	2969.7	0.0	0.00
25YR-72HR	0.83	0.0	-3411.7	3411.7	0.0	0.00
25YR-72HR	0.92	0.0	-3850.6	3850.6	0.0	0.00
25YR-72HR	1.00	0.0	-4286.7	4286.7	0.0	0.00
25YR-72HR	1.08	0.0	-4720.0	4720.0	-0.0	-0.00
25YR-72HR	1.17	0.0	-5150.5	5150.5	-0.0	-0.00
25YR-72HR	1.25	0.0	-5578.1	5578.1	-0.0	-0.00
25YR-72HR	1.33	0.4	-6002.8	6003.2	0.0	0.00
25YR-72HR	1.42	1.4	-6424.5	6425.9	0.0	0.00
25YR-72HR	1.50	3.2	-6843.0	6846.2	0.0	0.00
25YR-72HR	1.58	7.2	-7258.2	7265.4	0.0	0.00
25YR-72HR	1.67	14.9	-7669.9	7684.8	0.0	0.00
25YR-72HR	1.75	26.4	-8078.0	8104.3	0.0	0.00
25YR-72HR	1.83	42.1	-8482.1	8524.2	0.0	0.00
25YR-72HR	1.92	62.5	-8882.3	8944.8	0.0	0.00
25YR-72HR	2.00	87.7	-9278.2	9365.9	0.0	0.00
25YR-72HR	2.08	117.6	-9669.7	9787.3	0.0	0.00
25YR-72HR	2.17	152.3	-10056.7	10209.0	0.0	0.00
25YR-72HR	2.25	191.8	-10438.9	10630.7	-0.0	-0.00
25YR-72HR	2.33	235.9	-10816.3	11052.2	-0.0	-0.00
25YR-72HR	2.42	284.4	-11188.9	11473.3	0.0	0.00
25YR-72HR	2.50	337.4	-11556.5	11893.9	0.0	0.00
25YR-72HR	2.58	394.6	-11919.2	12313.8	0.0	0.00
25YR-72HR	2.67	455.9	-12276.8	12732.7	0.0	0.00
25YR-72HR	2.75	521.3	-12629.3	13150.6	0.0	0.00
25YR-72HR	2.83	590.5	-12976.8	13567.3	0.0	0.00
25YR-72HR	2.92	663.6	-13319.1	13982.6	0.0	0.00
25YR-72HR	3.00	740.3	-13656.2	14396.5	0.0	0.00
25YR-72HR	3.08	820.7	-13988.2	14808.8	0.0	0.00
25YR-72HR	3.17	904.4	-14315.1	15219.5	0.0	0.00
25YR-72HR	3.25	991.6	-14637.2	15628.8	0.0	0.00
25YR-72HR	3.33	1082.1	-14954.3	16036.4	0.0	0.00
25YR-72HR	3.42	1175.6	-15266.5	16442.1	-0.0	-0.00
25YR-72HR	3.50	1272.4	-15573.6	16846.0	-0.0	-0.00
25YR-72HR	3.58	1372.1	-15875.6	17247.7	-0.0	-0.00
25YR-72HR	3.67	1474.7	-16172.4	17647.1	-0.0	-0.00
25YR-72HR	3.75	1580.1	-16463.9	18044.1	-0.0	-0.00
25YR-72HR	3.83	1688.4	-16750.1	18438.5	0.0	0.00
25YR-72HR	3.92	1799.2	-17030.9	18830.1	0.0	0.00
25YR-72HR	4.00	1912.7	-17306.2	19218.9	0.0	0.00
25YR-72HR	4.08	2028.8	-17575.9	19604.6	-0.0	-0.00
25YR-72HR	4.17	2147.2	-17839.9	19987.1	-0.0	-0.00
25YR-72HR	4.25	2268.1	-18098.1	20366.2	-0.0	-0.00
25YR-72HR	4.33	2391.3	-18350.5	20741.8	-0.0	-0.00
25YR-72HR	4.42	2516.8	-18596.8	21113.6	-0.0	-0.00
25YR-72HR	4.50	2644.5	-18837.1	21481.6	-0.0	-0.00
25YR-72HR	4.58	2774.4	-19071.1	21845.5	-0.0	-0.00
25YR-72HR	4.67	2906.3	-19298.8	22205.1	-0.0	-0.00
25YR-72HR	4.75	3040.4	-19520.1	22560.5	0.0	0.00
25YR-72HR	4.83	3176.4	-19735.1	22911.5	-0.0	-0.00
25YR-72HR	4.92	3314.4	-19943.8	23258.1	-0.0	-0.00
25YR-72HR	5.00	3454.2	-20146.5	23600.7	-0.0	-0.00
25YR-72HR	5.08	3596.0	-20343.5	23939.4	-0.0	-0.00
25YR-72HR	5.17	3739.5	-20535.1	24274.6	0.0	0.00
25YR-72HR	5.25	3884.8	-20721.5	24606.3	0.0	0.00
25YR-72HR	5.33	4031.8	-20903.0	24934.8	0.0	0.00
25YR-72HR	5.42	4180.5	-21079.6	25260.1	-0.0	-0.00
25YR-72HR	5.50	4330.9	-21251.4	25582.3	-0.0	-0.00
25YR-72HR	5.58	4482.8	-21418.7	25901.5	-0.0	-0.00
25YR-72HR	5.67	4636.3	-21581.4	26217.7	-0.0	-0.00
25YR-72HR	5.75	4791.4	-21739.7	26531.1	-0.0	-0.00
25YR-72HR	5.83	4948.0	-21893.6	26841.6	-0.0	-0.00
25YR-72HR	5.92	5106.0	-22043.3	27149.3	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	6.00	5265.4	-22188.8	27454.2	-0.0	-0.00
25YR-72HR	6.08	5426.3	-22330.1	27756.4	-0.0	-0.00
25YR-72HR	6.17	5588.5	-22467.3	28055.8	0.0	0.00
25YR-72HR	6.25	5752.1	-22600.5	28352.5	0.0	0.00
25YR-72HR	6.33	5916.9	-22729.7	28646.6	0.0	0.00
25YR-72HR	6.42	6083.1	-22855.0	28938.0	0.0	0.00
25YR-72HR	6.50	6250.5	-22976.4	29226.8	0.0	0.00
25YR-72HR	6.58	6419.1	-23093.9	29513.1	0.0	0.00
25YR-72HR	6.67	6588.9	-23207.7	29796.7	-0.0	-0.00
25YR-72HR	6.75	6759.9	-23317.8	30077.7	0.0	0.00
25YR-72HR	6.83	6932.1	-23424.2	30356.3	0.0	0.00
25YR-72HR	6.92	7105.4	-23526.9	30632.3	-0.0	-0.00
25YR-72HR	7.00	7279.8	-23626.0	30905.8	-0.0	-0.00
25YR-72HR	7.08	7455.2	-23721.5	31176.8	-0.0	-0.00
25YR-72HR	7.17	7631.8	-23813.6	31445.3	-0.0	-0.00
25YR-72HR	7.25	7809.3	-23902.1	31711.4	-0.0	-0.00
25YR-72HR	7.33	7987.9	-23987.2	31975.1	0.0	0.00
25YR-72HR	7.42	8167.5	-24068.9	32236.4	0.0	0.00
25YR-72HR	7.50	8348.1	-24147.2	32495.3	0.0	0.00
25YR-72HR	7.58	8529.6	-24222.2	32751.8	-0.0	-0.00
25YR-72HR	7.67	8712.0	-24293.9	33005.9	0.0	0.00
25YR-72HR	7.75	8895.4	-24362.4	33257.8	0.0	0.00
25YR-72HR	7.83	9079.7	-24427.6	33507.3	0.0	0.00
25YR-72HR	7.92	9264.9	-24489.7	33754.5	0.0	0.00
25YR-72HR	8.00	9450.9	-24548.6	33999.5	0.0	0.00
25YR-72HR	8.08	9637.8	-24604.4	34242.2	0.0	0.00
25YR-72HR	8.10	9675.3	-24615.2	34290.5	0.0	0.00
25YR-72HR	8.12	9712.8	-24625.9	34338.7	0.0	0.00
25YR-72HR	8.13	9750.4	-24636.4	34386.8	0.0	0.00
25YR-72HR	8.15	9788.0	-24646.9	34434.8	0.0	0.00
25YR-72HR	8.17	9825.6	-24657.2	34482.7	0.0	0.00
25YR-72HR	8.18	9863.2	-24667.4	34530.6	0.0	0.00
25YR-72HR	8.20	9900.9	-24677.4	34578.3	0.0	0.00
25YR-72HR	8.22	9938.6	-24687.4	34626.0	0.0	0.00
25YR-72HR	8.23	9976.4	-24697.2	34673.6	0.0	0.00
25YR-72HR	8.25	10014.1	-24706.9	34721.0	0.0	0.00
25YR-72HR	8.27	10052.0	-24716.5	34768.4	0.0	0.00
25YR-72HR	8.28	10089.8	-24726.0	34815.7	0.0	0.00
25YR-72HR	8.30	10127.7	-24735.3	34863.0	0.0	0.00
25YR-72HR	8.32	10165.6	-24744.5	34910.1	0.0	0.00
25YR-72HR	8.33	10203.5	-24753.6	34957.2	0.0	0.00
25YR-72HR	8.35	10241.5	-24762.6	35004.1	0.0	0.00
25YR-72HR	8.37	10279.5	-24771.5	35051.0	0.0	0.00
25YR-72HR	8.38	10317.5	-24780.2	35097.8	0.0	0.00
25YR-72HR	8.40	10355.6	-24788.9	35144.5	0.0	0.00
25YR-72HR	8.42	10393.7	-24797.4	35191.1	0.0	0.00
25YR-72HR	8.43	10431.8	-24805.8	35237.6	0.0	0.00
25YR-72HR	8.45	10470.0	-24814.1	35284.1	0.0	0.00
25YR-72HR	8.47	10508.2	-24822.2	35330.4	0.0	0.00
25YR-72HR	8.48	10546.4	-24830.3	35376.7	0.0	0.00
25YR-72HR	8.50	10584.7	-24838.2	35422.9	0.0	0.00
25YR-72HR	8.52	10623.0	-24846.0	35469.0	0.0	0.00
25YR-72HR	8.53	10661.3	-24853.7	35515.0	0.0	0.00
25YR-72HR	8.55	10699.6	-24861.3	35561.0	0.0	0.00
25YR-72HR	8.57	10738.0	-24868.8	35606.8	0.0	0.00
25YR-72HR	8.58	10776.4	-24876.2	35652.6	0.0	0.00
25YR-72HR	8.60	10814.9	-24883.4	35698.3	0.0	0.00
25YR-72HR	8.62	10853.3	-24890.5	35743.9	0.0	0.00
25YR-72HR	8.63	10891.8	-24897.5	35789.4	0.0	0.00
25YR-72HR	8.65	10930.4	-24904.4	35834.8	0.0	0.00
25YR-72HR	8.67	10968.9	-24911.2	35880.1	0.0	0.00
25YR-72HR	8.68	11007.5	-24917.9	35925.4	0.0	0.00
25YR-72HR	8.70	11046.1	-24924.5	35970.6	0.0	0.00
25YR-72HR	8.72	11084.8	-24930.9	36015.7	0.0	0.00
25YR-72HR	8.73	11123.5	-24937.2	36060.7	0.0	0.00
25YR-72HR	8.75	11162.2	-24943.5	36105.6	0.0	0.00
25YR-72HR	8.77	11200.9	-24949.6	36150.5	0.0	0.00
25YR-72HR	8.78	11239.7	-24955.6	36195.2	0.0	0.00
25YR-72HR	8.80	11278.5	-24961.5	36239.9	0.0	0.00
25YR-72HR	8.82	11317.3	-24967.2	36284.5	0.0	0.00
25YR-72HR	8.83	11356.2	-24972.9	36329.0	0.0	0.00
25YR-72HR	8.85	11395.0	-24978.4	36373.5	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	8.87	11433.9	-24983.9	36417.8	0.0	0.00
25YR-72HR	8.88	11472.9	-24989.2	36462.1	0.0	0.00
25YR-72HR	8.90	11511.9	-24994.4	36506.3	0.0	0.00
25YR-72HR	8.92	11550.9	-24999.6	36550.4	-0.0	-0.00
25YR-72HR	8.93	11589.9	-25004.6	36594.4	-0.0	-0.00
25YR-72HR	8.95	11628.9	-25009.5	36638.4	-0.0	-0.00
25YR-72HR	8.97	11668.0	-25014.2	36682.3	-0.0	-0.00
25YR-72HR	8.98	11707.1	-25018.9	36726.0	-0.0	-0.00
25YR-72HR	9.00	11746.3	-25023.5	36769.8	-0.0	-0.00
25YR-72HR	9.02	11785.4	-25027.9	36813.4	-0.0	-0.00
25YR-72HR	9.03	11824.6	-25032.3	36856.9	-0.0	-0.00
25YR-72HR	9.05	11863.9	-25036.5	36900.4	-0.0	-0.00
25YR-72HR	9.07	11903.1	-25040.7	36943.8	-0.0	-0.00
25YR-72HR	9.08	11942.4	-25044.7	36987.1	-0.0	-0.00
25YR-72HR	9.10	11981.7	-25048.6	37030.3	-0.0	-0.00
25YR-72HR	9.12	12021.0	-25052.4	37073.5	-0.0	-0.00
25YR-72HR	9.13	12060.4	-25056.1	37116.5	-0.0	-0.00
25YR-72HR	9.15	12099.8	-25059.7	37159.5	-0.0	-0.00
25YR-72HR	9.17	12139.2	-25063.2	37202.4	-0.0	-0.00
25YR-72HR	9.18	12178.6	-25066.6	37245.2	-0.0	-0.00
25YR-72HR	9.20	12218.1	-25069.9	37288.0	-0.0	-0.00
25YR-72HR	9.22	12257.6	-25073.1	37330.7	-0.0	-0.00
25YR-72HR	9.23	12297.1	-25076.2	37373.3	-0.0	-0.00
25YR-72HR	9.25	12336.7	-25079.1	37415.8	-0.0	-0.00
25YR-72HR	9.27	12376.2	-25082.0	37458.2	-0.0	-0.00
25YR-72HR	9.28	12415.8	-25084.8	37500.6	-0.0	-0.00
25YR-72HR	9.30	12455.5	-25087.4	37542.9	-0.0	-0.00
25YR-72HR	9.32	12495.1	-25090.0	37585.1	-0.0	-0.00
25YR-72HR	9.33	12534.8	-25092.4	37627.2	-0.0	-0.00
25YR-72HR	9.35	12574.5	-25094.8	37669.3	-0.0	-0.00
25YR-72HR	9.37	12614.2	-25097.0	37711.2	-0.0	-0.00
25YR-72HR	9.38	12654.0	-25099.1	37753.1	-0.0	-0.00
25YR-72HR	9.40	12693.8	-25101.2	37794.9	-0.0	-0.00
25YR-72HR	9.42	12733.6	-25103.1	37836.7	-0.0	-0.00
25YR-72HR	9.43	12773.4	-25105.0	37878.3	-0.0	-0.00
25YR-72HR	9.45	12813.3	-25106.7	37919.9	-0.0	-0.00
25YR-72HR	9.47	12853.1	-25108.3	37961.5	-0.0	-0.00
25YR-72HR	9.48	12893.1	-25109.8	38002.9	-0.0	-0.00
25YR-72HR	9.50	12933.0	-25111.3	38044.3	-0.0	-0.00
25YR-72HR	9.52	12972.9	-25112.6	38085.5	-0.0	-0.00
25YR-72HR	9.53	13012.9	-25113.8	38126.7	-0.0	-0.00
25YR-72HR	9.55	13052.9	-25114.9	38167.9	-0.0	-0.00
25YR-72HR	9.57	13093.0	-25116.0	38208.9	-0.0	-0.00
25YR-72HR	9.58	13133.0	-25116.9	38249.9	-0.0	-0.00
25YR-72HR	9.60	13173.1	-25117.7	38290.8	-0.0	-0.00
25YR-72HR	9.62	13213.2	-25118.4	38331.7	-0.0	-0.00
25YR-72HR	9.63	13253.4	-25119.1	38372.4	-0.0	-0.00
25YR-72HR	9.65	13293.5	-25119.6	38413.1	-0.0	-0.00
25YR-72HR	9.67	13333.7	-25120.0	38453.7	-0.0	-0.00
25YR-72HR	9.68	13373.9	-25120.3	38494.2	-0.0	-0.00
25YR-72HR	9.70	13414.1	-25120.6	38534.7	-0.0	-0.00
25YR-72HR	9.72	13454.4	-25120.7	38575.1	-0.0	-0.00
25YR-72HR	9.73	13494.7	-25120.7	38615.4	-0.0	-0.00
25YR-72HR	9.75	13535.0	-25120.7	38655.6	-0.0	-0.00
25YR-72HR	9.77	13575.3	-25120.5	38695.8	-0.0	-0.00
25YR-72HR	9.78	13615.7	-25120.2	38735.9	-0.0	-0.00
25YR-72HR	9.80	13656.0	-25119.9	38775.9	-0.0	-0.00
25YR-72HR	9.82	13696.4	-25119.4	38815.9	-0.0	-0.00
25YR-72HR	9.83	13736.9	-25118.9	38855.7	-0.0	-0.00
25YR-72HR	9.85	13777.3	-25118.2	38895.5	-0.0	-0.00
25YR-72HR	9.87	13817.8	-25117.5	38935.3	-0.0	-0.00
25YR-72HR	9.88	13858.3	-25116.6	38974.9	-0.0	-0.00
25YR-72HR	9.90	13898.8	-25115.7	39014.5	-0.0	-0.00
25YR-72HR	9.92	13939.3	-25114.7	39054.0	-0.0	-0.00
25YR-72HR	9.93	13979.9	-25113.5	39093.4	-0.0	-0.00
25YR-72HR	9.95	14020.5	-25112.3	39132.8	-0.0	-0.00
25YR-72HR	9.97	14061.1	-25111.0	39172.1	0.0	0.00
25YR-72HR	9.98	14101.7	-25109.6	39211.3	0.0	0.00
25YR-72HR	10.00	14142.4	-25108.1	39250.5	0.0	0.00
25YR-72HR	10.02	14183.1	-25106.5	39289.5	-0.0	-0.00
25YR-72HR	10.03	14223.8	-25104.8	39328.6	-0.0	-0.00
25YR-72HR	10.05	14264.5	-25103.0	39367.5	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	10.07	14305.2	-25101.1	39406.4	-0.0	-0.00
25YR-72HR	10.08	14346.0	-25099.2	39445.1	-0.0	-0.00
25YR-72HR	10.10	14386.8	-25097.1	39483.9	-0.0	-0.00
25YR-72HR	10.12	14427.6	-25094.9	39522.5	-0.0	-0.00
25YR-72HR	10.13	14468.4	-25092.7	39561.1	-0.0	-0.00
25YR-72HR	10.15	14509.3	-25090.3	39599.6	-0.0	-0.00
25YR-72HR	10.17	14550.2	-25087.9	39638.0	-0.0	-0.00
25YR-72HR	10.18	14591.1	-25085.4	39676.4	-0.0	-0.00
25YR-72HR	10.20	14632.0	-25082.7	39714.7	-0.0	-0.00
25YR-72HR	10.22	14672.9	-25080.0	39752.9	-0.0	-0.00
25YR-72HR	10.23	14713.9	-25077.2	39791.1	-0.0	-0.00
25YR-72HR	10.25	14754.9	-25074.3	39829.2	-0.0	-0.00
25YR-72HR	10.27	14795.9	-25071.3	39867.2	-0.0	-0.00
25YR-72HR	10.28	14836.9	-25068.2	39905.2	-0.0	-0.00
25YR-72HR	10.30	14878.0	-25065.1	39943.1	-0.0	-0.00
25YR-72HR	10.32	14919.1	-25061.8	39980.9	-0.0	-0.00
25YR-72HR	10.33	14960.2	-25058.5	40018.6	-0.0	-0.00
25YR-72HR	10.35	15001.3	-25055.0	40056.3	-0.0	-0.00
25YR-72HR	10.37	15042.4	-25051.5	40093.9	-0.0	-0.00
25YR-72HR	10.38	15083.6	-25047.9	40131.4	-0.0	-0.00
25YR-72HR	10.40	15124.7	-25044.2	40168.9	-0.0	-0.00
25YR-72HR	10.42	15166.0	-25040.4	40206.3	-0.0	-0.00
25YR-72HR	10.43	15207.2	-25036.5	40243.6	-0.0	-0.00
25YR-72HR	10.45	15248.4	-25032.5	40280.9	-0.0	-0.00
25YR-72HR	10.47	15289.7	-25028.4	40318.1	-0.0	-0.00
25YR-72HR	10.48	15331.0	-25024.3	40355.2	-0.0	-0.00
25YR-72HR	10.50	15372.3	-25020.0	40392.3	-0.0	-0.00
25YR-72HR	10.52	15413.6	-25015.7	40429.3	-0.0	-0.00
25YR-72HR	10.53	15455.0	-25011.3	40466.2	-0.0	-0.00
25YR-72HR	10.55	15496.3	-25006.8	40503.1	-0.0	-0.00
25YR-72HR	10.57	15537.7	-25002.2	40539.9	-0.0	-0.00
25YR-72HR	10.58	15579.1	-24997.5	40576.6	-0.0	-0.00
25YR-72HR	10.60	15620.6	-24992.7	40613.3	-0.0	-0.00
25YR-72HR	10.62	15662.0	-24987.9	40649.9	-0.0	-0.00
25YR-72HR	10.63	15703.5	-24982.9	40686.4	-0.0	-0.00
25YR-72HR	10.65	15745.0	-24977.9	40722.8	-0.0	-0.00
25YR-72HR	10.67	15786.5	-24972.8	40759.2	-0.0	-0.00
25YR-72HR	10.68	15828.0	-24967.6	40795.6	-0.0	-0.00
25YR-72HR	10.70	15869.6	-24962.3	40831.8	0.0	0.00
25YR-72HR	10.72	15911.1	-24956.9	40868.0	0.0	0.00
25YR-72HR	10.73	15952.7	-24951.4	40904.2	0.0	0.00
25YR-72HR	10.75	15994.3	-24945.9	40940.2	0.0	0.00
25YR-72HR	10.77	16036.0	-24940.2	40976.2	0.0	0.00
25YR-72HR	10.78	16077.6	-24934.5	41012.1	0.0	0.00
25YR-72HR	10.80	16119.3	-24928.7	41048.0	0.0	0.00
25YR-72HR	10.82	16161.0	-24922.8	41083.8	0.0	0.00
25YR-72HR	10.83	16202.7	-24916.9	41119.6	0.0	0.00
25YR-72HR	10.85	16244.4	-24910.8	41155.2	0.0	0.00
25YR-72HR	10.87	16286.2	-24904.7	41190.8	0.0	0.00
25YR-72HR	10.88	16327.9	-24898.5	41226.4	0.0	0.00
25YR-72HR	10.90	16369.7	-24892.1	41261.9	0.0	0.00
25YR-72HR	10.92	16411.5	-24885.8	41297.3	0.0	0.00
25YR-72HR	10.93	16453.3	-24879.3	41332.6	0.0	0.00
25YR-72HR	10.95	16495.2	-24872.7	41367.9	0.0	0.00
25YR-72HR	10.97	16537.1	-24866.1	41403.1	0.0	0.00
25YR-72HR	10.98	16578.9	-24859.4	41438.3	0.0	0.00
25YR-72HR	11.00	16620.8	-24852.6	41473.4	0.0	0.00
25YR-72HR	11.02	16662.8	-24845.7	41508.4	0.0	0.00
25YR-72HR	11.03	16704.7	-24838.7	41543.4	0.0	0.00
25YR-72HR	11.05	16746.7	-24831.6	41578.3	0.0	0.00
25YR-72HR	11.07	16788.6	-24824.5	41613.1	0.0	0.00
25YR-72HR	11.08	16830.6	-24817.3	41647.9	0.0	0.00
25YR-72HR	11.10	16872.6	-24810.0	41682.6	0.0	0.00
25YR-72HR	11.12	16914.7	-24802.6	41717.3	0.0	0.00
25YR-72HR	11.13	16956.7	-24795.2	41751.9	0.0	0.00
25YR-72HR	11.15	16998.8	-24787.6	41786.4	0.0	0.00
25YR-72HR	11.17	17040.9	-24780.0	41820.9	0.0	0.00
25YR-72HR	11.18	17083.0	-24772.3	41855.3	0.0	0.00
25YR-72HR	11.20	17125.1	-24764.5	41889.6	0.0	0.00
25YR-72HR	11.22	17167.2	-24756.6	41923.9	0.0	0.00
25YR-72HR	11.23	17209.4	-24748.7	41958.1	0.0	0.00
25YR-72HR	11.25	17251.6	-24740.7	41992.3	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	11.27	17293.8	-24732.6	42026.4	0.0	0.00
25YR-72HR	11.28	17336.0	-24724.4	42060.4	0.0	0.00
25YR-72HR	11.30	17378.2	-24716.1	42094.4	0.0	0.00
25YR-72HR	11.32	17420.5	-24707.8	42128.3	0.0	0.00
25YR-72HR	11.33	17462.8	-24699.4	42162.1	0.0	0.00
25YR-72HR	11.35	17505.0	-24690.9	42195.9	0.0	0.00
25YR-72HR	11.37	17547.3	-24682.3	42229.6	0.0	0.00
25YR-72HR	11.38	17589.7	-24673.6	42263.3	0.0	0.00
25YR-72HR	11.40	17632.0	-24664.9	42296.9	0.0	0.00
25YR-72HR	11.42	17674.4	-24656.1	42330.5	0.0	0.00
25YR-72HR	11.43	17716.8	-24647.2	42364.0	0.0	0.00
25YR-72HR	11.45	17759.2	-24638.2	42397.4	0.0	0.00
25YR-72HR	11.47	17801.6	-24629.2	42430.8	0.0	0.00
25YR-72HR	11.48	17844.0	-24620.1	42464.1	0.0	0.00
25YR-72HR	11.50	17886.5	-24610.9	42497.3	0.0	0.00
25YR-72HR	11.52	17928.9	-24601.6	42530.5	0.0	0.00
25YR-72HR	11.53	17971.4	-24592.2	42563.7	0.0	0.00
25YR-72HR	11.55	18013.9	-24582.8	42596.7	0.0	0.00
25YR-72HR	11.57	18056.5	-24573.3	42629.7	0.0	0.00
25YR-72HR	11.58	18099.0	-24563.7	42662.7	0.0	0.00
25YR-72HR	11.60	18141.6	-24554.0	42695.6	0.0	0.00
25YR-72HR	11.62	18184.1	-24544.3	42728.5	0.0	0.00
25YR-72HR	11.63	18226.7	-24534.5	42761.2	0.0	0.00
25YR-72HR	11.65	18269.4	-24524.6	42794.0	0.0	0.00
25YR-72HR	11.67	18312.0	-24514.6	42826.6	0.0	0.00
25YR-72HR	11.68	18354.7	-24504.6	42859.3	0.0	0.00
25YR-72HR	11.70	18397.3	-24494.5	42891.8	0.0	0.00
25YR-72HR	11.72	18440.0	-24484.3	42924.3	0.0	0.00
25YR-72HR	11.73	18482.7	-24474.0	42956.8	0.0	0.00
25YR-72HR	11.75	18525.5	-24463.7	42989.2	0.0	0.00
25YR-72HR	11.77	18568.2	-24453.3	43021.5	0.0	0.00
25YR-72HR	11.78	18611.0	-24442.8	43053.8	0.0	0.00
25YR-72HR	11.80	18653.8	-24432.2	43086.0	0.0	0.00
25YR-72HR	11.82	18696.6	-24421.6	43118.2	0.0	0.00
25YR-72HR	11.83	18739.4	-24410.9	43150.3	0.0	0.00
25YR-72HR	11.85	18782.2	-24400.1	43182.3	0.0	0.00
25YR-72HR	11.87	18825.1	-24389.3	43214.3	0.0	0.00
25YR-72HR	11.88	18867.9	-24378.3	43246.3	0.0	0.00
25YR-72HR	11.90	18910.8	-24367.3	43278.2	0.0	0.00
25YR-72HR	11.92	18953.7	-24356.2	43310.0	0.0	0.00
25YR-72HR	11.93	18996.7	-24345.1	43341.8	0.0	0.00
25YR-72HR	11.95	19039.6	-24333.9	43373.5	0.0	0.00
25YR-72HR	11.97	19082.6	-24322.6	43405.2	0.0	0.00
25YR-72HR	11.98	19125.6	-24311.2	43436.8	0.0	0.00
25YR-72HR	12.00	19168.6	-24299.8	43468.3	0.0	0.00
25YR-72HR	12.02	19211.6	-24288.3	43499.9	0.0	0.00
25YR-72HR	12.03	19254.6	-24276.7	43531.3	0.0	0.00
25YR-72HR	12.05	19297.7	-24265.0	43562.7	0.0	0.00
25YR-72HR	12.07	19340.8	-24253.3	43594.1	0.0	0.00
25YR-72HR	12.08	19383.9	-24241.5	43625.4	0.0	0.00
25YR-72HR	12.10	19427.0	-24229.6	43656.6	0.0	0.00
25YR-72HR	12.12	19470.1	-24217.7	43687.8	0.0	0.00
25YR-72HR	12.13	19513.3	-24205.7	43719.0	0.0	0.00
25YR-72HR	12.15	19556.5	-24193.6	43750.1	0.0	0.00
25YR-72HR	12.17	19599.7	-24181.4	43781.1	0.0	0.00
25YR-72HR	12.18	19642.9	-24169.2	43812.1	0.0	0.00
25YR-72HR	12.20	19686.1	-24156.9	43843.0	0.0	0.00
25YR-72HR	12.22	19729.4	-24144.5	43873.9	0.0	0.00
25YR-72HR	12.23	19772.7	-24132.1	43904.8	0.0	0.00
25YR-72HR	12.25	19816.0	-24119.6	43935.5	0.0	0.00
25YR-72HR	12.27	19859.3	-24107.0	43966.3	0.0	0.00
25YR-72HR	12.28	19902.6	-24094.4	43997.0	0.0	0.00
25YR-72HR	12.30	19946.0	-24081.6	44027.6	0.0	0.00
25YR-72HR	12.32	19989.3	-24068.9	44058.2	0.0	0.00
25YR-72HR	12.33	20032.7	-24056.0	44088.7	0.0	0.00
25YR-72HR	12.35	20076.1	-24043.1	44119.2	0.0	0.00
25YR-72HR	12.37	20119.6	-24030.1	44149.7	0.0	0.00
25YR-72HR	12.38	20163.0	-24017.0	44180.0	0.0	0.00
25YR-72HR	12.40	20206.5	-24003.9	44210.4	0.0	0.00
25YR-72HR	12.42	20250.0	-23990.7	44240.7	0.0	0.00
25YR-72HR	12.43	20293.5	-23977.4	44270.9	0.0	0.00
25YR-72HR	12.45	20337.0	-23964.1	44301.1	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	12.47	20380.6	-23950.7	44331.3	0.0	0.00
25YR-72HR	12.48	20424.1	-23937.2	44361.3	0.0	0.00
25YR-72HR	12.50	20467.7	-23923.7	44391.4	0.0	0.00
25YR-72HR	12.52	20511.3	-23910.1	44421.4	0.0	0.00
25YR-72HR	12.53	20555.0	-23896.4	44451.3	0.0	0.00
25YR-72HR	12.55	20598.6	-23882.6	44481.2	0.0	0.00
25YR-72HR	12.57	20642.3	-23868.8	44511.1	0.0	0.00
25YR-72HR	12.58	20685.9	-23855.0	44540.9	0.0	0.00
25YR-72HR	12.60	20729.6	-23841.0	44570.7	0.0	0.00
25YR-72HR	12.62	20773.4	-23827.0	44600.4	0.0	0.00
25YR-72HR	12.63	20817.1	-23812.9	44630.0	0.0	0.00
25YR-72HR	12.65	20860.9	-23798.8	44659.6	0.0	0.00
25YR-72HR	12.67	20904.6	-23784.6	44689.2	0.0	0.00
25YR-72HR	12.68	20948.4	-23770.3	44718.7	0.0	0.00
25YR-72HR	12.70	20992.3	-23755.9	44748.2	0.0	0.00
25YR-72HR	12.72	21036.1	-23741.5	44777.6	0.0	0.00
25YR-72HR	12.73	21079.9	-23727.0	44807.0	0.0	0.00
25YR-72HR	12.75	21123.8	-23712.5	44836.3	0.0	0.00
25YR-72HR	12.77	21167.7	-23697.9	44865.6	0.0	0.00
25YR-72HR	12.78	21211.6	-23683.2	44894.8	0.0	0.00
25YR-72HR	12.80	21255.6	-23668.5	44924.0	0.0	0.00
25YR-72HR	12.82	21299.5	-23653.7	44953.2	0.0	0.00
25YR-72HR	12.83	21343.5	-23638.8	44982.3	0.0	0.00
25YR-72HR	12.85	21387.5	-23623.9	45011.3	0.0	0.00
25YR-72HR	12.87	21431.5	-23608.9	45040.3	0.0	0.00
25YR-72HR	12.88	21475.5	-23593.8	45069.3	0.0	0.00
25YR-72HR	12.90	21519.5	-23578.7	45098.2	0.0	0.00
25YR-72HR	12.92	21563.6	-23563.5	45127.1	0.0	0.00
25YR-72HR	12.93	21607.7	-23548.2	45155.9	0.0	0.00
25YR-72HR	12.95	21651.8	-23532.9	45184.7	0.0	0.00
25YR-72HR	12.97	21695.9	-23517.5	45213.4	0.0	0.00
25YR-72HR	12.98	21740.0	-23502.1	45242.1	0.0	0.00
25YR-72HR	13.00	21784.1	-23486.6	45270.7	0.0	0.00
25YR-72HR	13.02	21828.3	-23471.0	45299.3	0.0	0.00
25YR-72HR	13.03	21872.5	-23455.3	45327.8	0.0	0.00
25YR-72HR	13.05	21916.7	-23439.6	45356.3	0.0	0.00
25YR-72HR	13.07	21960.9	-23423.9	45384.8	0.0	0.00
25YR-72HR	13.08	22005.2	-23408.0	45413.2	0.0	0.00
25YR-72HR	13.10	22049.4	-23392.1	45441.6	0.0	0.00
25YR-72HR	13.12	22093.7	-23376.2	45469.9	0.0	0.00
25YR-72HR	13.13	22138.0	-23360.2	45498.2	0.0	0.00
25YR-72HR	13.15	22182.3	-23344.1	45526.4	0.0	0.00
25YR-72HR	13.17	22226.7	-23327.9	45554.6	-0.0	-0.00
25YR-72HR	13.18	22271.0	-23311.7	45582.7	-0.0	-0.00
25YR-72HR	13.20	22315.4	-23295.5	45610.8	-0.0	-0.00
25YR-72HR	13.22	22359.8	-23279.1	45638.9	-0.0	-0.00
25YR-72HR	13.23	22404.2	-23262.7	45666.9	-0.0	-0.00
25YR-72HR	13.25	22448.6	-23246.3	45694.9	-0.0	-0.00
25YR-72HR	13.27	22493.0	-23229.8	45722.8	-0.0	-0.00
25YR-72HR	13.28	22537.5	-23213.2	45750.7	-0.0	-0.00
25YR-72HR	13.30	22581.9	-23196.6	45778.5	-0.0	-0.00
25YR-72HR	13.32	22626.4	-23179.9	45806.3	-0.0	-0.00
25YR-72HR	13.33	22670.9	-23163.1	45834.0	-0.0	-0.00
25YR-72HR	13.35	22715.5	-23146.3	45861.7	-0.0	-0.00
25YR-72HR	13.37	22760.0	-23129.4	45889.4	-0.0	-0.00
25YR-72HR	13.38	22804.6	-23112.4	45917.0	-0.0	-0.00
25YR-72HR	13.40	22849.1	-23095.4	45944.6	-0.0	-0.00
25YR-72HR	13.42	22893.7	-23078.4	45972.1	-0.0	-0.00
25YR-72HR	13.43	22938.3	-23061.2	45999.6	-0.0	-0.00
25YR-72HR	13.45	22983.0	-23044.0	46027.0	-0.0	-0.00
25YR-72HR	13.47	23027.6	-23026.8	46054.4	-0.0	-0.00
25YR-72HR	13.48	23072.3	-23009.5	46081.8	-0.0	-0.00
25YR-72HR	13.50	23117.0	-22992.1	46109.1	-0.0	-0.00
25YR-72HR	13.52	23161.7	-22974.7	46136.4	-0.0	-0.00
25YR-72HR	13.53	23206.4	-22957.2	46163.6	-0.0	-0.00
25YR-72HR	13.55	23251.1	-22939.7	46190.8	-0.0	-0.00
25YR-72HR	13.57	23295.9	-22922.1	46217.9	-0.0	-0.00
25YR-72HR	13.58	23340.6	-22904.4	46245.0	-0.0	-0.00
25YR-72HR	13.60	23385.4	-22886.7	46272.1	-0.0	-0.00
25YR-72HR	13.62	23430.2	-22868.9	46299.1	-0.0	-0.00
25YR-72HR	13.63	23475.0	-22851.0	46326.1	-0.0	-0.00
25YR-72HR	13.65	23519.8	-22833.1	46353.0	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	13.67	23564.7	-22815.2	46379.9	-0.0	-0.00
25YR-72HR	13.68	23609.6	-22797.2	46406.7	-0.0	-0.00
25YR-72HR	13.70	23654.4	-22779.1	46433.5	-0.0	-0.00
25YR-72HR	13.72	23699.3	-22760.9	46460.3	-0.0	-0.00
25YR-72HR	13.73	23744.3	-22742.8	46487.0	-0.0	-0.00
25YR-72HR	13.75	23789.2	-22724.5	46513.7	-0.0	-0.00
25YR-72HR	13.77	23834.1	-22706.2	46540.3	-0.0	-0.00
25YR-72HR	13.78	23879.1	-22687.8	46566.9	-0.0	-0.00
25YR-72HR	13.80	23924.1	-22669.4	46593.5	-0.0	-0.00
25YR-72HR	13.82	23969.1	-22650.9	46620.0	-0.0	-0.00
25YR-72HR	13.83	24014.1	-22632.4	46646.5	-0.0	-0.00
25YR-72HR	13.85	24059.1	-22613.8	46672.9	-0.0	-0.00
25YR-72HR	13.87	24104.2	-22595.1	46699.3	-0.0	-0.00
25YR-72HR	13.88	24149.2	-22576.4	46725.6	-0.0	-0.00
25YR-72HR	13.90	24194.3	-22557.6	46752.0	-0.0	-0.00
25YR-72HR	13.92	24239.4	-22538.8	46778.2	-0.0	-0.00
25YR-72HR	13.93	24284.5	-22519.9	46804.5	-0.0	-0.00
25YR-72HR	13.95	24329.7	-22501.0	46830.6	-0.0	-0.00
25YR-72HR	13.97	24374.8	-22482.0	46856.8	-0.0	-0.00
25YR-72HR	13.98	24420.0	-22462.9	46882.9	-0.0	-0.00
25YR-72HR	14.00	24465.1	-22443.8	46909.0	-0.0	-0.00
25YR-72HR	14.02	24510.3	-22424.7	46935.0	-0.0	-0.00
25YR-72HR	14.03	24555.5	-22405.4	46961.0	-0.0	-0.00
25YR-72HR	14.05	24600.8	-22386.2	46986.9	-0.0	-0.00
25YR-72HR	14.07	24646.0	-22366.8	47012.8	-0.0	-0.00
25YR-72HR	14.08	24691.3	-22347.4	47038.7	-0.0	-0.00
25YR-72HR	14.10	24736.5	-22328.0	47064.5	-0.0	-0.00
25YR-72HR	14.12	24781.8	-22308.5	47090.3	-0.0	-0.00
25YR-72HR	14.13	24827.1	-22288.9	47116.1	-0.0	-0.00
25YR-72HR	14.15	24872.4	-22269.3	47141.8	-0.0	-0.00
25YR-72HR	14.17	24917.8	-22249.7	47167.4	-0.0	-0.00
25YR-72HR	14.18	24963.1	-22229.9	47193.1	-0.0	-0.00
25YR-72HR	14.20	25008.5	-22210.2	47218.7	-0.0	-0.00
25YR-72HR	14.22	25053.9	-22190.3	47244.2	-0.0	-0.00
25YR-72HR	14.23	25099.3	-22170.5	47269.7	-0.0	-0.00
25YR-72HR	14.25	25144.7	-22150.5	47295.2	-0.0	-0.00
25YR-72HR	14.27	25190.1	-22130.5	47320.6	-0.0	-0.00
25YR-72HR	14.28	25235.6	-22110.5	47346.0	-0.0	-0.00
25YR-72HR	14.30	25281.0	-22090.4	47371.4	-0.0	-0.00
25YR-72HR	14.32	25326.5	-22070.2	47396.7	-0.0	-0.00
25YR-72HR	14.33	25372.0	-22050.0	47422.0	-0.0	-0.00
25YR-72HR	14.35	25417.5	-22029.7	47447.2	-0.0	-0.00
25YR-72HR	14.37	25463.0	-22009.4	47472.4	-0.0	-0.00
25YR-72HR	14.38	25508.5	-21989.0	47497.6	-0.0	-0.00
25YR-72HR	14.40	25554.1	-21968.6	47522.7	-0.0	-0.00
25YR-72HR	14.42	25599.7	-21948.1	47547.8	-0.0	-0.00
25YR-72HR	14.43	25645.2	-21927.6	47572.9	-0.0	-0.00
25YR-72HR	14.45	25690.8	-21907.0	47597.9	-0.0	-0.00
25YR-72HR	14.47	25736.5	-21886.4	47622.8	-0.0	-0.00
25YR-72HR	14.48	25782.1	-21865.7	47647.8	-0.0	-0.00
25YR-72HR	14.50	25827.7	-21844.9	47672.7	-0.0	-0.00
25YR-72HR	14.52	25873.4	-21824.1	47697.5	-0.0	-0.00
25YR-72HR	14.53	25919.1	-21803.3	47722.4	-0.0	-0.00
25YR-72HR	14.55	25964.7	-21782.4	47747.1	-0.0	-0.00
25YR-72HR	14.57	26010.5	-21761.4	47771.9	-0.0	-0.00
25YR-72HR	14.58	26056.2	-21740.4	47796.6	-0.0	-0.00
25YR-72HR	14.60	26101.9	-21719.4	47821.3	-0.0	-0.00
25YR-72HR	14.62	26147.6	-21698.2	47845.9	-0.0	-0.00
25YR-72HR	14.63	26193.4	-21677.1	47870.5	-0.0	-0.00
25YR-72HR	14.65	26239.2	-21655.9	47895.1	-0.0	-0.00
25YR-72HR	14.67	26285.0	-21634.6	47919.6	-0.0	-0.00
25YR-72HR	14.68	26330.8	-21613.3	47944.1	-0.0	-0.00
25YR-72HR	14.70	26376.6	-21591.9	47968.5	-0.0	-0.00
25YR-72HR	14.72	26422.4	-21570.5	47992.9	-0.0	-0.00
25YR-72HR	14.73	26468.3	-21549.0	48017.3	-0.0	-0.00
25YR-72HR	14.75	26514.2	-21527.5	48041.6	-0.0	-0.00
25YR-72HR	14.77	26560.0	-21505.9	48066.0	-0.0	-0.00
25YR-72HR	14.78	26605.9	-21484.3	48090.2	-0.0	-0.00
25YR-72HR	14.80	26651.9	-21462.6	48114.5	-0.0	-0.00
25YR-72HR	14.82	26697.8	-21440.9	48138.6	-0.0	-0.00
25YR-72HR	14.83	26743.7	-21419.1	48162.8	-0.0	-0.00
25YR-72HR	14.85	26789.7	-21397.3	48186.9	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	14.87	26835.6	-21375.4	48211.0	-0.0	-0.00
25YR-72HR	14.88	26881.6	-21353.4	48235.1	-0.0	-0.00
25YR-72HR	14.90	26927.6	-21331.5	48259.1	-0.0	-0.00
25YR-72HR	14.92	26973.6	-21309.4	48283.1	-0.0	-0.00
25YR-72HR	14.93	27019.6	-21287.3	48307.0	-0.0	-0.00
25YR-72HR	14.95	27065.7	-21265.2	48330.9	-0.0	-0.00
25YR-72HR	14.97	27111.7	-21243.0	48354.8	-0.0	-0.00
25YR-72HR	14.98	27157.8	-21220.8	48378.6	-0.0	-0.00
25YR-72HR	15.00	27203.9	-21198.5	48402.4	-0.0	-0.00
25YR-72HR	15.02	27250.0	-21176.2	48426.2	-0.0	-0.00
25YR-72HR	15.03	27296.1	-21153.8	48449.9	-0.0	-0.00
25YR-72HR	15.05	27342.2	-21131.4	48473.6	-0.0	-0.00
25YR-72HR	15.07	27388.4	-21108.9	48497.3	-0.0	-0.00
25YR-72HR	15.08	27434.5	-21086.4	48520.9	-0.0	-0.00
25YR-72HR	15.10	27480.7	-21063.8	48544.5	-0.0	-0.00
25YR-72HR	15.12	27526.9	-21041.2	48568.0	-0.0	-0.00
25YR-72HR	15.13	27573.1	-21018.5	48591.5	-0.0	-0.00
25YR-72HR	15.15	27619.3	-20995.8	48615.0	-0.0	-0.00
25YR-72HR	15.17	27665.5	-20973.0	48638.5	-0.0	-0.00
25YR-72HR	15.18	27711.7	-20950.2	48661.9	0.0	0.00
25YR-72HR	15.20	27758.0	-20927.3	48685.3	0.0	0.00
25YR-72HR	15.22	27804.2	-20904.4	48708.6	0.0	0.00
25YR-72HR	15.23	27850.5	-20881.4	48731.9	0.0	0.00
25YR-72HR	15.25	27896.8	-20858.4	48755.2	0.0	0.00
25YR-72HR	15.27	27943.1	-20835.3	48778.4	0.0	0.00
25YR-72HR	15.28	27989.4	-20812.2	48801.7	0.0	0.00
25YR-72HR	15.30	28035.8	-20789.1	48824.8	0.0	0.00
25YR-72HR	15.32	28082.1	-20765.8	48848.0	0.0	0.00
25YR-72HR	15.33	28128.5	-20742.6	48871.1	0.0	0.00
25YR-72HR	15.35	28174.9	-20719.3	48894.2	0.0	0.00
25YR-72HR	15.37	28221.3	-20695.9	48917.2	0.0	0.00
25YR-72HR	15.38	28267.7	-20672.5	48940.2	0.0	0.00
25YR-72HR	15.40	28314.1	-20649.1	48963.2	0.0	0.00
25YR-72HR	15.42	28360.5	-20625.6	48986.1	0.0	0.00
25YR-72HR	15.43	28406.9	-20602.1	49009.0	0.0	0.00
25YR-72HR	15.45	28453.4	-20578.5	49031.9	0.0	0.00
25YR-72HR	15.47	28499.9	-20554.9	49054.7	0.0	0.00
25YR-72HR	15.48	28546.4	-20531.2	49077.5	0.0	0.00
25YR-72HR	15.50	28592.8	-20507.4	49100.3	0.0	0.00
25YR-72HR	15.52	28639.4	-20483.7	49123.0	0.0	0.00
25YR-72HR	15.53	28685.9	-20459.9	49145.7	0.0	0.00
25YR-72HR	15.55	28732.4	-20436.0	49168.4	0.0	0.00
25YR-72HR	15.57	28779.0	-20412.1	49191.1	0.0	0.00
25YR-72HR	15.58	28825.5	-20388.1	49213.7	0.0	0.00
25YR-72HR	15.60	28872.1	-20364.1	49236.2	0.0	0.00
25YR-72HR	15.62	28918.7	-20340.1	49258.8	0.0	0.00
25YR-72HR	15.63	28965.3	-20316.0	49281.3	0.0	0.00
25YR-72HR	15.65	29011.9	-20291.8	49303.8	0.0	0.00
25YR-72HR	15.67	29058.6	-20267.6	49326.2	0.0	0.00
25YR-72HR	15.68	29105.2	-20243.4	49348.6	0.0	0.00
25YR-72HR	15.70	29151.9	-20219.1	49371.0	0.0	0.00
25YR-72HR	15.72	29198.5	-20194.8	49393.3	0.0	0.00
25YR-72HR	15.73	29245.2	-20170.4	49415.7	0.0	0.00
25YR-72HR	15.75	29291.9	-20146.0	49437.9	0.0	0.00
25YR-72HR	15.77	29338.6	-20121.6	49460.2	0.0	0.00
25YR-72HR	15.78	29385.3	-20097.1	49482.4	0.0	0.00
25YR-72HR	15.80	29432.1	-20072.5	49504.6	0.0	0.00
25YR-72HR	15.82	29478.8	-20047.9	49526.7	0.0	0.00
25YR-72HR	15.83	29525.6	-20023.3	49548.9	0.0	0.00
25YR-72HR	15.85	29572.3	-19998.6	49571.0	0.0	0.00
25YR-72HR	15.87	29619.1	-19973.9	49593.0	0.0	0.00
25YR-72HR	15.88	29665.9	-19949.1	49615.0	0.0	0.00
25YR-72HR	15.90	29712.7	-19924.3	49637.0	0.0	0.00
25YR-72HR	15.92	29759.6	-19899.4	49659.0	0.0	0.00
25YR-72HR	15.93	29806.4	-19874.5	49680.9	0.0	0.00
25YR-72HR	15.95	29853.3	-19849.6	49702.8	0.0	0.00
25YR-72HR	15.97	29900.1	-19824.6	49724.7	0.0	0.00
25YR-72HR	15.98	29947.0	-19799.5	49746.5	0.0	0.00
25YR-72HR	16.00	29993.9	-19774.5	49768.3	0.0	0.00
25YR-72HR	16.08	30228.5	-19648.4	49876.9	0.0	0.00
25YR-72HR	16.17	30463.5	-19521.3	49984.7	0.0	0.00
25YR-72HR	16.25	30698.7	-19393.0	50091.8	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	16.33	30934.3	-19263.8	50198.1	0.0	0.00
25YR-72HR	16.42	31170.2	-19133.4	50303.6	0.0	0.00
25YR-72HR	16.50	31406.4	-19002.1	50408.5	0.0	0.00
25YR-72HR	16.58	31642.9	-18869.7	50512.6	0.0	0.00
25YR-72HR	16.67	31879.8	-18736.3	50616.1	0.0	0.00
25YR-72HR	16.75	32117.0	-18601.9	50718.9	0.0	0.00
25YR-72HR	16.83	32354.6	-18466.5	50821.1	0.0	0.00
25YR-72HR	16.92	32592.6	-18330.1	50922.7	0.0	0.00
25YR-72HR	17.00	32831.1	-18192.7	51023.8	0.0	0.00
25YR-72HR	17.08	33069.9	-18054.3	51124.3	0.0	0.00
25YR-72HR	17.17	33309.2	-17915.0	51224.2	0.0	0.00
25YR-72HR	17.25	33548.9	-17774.7	51323.7	0.0	0.00
25YR-72HR	17.33	33789.1	-17633.5	51422.6	0.0	0.00
25YR-72HR	17.42	34029.6	-17491.3	51520.9	0.0	0.00
25YR-72HR	17.50	34270.6	-17348.2	51618.8	0.0	0.00
25YR-72HR	17.58	34512.0	-17204.2	51716.1	0.0	0.00
25YR-72HR	17.67	34753.8	-17059.2	51812.9	-0.0	-0.00
25YR-72HR	17.75	34996.0	-16913.3	51909.3	-0.0	-0.00
25YR-72HR	17.83	35238.6	-16766.5	52005.1	-0.0	-0.00
25YR-72HR	17.92	35481.6	-16618.8	52100.5	-0.0	-0.00
25YR-72HR	18.00	35725.1	-16470.3	52195.3	0.0	0.00
25YR-72HR	18.08	35968.9	-16320.7	52289.6	0.0	0.00
25YR-72HR	18.17	36213.1	-16170.2	52383.3	0.0	0.00
25YR-72HR	18.25	36457.8	-16018.6	52476.4	0.0	0.00
25YR-72HR	18.33	36702.8	-15866.1	52568.9	0.0	0.00
25YR-72HR	18.42	36948.2	-15712.5	52660.8	0.0	0.00
25YR-72HR	18.50	37194.0	-15558.0	52752.1	0.0	0.00
25YR-72HR	18.58	37440.2	-15402.5	52842.7	0.0	0.00
25YR-72HR	18.67	37686.8	-15245.9	52932.8	0.0	0.00
25YR-72HR	18.75	37933.8	-15088.3	53022.1	0.0	0.00
25YR-72HR	18.83	38181.2	-14929.6	53110.8	0.0	0.00
25YR-72HR	18.92	38428.9	-14770.0	53198.9	-0.0	-0.00
25YR-72HR	19.00	38677.0	-14609.3	53286.3	-0.0	-0.00
25YR-72HR	19.08	38925.5	-14447.7	53373.2	-0.0	-0.00
25YR-72HR	19.17	39174.3	-14285.3	53459.6	-0.0	-0.00
25YR-72HR	19.25	39423.5	-14122.1	53545.6	-0.0	-0.00
25YR-72HR	19.33	39673.1	-13958.1	53631.2	0.0	0.00
25YR-72HR	19.42	39923.1	-13793.4	53716.4	-0.0	-0.00
25YR-72HR	19.50	40173.4	-13627.9	53801.3	-0.0	-0.00
25YR-72HR	19.58	40424.1	-13461.7	53885.7	-0.0	-0.00
25YR-72HR	19.67	40675.1	-13294.7	53969.8	0.0	0.00
25YR-72HR	19.75	40926.5	-13127.0	54053.5	0.0	0.00
25YR-72HR	19.83	41178.3	-12958.6	54136.9	0.0	0.00
25YR-72HR	19.92	41430.4	-12789.5	54219.8	0.0	0.00
25YR-72HR	20.00	41682.8	-12619.6	54302.4	0.0	0.00
25YR-72HR	20.08	41935.6	-12449.0	54384.7	0.0	0.00
25YR-72HR	20.17	42188.8	-12277.8	54466.5	0.0	0.00
25YR-72HR	20.25	42442.3	-12105.8	54548.1	0.0	0.00
25YR-72HR	20.33	42696.1	-11933.1	54629.3	0.0	0.00
25YR-72HR	20.42	42950.3	-11759.8	54710.1	0.0	0.00
25YR-72HR	20.50	43204.8	-11585.8	54790.6	0.0	0.00
25YR-72HR	20.58	43459.7	-11411.0	54870.7	0.0	0.00
25YR-72HR	20.67	43714.9	-11235.6	54950.6	0.0	0.00
25YR-72HR	20.75	43970.5	-11059.6	55030.1	0.0	0.00
25YR-72HR	20.83	44226.5	-10882.8	55109.4	0.0	0.00
25YR-72HR	20.92	44482.9	-10705.4	55188.3	0.0	0.00
25YR-72HR	21.00	44739.7	-10527.3	55267.0	0.0	0.00
25YR-72HR	21.08	44996.8	-10348.6	55345.4	0.0	0.00
25YR-72HR	21.17	45254.3	-10169.2	55423.5	0.0	0.00
25YR-72HR	21.25	45512.2	-9989.1	55501.3	0.0	0.00
25YR-72HR	21.33	45770.5	-9808.4	55578.9	0.0	0.00
25YR-72HR	21.42	46029.2	-9627.0	55656.2	0.0	0.00
25YR-72HR	21.50	46288.2	-9444.9	55733.2	0.0	0.00
25YR-72HR	21.58	46547.7	-9262.3	55809.9	0.0	0.00
25YR-72HR	21.67	46807.5	-9078.9	55886.4	0.0	0.00
25YR-72HR	21.75	47067.6	-8895.0	55962.6	0.0	0.00
25YR-72HR	21.83	47328.2	-8710.4	56038.6	0.0	0.00
25YR-72HR	21.92	47589.1	-8525.1	56114.2	0.0	0.00
25YR-72HR	22.00	47850.4	-8339.2	56189.7	0.0	0.00
25YR-72HR	22.08	48112.1	-8152.7	56264.8	0.0	0.00
25YR-72HR	22.17	48374.1	-7965.6	56339.7	0.0	0.00
25YR-72HR	22.25	48636.5	-7777.9	56414.4	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	22.33	48899.3	-7589.5	56488.8	0.0	0.00
25YR-72HR	22.42	49162.4	-7400.5	56562.9	0.0	0.00
25YR-72HR	22.50	49425.9	-7210.9	56636.8	0.0	0.00
25YR-72HR	22.58	49689.7	-7020.7	56710.5	0.0	0.00
25YR-72HR	22.67	49953.9	-6829.9	56783.9	0.0	0.00
25YR-72HR	22.75	50218.5	-6638.6	56857.1	0.0	0.00
25YR-72HR	22.83	50483.4	-6446.6	56930.0	0.0	0.00
25YR-72HR	22.92	50748.7	-6254.0	57002.7	0.0	0.00
25YR-72HR	23.00	51014.3	-6060.8	57075.1	0.0	0.00
25YR-72HR	23.08	51280.2	-5867.1	57147.3	0.0	0.00
25YR-72HR	23.17	51546.6	-5672.7	57219.3	-0.0	-0.00
25YR-72HR	23.25	51813.2	-5477.8	57291.0	-0.0	-0.00
25YR-72HR	23.33	52080.2	-5282.4	57362.6	-0.0	-0.00
25YR-72HR	23.42	52347.6	-5086.3	57433.9	-0.0	-0.00
25YR-72HR	23.50	52615.2	-4889.7	57504.9	-0.0	-0.00
25YR-72HR	23.58	52883.3	-4692.5	57575.8	-0.0	-0.00
25YR-72HR	23.67	53151.6	-4494.8	57646.4	-0.0	-0.00
25YR-72HR	23.75	53420.3	-4296.5	57716.8	-0.0	-0.00
25YR-72HR	23.83	53689.4	-4097.6	57787.0	-0.0	-0.00
25YR-72HR	23.92	53958.8	-3898.2	57857.0	-0.0	-0.00
25YR-72HR	24.00	54228.7	-3698.2	57926.9	-0.0	-0.00
25YR-72HR	24.25	55151.2	-3094.9	58246.1	-0.0	-0.00
25YR-72HR	24.50	56236.7	-2479.6	58716.3	-0.0	-0.00
25YR-72HR	24.75	57395.8	-1846.9	59242.7	-0.0	-0.00
25YR-72HR	25.00	58585.8	-1195.5	59781.3	-0.0	-0.00
25YR-72HR	25.25	59786.7	-525.7	60312.3	-0.0	-0.00
25YR-72HR	25.50	60993.3	161.6	60831.7	-0.0	-0.00
25YR-72HR	25.75	62205.6	865.4	61340.2	-0.0	-0.00
25YR-72HR	26.00	63423.4	1585.1	61838.4	-0.0	-0.00
25YR-72HR	26.25	64646.8	2320.0	62326.7	-0.0	-0.00
25YR-72HR	26.50	65875.5	3069.8	62805.7	-0.0	-0.00
25YR-72HR	26.75	67109.6	3833.9	63275.6	-0.0	-0.00
25YR-72HR	27.00	68348.8	4611.9	63736.9	-0.0	-0.00
25YR-72HR	27.25	69593.2	5403.5	64189.7	0.0	0.00
25YR-72HR	27.50	70842.7	6208.2	64634.5	0.0	0.00
25YR-72HR	27.75	72097.1	7025.7	65071.4	0.0	0.00
25YR-72HR	28.00	73356.4	7855.6	65500.8	0.0	0.00
25YR-72HR	28.25	74620.6	8697.7	65922.9	0.0	0.00
25YR-72HR	28.50	75889.5	9551.5	66338.0	0.0	0.00
25YR-72HR	28.75	77163.0	10416.9	66746.2	0.0	0.00
25YR-72HR	29.00	78441.2	11293.4	67147.8	0.0	0.00
25YR-72HR	29.25	79723.9	12180.9	67543.0	0.0	0.00
25YR-72HR	29.50	81011.1	13079.0	67932.1	0.0	0.00
25YR-72HR	29.75	82302.7	13987.4	68315.2	0.0	0.00
25YR-72HR	30.00	83598.6	14906.0	68692.6	0.0	0.00
25YR-72HR	30.25	84898.8	15834.4	69064.3	0.0	0.00
25YR-72HR	30.50	86203.2	16772.5	69430.7	0.0	0.00
25YR-72HR	30.75	87511.8	17719.9	69791.9	0.0	0.00
25YR-72HR	31.00	88824.4	18676.5	70148.0	0.0	0.00
25YR-72HR	31.25	90141.2	19642.0	70499.2	0.0	0.00
25YR-72HR	31.50	91461.9	20616.2	70845.7	0.0	0.00
25YR-72HR	31.75	92786.5	21599.0	71187.6	0.0	0.00
25YR-72HR	32.00	94115.0	22590.0	71525.0	0.0	0.00
25YR-72HR	32.25	95447.4	23589.1	71858.2	0.0	0.00
25YR-72HR	32.50	96783.5	24596.2	72187.3	0.0	0.00
25YR-72HR	32.75	98123.4	25611.0	72512.4	0.0	0.00
25YR-72HR	33.00	99466.9	26633.4	72833.5	0.0	0.00
25YR-72HR	33.25	100814.1	27663.2	73150.9	0.0	0.00
25YR-72HR	33.50	102164.9	28700.3	73464.6	0.0	0.00
25YR-72HR	33.75	103519.1	29744.4	73774.8	0.0	0.00
25YR-72HR	34.00	104876.9	30795.4	74081.5	0.0	0.00
25YR-72HR	34.25	106238.2	31853.3	74384.9	0.0	0.00
25YR-72HR	34.50	107602.8	32917.7	74685.1	0.0	0.00
25YR-72HR	34.75	108970.8	33988.7	74982.2	0.0	0.00
25YR-72HR	35.00	110342.2	35066.0	75276.2	0.0	0.00
25YR-72HR	35.25	111716.8	36149.5	75567.2	0.0	0.00
25YR-72HR	35.50	113094.6	37239.2	75855.4	0.0	0.00
25YR-72HR	35.75	114475.7	38334.8	76140.9	0.0	0.00
25YR-72HR	36.00	115859.9	39436.3	76423.6	0.0	0.00
25YR-72HR	36.25	117251.5	40543.6	76707.9	0.0	0.00
25YR-72HR	36.50	118652.4	41657.0	76995.5	0.0	0.00
25YR-72HR	36.75	120059.1	42776.4	77282.7	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	37.00	121469.8	43901.9	77567.9	0.0	0.00
25YR-72HR	37.25	122883.7	45033.2	77850.5	0.0	0.00
25YR-72HR	37.50	124300.6	46170.3	78130.4	0.0	0.00
25YR-72HR	37.75	125720.6	47312.9	78407.6	0.0	0.00
25YR-72HR	38.00	127143.4	48461.0	78682.4	0.0	0.00
25YR-72HR	38.25	128569.1	49614.5	78954.7	0.0	0.00
25YR-72HR	38.50	129997.8	50773.1	79224.6	0.0	0.00
25YR-72HR	38.75	131429.2	51936.9	79492.3	0.0	0.00
25YR-72HR	39.00	132863.5	53106.8	79756.7	0.0	0.00
25YR-72HR	39.25	134300.5	54281.7	80018.8	0.0	0.00
25YR-72HR	39.50	135740.2	55461.3	80278.9	0.0	0.00
25YR-72HR	39.75	137182.7	56645.7	80537.0	0.0	0.00
25YR-72HR	40.00	138627.9	57834.7	80793.1	0.0	0.00
25YR-72HR	40.25	140075.7	59028.3	81047.4	0.0	0.00
25YR-72HR	40.50	141526.1	60226.3	81299.8	0.0	0.00
25YR-72HR	40.75	142979.1	61428.7	81550.4	0.0	0.00
25YR-72HR	41.00	144434.7	62635.4	81799.3	0.0	0.00
25YR-72HR	41.25	145892.8	63846.3	82046.5	0.0	0.00
25YR-72HR	41.50	147353.4	65061.3	82292.1	0.0	0.00
25YR-72HR	41.75	148816.5	66280.4	82536.0	0.0	0.00
25YR-72HR	42.00	150282.0	67503.6	82778.4	0.0	0.00
25YR-72HR	42.25	151750.0	68730.6	83019.4	0.0	0.00
25YR-72HR	42.50	153220.4	69961.6	83258.8	0.0	0.00
25YR-72HR	42.75	154693.1	71196.3	83496.8	0.0	0.00
25YR-72HR	43.00	156168.2	72434.8	83733.4	0.0	0.00
25YR-72HR	43.25	157645.7	73677.0	83968.7	0.0	0.00
25YR-72HR	43.50	159125.4	74922.7	84202.7	0.0	0.00
25YR-72HR	43.75	160607.4	76172.1	84435.3	0.0	0.00
25YR-72HR	44.00	162091.7	77424.9	84666.8	0.0	0.00
25YR-72HR	44.25	163578.2	78681.2	84897.0	0.0	0.00
25YR-72HR	44.50	165066.9	79940.9	85126.0	0.0	0.00
25YR-72HR	44.75	166557.8	81203.9	85353.9	0.0	0.00
25YR-72HR	45.00	168050.9	82470.2	85580.6	0.0	0.00
25YR-72HR	45.25	169546.1	83739.8	85806.3	0.0	0.00
25YR-72HR	45.50	171043.4	85012.6	86030.9	0.0	0.00
25YR-72HR	45.75	172542.9	86288.5	86254.4	0.0	0.00
25YR-72HR	46.00	174044.4	87567.4	86476.9	0.0	0.00
25YR-72HR	46.25	175547.9	88849.5	86698.5	0.0	0.00
25YR-72HR	46.50	177053.6	90134.5	86919.0	0.0	0.00
25YR-72HR	46.75	178561.2	91422.5	87138.6	0.0	0.00
25YR-72HR	47.00	180070.8	92713.5	87357.3	0.0	0.00
25YR-72HR	47.25	181582.4	94007.4	87575.0	0.0	0.00
25YR-72HR	47.50	183096.0	95304.2	87791.8	0.0	0.00
25YR-72HR	47.75	184611.5	96603.8	88007.6	0.0	0.00
25YR-72HR	48.00	186129.0	97906.2	88222.7	0.0	0.00
25YR-72HR	48.25	187695.5	99217.0	88478.6	0.0	0.00
25YR-72HR	48.50	189343.3	100543.8	88799.5	0.0	0.00
25YR-72HR	48.75	191022.9	101887.6	89135.4	0.0	0.00
25YR-72HR	49.00	192716.0	103247.6	89468.4	0.0	0.00
25YR-72HR	49.25	194423.0	104613.5	89809.5	0.0	0.00
25YR-72HR	49.50	196149.0	105978.1	90170.9	0.0	0.00
25YR-72HR	49.75	197883.6	107343.6	90540.0	0.0	0.00
25YR-72HR	50.00	199623.0	108711.0	90912.0	0.0	0.00
25YR-72HR	50.25	201457.2	110082.6	91374.6	0.0	0.00
25YR-72HR	50.50	203439.3	111466.5	91972.8	0.0	0.00
25YR-72HR	50.75	205478.5	112867.0	92611.5	0.0	0.00
25YR-72HR	51.00	207541.1	114289.2	93251.8	0.0	0.00
25YR-72HR	51.25	209664.3	115748.7	93915.6	0.0	0.00
25YR-72HR	51.50	211877.9	117269.7	94608.2	0.0	0.00
25YR-72HR	51.75	214127.3	118861.1	95266.2	0.0	0.00
25YR-72HR	52.00	216392.4	120524.3	95868.1	0.0	0.00
25YR-72HR	52.25	218861.1	122255.1	96606.1	0.0	0.00
25YR-72HR	52.50	221652.7	124083.0	97569.7	0.0	0.00
25YR-72HR	52.75	224568.0	126033.4	98534.6	0.0	0.00
25YR-72HR	53.00	227533.5	128110.4	99423.1	0.0	0.00
25YR-72HR	53.25	230709.6	130315.4	100394.2	0.0	0.00
25YR-72HR	53.50	234213.8	132684.9	101528.8	0.0	0.00
25YR-72HR	53.75	237845.2	135237.1	102608.1	0.0	0.00
25YR-72HR	54.00	241529.5	137964.2	103565.3	0.0	0.00
25YR-72HR	54.25	245434.0	140848.3	104585.7	0.0	0.00
25YR-72HR	54.50	249683.5	143919.5	105764.0	0.0	0.00
25YR-72HR	54.75	254068.2	147195.4	106872.9	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	55.00	258510.4	150662.6	107847.7	0.0	0.00
25YR-72HR	55.25	263175.9	154316.7	108859.2	0.0	0.00
25YR-72HR	55.50	268192.7	158199.6	109993.0	0.0	0.00
25YR-72HR	55.75	273348.4	162319.1	111029.3	0.0	0.00
25YR-72HR	56.00	278564.6	166651.5	111913.0	0.0	0.00
25YR-72HR	56.25	284045.6	171167.6	112878.0	0.0	0.00
25YR-72HR	56.50	289958.1	175912.7	114045.5	0.0	0.00
25YR-72HR	56.75	296038.4	180907.5	115130.9	0.0	0.00
25YR-72HR	57.00	302191.8	186128.9	116062.9	0.0	0.00
25YR-72HR	57.25	308684.0	191558.3	117125.7	0.0	0.00
25YR-72HR	57.50	315735.1	197273.6	118461.5	0.0	0.00
25YR-72HR	57.75	323183.8	203297.3	119886.5	0.0	0.00
25YR-72HR	58.00	331026.9	209654.2	121372.7	0.0	0.00
25YR-72HR	58.25	339250.8	216369.7	122881.1	0.0	0.00
25YR-72HR	58.50	347953.9	223498.8	124455.1	0.0	0.00
25YR-72HR	58.75	357668.9	231061.6	126607.3	0.0	0.00
25YR-72HR	59.00	368858.3	239314.2	129544.1	0.0	0.00
25YR-72HR	59.25	382489.2	248497.6	133991.6	0.0	0.00
25YR-72HR	59.50	399427.9	259303.1	140124.8	0.0	0.00
25YR-72HR	59.75	448371.1	273954.4	174416.7	0.0	0.00
25YR-72HR	60.00	550676.6	303594.8	247081.8	0.0	0.00
25YR-72HR	60.25	643742.2	344071.1	299671.1	0.0	0.00
25YR-72HR	60.50	696093.7	387405.9	308687.8	0.0	0.00
25YR-72HR	60.75	728294.9	430610.6	297684.2	0.0	0.00
25YR-72HR	61.00	747559.8	471291.7	276268.1	0.0	0.00
25YR-72HR	61.25	762423.1	508929.0	253494.1	0.0	0.00
25YR-72HR	61.50	774478.4	543381.2	231097.2	0.0	0.00
25YR-72HR	61.75	785202.4	574665.1	210537.3	0.0	0.00
25YR-72HR	62.00	794796.4	602883.4	191913.0	0.0	0.00
25YR-72HR	62.25	803339.8	628134.1	175205.8	0.0	0.00
25YR-72HR	62.50	810605.3	648929.9	161675.4	0.0	0.00
25YR-72HR	62.75	817237.2	665176.6	152060.5	0.0	0.00
25YR-72HR	63.00	823372.4	678272.6	145099.8	0.0	0.00
25YR-72HR	63.25	829358.8	689222.5	140136.3	0.0	0.00
25YR-72HR	63.50	835292.5	698707.1	136585.4	0.0	0.00
25YR-72HR	63.75	841218.7	707175.0	134043.6	0.0	0.00
25YR-72HR	64.00	847145.8	714929.6	132216.3	0.0	0.00
25YR-72HR	64.25	852397.9	722127.2	130270.7	0.0	0.00
25YR-72HR	64.50	856537.0	728648.4	127888.6	0.0	0.00
25YR-72HR	64.75	860260.8	734484.6	125776.1	0.0	0.00
25YR-72HR	65.00	863828.0	739748.6	124079.5	0.0	0.00
25YR-72HR	65.25	867380.0	744572.3	122807.7	0.0	0.00
25YR-72HR	65.50	870945.3	749072.2	121873.0	0.0	0.00
25YR-72HR	65.75	874515.9	753333.5	121182.4	0.0	0.00
25YR-72HR	66.00	878089.0	757416.9	120672.1	0.0	0.00
25YR-72HR	66.25	881662.8	761374.8	120288.1	0.0	0.00
25YR-72HR	66.50	885237.1	765244.5	119992.6	0.0	0.00
25YR-72HR	66.75	888812.0	769046.6	119765.4	0.0	0.00
25YR-72HR	67.00	892387.4	772796.6	119590.9	0.0	0.00
25YR-72HR	67.25	895963.6	776473.5	119490.0	0.0	0.00
25YR-72HR	67.50	899540.3	780089.4	119451.0	0.0	0.00
25YR-72HR	67.75	903117.8	783668.1	119449.6	0.0	0.00
25YR-72HR	68.00	906695.5	787229.5	119465.9	0.0	0.00
25YR-72HR	68.25	909919.6	790763.9	119155.7	0.0	0.00
25YR-72HR	68.50	912585.6	794167.5	118418.1	0.0	0.00
25YR-72HR	68.75	915044.0	797389.1	117654.8	0.0	0.00
25YR-72HR	69.00	917424.5	800422.7	117001.8	0.0	0.00
25YR-72HR	69.25	919793.9	803297.1	116496.8	0.0	0.00
25YR-72HR	69.50	922163.6	806048.4	116115.2	0.0	0.00
25YR-72HR	69.75	924533.6	808705.2	115828.4	0.0	0.00
25YR-72HR	70.00	926903.8	811289.1	115614.7	0.0	0.00
25YR-72HR	70.25	929278.2	813819.3	115459.0	0.0	0.00
25YR-72HR	70.50	931659.2	816311.3	115347.9	0.0	0.00
25YR-72HR	70.75	934042.7	818774.6	115268.1	0.0	0.00
25YR-72HR	71.00	936427.3	821210.7	115216.7	0.0	0.00
25YR-72HR	71.25	938812.4	823627.0	115185.4	0.0	0.00
25YR-72HR	71.50	941197.7	826030.0	115167.7	0.0	0.00
25YR-72HR	71.75	943583.3	828422.7	115160.5	0.0	0.00
25YR-72HR	72.00	945968.7	830807.4	115161.3	0.0	0.00
25YR-72HR	72.25	947664.0	833181.9	114482.0	0.0	0.00
25YR-72HR	72.50	947932.7	835247.4	112685.3	0.0	0.00
25YR-72HR	72.75	947932.7	836949.0	110983.7	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	73.00	947932.7	838362.0	109570.6	0.0	0.00
25YR-72HR	73.25	947932.7	839543.6	108389.1	0.0	0.00
25YR-72HR	73.50	947932.7	840529.1	107403.6	0.0	0.00
25YR-72HR	73.75	947932.7	841365.4	106567.3	0.0	0.00
25YR-72HR	74.00	947932.7	842098.6	105834.1	0.0	0.00
25YR-72HR	74.25	947932.7	842748.8	105183.9	0.0	0.00
25YR-72HR	74.50	947932.7	843331.0	104601.7	0.0	0.00
25YR-72HR	74.75	947932.7	843857.4	104075.3	0.0	0.00
25YR-72HR	75.00	947932.7	844338.3	103594.4	0.0	0.00
25YR-72HR	75.25	947932.7	844782.0	103150.7	0.0	0.00
25YR-72HR	75.50	947932.7	845195.3	102737.4	0.0	0.00
25YR-72HR	75.75	947932.7	845583.9	102348.8	0.0	0.00
25YR-72HR	76.00	947932.7	845952.4	101980.3	0.0	0.00
25YR-72HR	76.25	947932.7	846304.6	101628.1	0.0	0.00
25YR-72HR	76.50	947932.7	846643.7	101289.0	0.0	0.00
25YR-72HR	76.75	947932.7	846972.3	100960.4	0.0	0.00
25YR-72HR	77.00	947932.7	847292.6	100640.1	0.0	0.00
25YR-72HR	77.25	947932.7	847606.7	100326.0	0.0	0.00
25YR-72HR	77.50	947932.7	847915.7	100016.9	0.0	0.00
25YR-72HR	77.75	947932.7	848221.2	99711.5	0.0	0.00
25YR-72HR	78.00	947932.7	848524.0	99408.7	0.0	0.00
25YR-72HR	78.25	947932.7	848825.3	99107.4	0.0	0.00
25YR-72HR	78.50	947932.7	849126.0	98806.7	0.0	0.00
25YR-72HR	78.75	947932.7	849426.9	98505.7	0.0	0.00
25YR-72HR	79.00	947932.7	849728.8	98203.9	0.0	0.00
25YR-72HR	79.25	947932.7	850032.1	97900.6	0.0	0.00
25YR-72HR	79.50	947932.7	850337.7	97595.0	0.0	0.00
25YR-72HR	79.75	947932.7	850646.1	97286.6	0.0	0.00
25YR-72HR	80.00	947932.7	850958.0	96974.7	0.0	0.00
25YR-72HR	80.25	947932.7	851273.8	96658.9	0.0	0.00
25YR-72HR	80.50	947932.7	851594.4	96338.3	0.0	0.00
25YR-72HR	80.75	947932.7	851920.4	96012.2	0.0	0.00
25YR-72HR	81.00	947932.7	852252.7	95680.0	0.0	0.00
25YR-72HR	81.25	947932.7	852592.0	95340.6	0.0	0.00
25YR-72HR	81.50	947932.7	852939.7	94993.0	0.0	0.00
25YR-72HR	81.75	947932.7	853297.3	94635.4	0.0	0.00
25YR-72HR	82.00	947932.7	853667.4	94265.2	0.0	0.00
25YR-72HR	82.25	947932.7	854053.5	93879.2	0.0	0.00
25YR-72HR	82.50	947932.7	854456.0	93476.7	0.0	0.00
25YR-72HR	82.75	947932.7	854876.2	93056.5	0.0	0.00
25YR-72HR	83.00	947932.7	855315.9	92616.8	0.0	0.00
25YR-72HR	83.25	947932.7	855775.0	92157.7	0.0	0.00
25YR-72HR	83.50	947932.7	856252.8	91679.9	0.0	0.00
25YR-72HR	83.75	947932.7	856748.6	91184.1	0.0	0.00
25YR-72HR	84.00	947932.7	857261.8	90670.9	0.0	0.00
25YR-72HR	84.25	947932.7	857792.4	90140.3	0.0	0.00
25YR-72HR	84.50	947932.7	858338.9	89593.8	0.0	0.00
25YR-72HR	84.75	947932.7	858900.7	89032.0	0.0	0.00
25YR-72HR	85.00	947932.7	859477.4	88455.3	0.0	0.00
25YR-72HR	85.25	947932.7	860068.4	87864.3	0.0	0.00
25YR-72HR	85.50	947932.7	860673.1	87259.6	0.0	0.00
25YR-72HR	85.75	947932.7	861291.0	86641.7	0.0	0.00
25YR-72HR	86.00	947932.7	861921.6	86011.1	0.0	0.00
25YR-72HR	86.25	947932.7	862564.5	85368.2	0.0	0.00
25YR-72HR	86.50	947932.7	863219.1	84713.6	0.0	0.00
25YR-72HR	86.75	947932.7	863885.1	84047.6	0.0	0.00
25YR-72HR	87.00	947932.7	864561.9	83370.8	0.0	0.00
25YR-72HR	87.25	947932.7	865249.3	82683.4	0.0	0.00
25YR-72HR	87.50	947932.7	865946.7	81986.0	0.0	0.00
25YR-72HR	87.75	947932.7	866653.8	81278.9	0.0	0.00
25YR-72HR	88.00	947932.7	867370.2	80562.5	0.0	0.00
25YR-72HR	88.25	947932.7	868095.6	79837.1	0.0	0.00
25YR-72HR	88.50	947932.7	868828.6	79104.1	0.0	0.00
25YR-72HR	88.75	947932.7	869569.3	78363.4	0.0	0.00
25YR-72HR	89.00	947932.7	870318.2	77614.5	0.0	0.00
25YR-72HR	89.25	947932.7	871074.9	76857.7	0.0	0.00
25YR-72HR	89.50	947932.7	871839.1	76093.6	0.0	0.00
25YR-72HR	89.75	947932.7	872610.4	75322.3	0.0	0.00
25YR-72HR	90.00	947932.7	873388.5	74544.2	0.0	0.00
25YR-72HR	90.25	947932.7	874173.2	73759.5	0.0	0.00
25YR-72HR	90.50	947932.7	874964.1	72968.6	0.0	0.00
25YR-72HR	90.75	947932.7	875761.1	72171.6	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
25YR-72HR	91.00	947932.7	876564.0	71368.7	0.0	0.00
25YR-72HR	91.25	947932.7	877372.4	70560.3	0.0	0.00
25YR-72HR	91.50	947932.7	878186.1	69746.6	0.0	0.00
25YR-72HR	91.75	947932.7	879005.0	68927.7	0.0	0.00
25YR-72HR	92.00	947932.7	879828.7	68103.9	0.0	0.00
25YR-72HR	92.25	947932.7	880657.2	67275.5	0.0	0.00
25YR-72HR	92.50	947932.7	881490.2	66442.5	0.0	0.00
25YR-72HR	92.75	947932.7	882327.5	65605.2	0.0	0.00
25YR-72HR	93.00	947932.7	883168.9	64763.8	0.0	0.00
25YR-72HR	93.25	947932.7	884014.3	63918.4	0.0	0.00
25YR-72HR	93.50	947932.7	884863.5	63069.2	0.0	0.00
25YR-72HR	93.75	947932.7	885716.3	62216.4	0.0	0.00
25YR-72HR	94.00	947932.7	886572.6	61360.1	0.0	0.00
25YR-72HR	94.25	947932.7	887432.1	60500.6	0.0	0.00
25YR-72HR	94.50	947932.7	888294.9	59637.8	0.0	0.00
25YR-72HR	94.75	947932.7	889160.6	58772.1	0.0	0.00
25YR-72HR	95.00	947932.7	890029.2	57903.5	0.0	0.00
25YR-72HR	95.25	947932.7	890900.5	57032.1	0.0	0.00
25YR-72HR	95.50	947932.7	891774.5	56158.2	0.0	0.00
25YR-72HR	95.75	947932.7	892650.9	55281.8	0.0	0.00
25YR-72HR	96.00	947932.7	893529.1	54403.6	0.0	0.00

APPENDIX H
Post-Development Condition – FPID 441830—52-01 & 441831-1-52-01
Curve Number Calcs
Rating Curve Calcs
Ad-ICPR Report

Basin 15_FRONTAGE

CN CALCULATIONS -POST-DEVELOPMENT CONDITIONS - FRONTAGE ROAD - BASIN 15

SUB-BASIN	TOTAL AREA (AC)	PERVIOUS AREA (AC)	PERVIOUS CN	IMPERVIOUS AREA (AC)	IMPERVIOUS CN	COMPOSITE CN
15FW-01	0.07	0.04	61	0.03	96	76.0
15FW-02	0.03	0.02	61	0.01	96	72.7
TOTAL AREA	0.1	0.06		0.04		

Average Hydraulic Conductivity

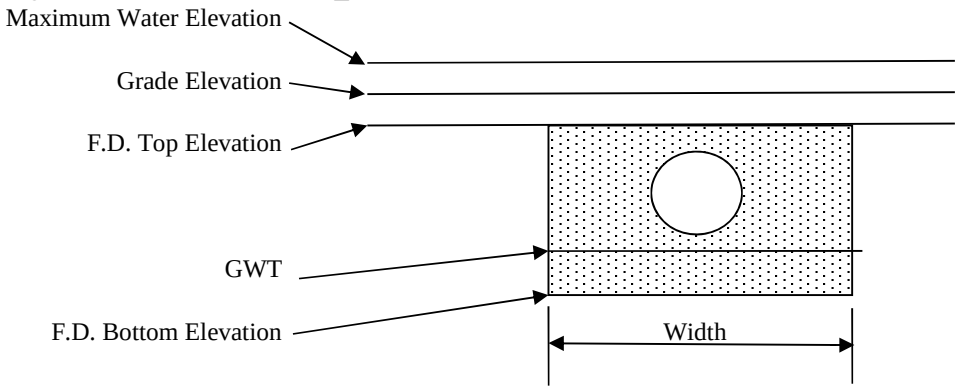
Basin B-15		
Percolation Test	P-27	P-28
Average Flow to 10 ft. depth (gpm)	0.10	49.82
Depth to Water Table (ft)	1.90	3.40
Head Maintained (ft)	0.90	2.40
Borehole Diameter (ft)	0.604	0.604
Borehole Depth (ft)	10.00	10.00
Du (ft)	0.90	2.40
Average Flow (cfs)	0.0002	0.1110
Ds (ft)	8.10	6.60
Hydraulic Conductivity K (cfs/ft2-ft head)	1.48E-05	3.06E-03
Average Hydraulic Conductivity K	**1.54E-03**	

Made by: _____ _____

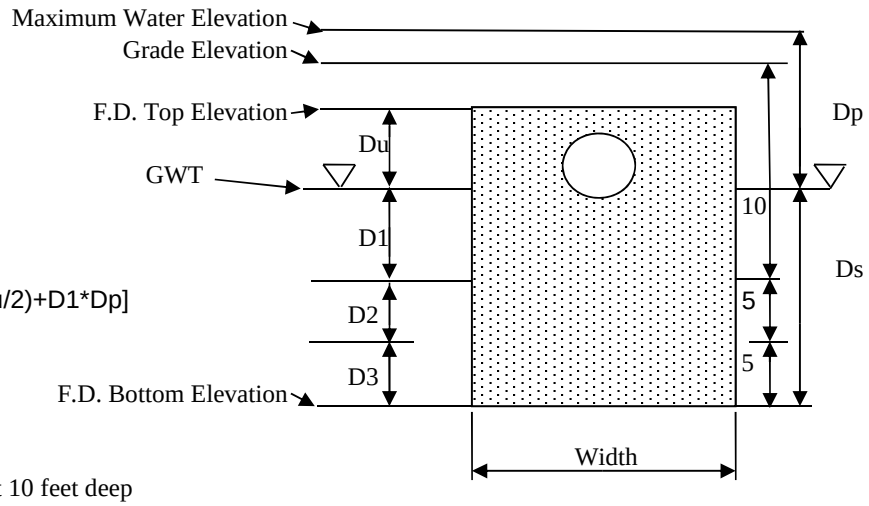
Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-15



Maximum Water Elevation =	**5.45**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**4.45**	ft.NAVD	
F.D.Top Elevation =	**3.90**	ft.NAVD	
Ground Water Table =	**1.45**	ft.NAVD	
F.D. Bottom Elevation =	**-11.54**	ft.NAVD	
Width =	**4.50**	feet.	
Pipe Diameter =	**24**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**1.54E-03**	cfs/ft^2-ft head	(Ave. P-27,P-28)
Hydraulic Conductivity K15 =	**1.54E-03**	cfs/ft^2-ft head	(Ave. P-27,P-28)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____

Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-15

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs/ft)	(cfs/ft)
1.45	0.000	0.000
2.20	0.026	0.000
3.90	0.107	0.076
5.45	0.181	0.150

Rating Curve (Q)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs)	(cfs)
1.45	0.00	0.00
2.20	0.03	0.00
3.90	0.11	0.08
5.45	0.18	0.15

Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

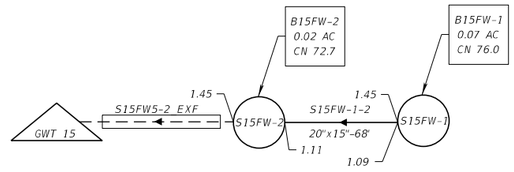
Rating Curve Adjusted (Q)

Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.45	1.45	0.00
1.45	2.20	0.03
1.45	3.90	0.10
1.45	5.45	0.10
2.20	2.20	0.00
2.20	3.90	0.08
2.20	5.45	0.10

SUMMARY OF MAX STAGE - PROPOSED CONDITIONS - BASIN 15_FRONAGE

NODE	STORM EVENT						WARNING STAGE (FT)
	10YR-1HR	10YR-8HR	10YR-24HR	100YR-1HR	100YR-24HR	100YR-8HR	
S15FW-1	1.89	2.37	2.22	2.29	2.25	2.69	5.07
S15FW-2	1.9	2.37	2.22	2.29	2.25	2.69	5.4

POST-DEVELOPMENT CONDITIONS



LEGEND	
B16-3 0.81 AC CN 96	CONTRIBUTING BASIN BASIN NAME BASIN AREA CURVE NUMBER
S16-1	NODE NAME
OFFSITE_LAKE	BOUNDARY NODE WITH CONSTANT TAILWATER
GWT 1-5	BOUNDARY NODE WITH VARIABLE TAILWATER
S16-14_S16-15 18"-37' (-) 0.85 (-) 1.95	PIPE LINK WITH (QUANTITY)SIZE-LENGTH INVERT ELEVATIONS
EX2-1_WEIR	WEIR LINK
S16-12_EXF	RATING CURVE LINK
S16-15_S16-17 24"x38"-126' 0.64 0.64	EXFILTRATION TRENCH LINK WITH LENGTH AND INVERT ELEVATIONS

PROPOSED DESIGN

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01 441830-1-52-01 441831-1-52-01

NODAL DIAGRAM
BASIN 15

SHEET NO.

SR-826 / PALMETTO EXPRESSWAY IMPROVEMENTS - BASIN 15 - FRONTAGE ROAD
POST-DEVELOPMENT CONDITIONS
NODE MAX REPORT

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
GWT_15	Basin 15	100YR-1HR	0.00	1.45	99.00	0.0000	0	0.88	0.34	0.00	0.00
S15FW-1	Basin 15	100YR-1HR	0.88	2.29	5.07	0.0039	138	0.68	0.32	0.64	0.60
S15FW-2	Basin 15	100YR-1HR	0.88	2.29	5.40	0.0050	140	0.64	0.72	0.88	0.34
GWT_15	Basin 15	100YR-24HR	24.00	2.20	99.00	-0.0002	0	12.07	0.11	0.00	0.00
S15FW-1	Basin 15	100YR-24HR	21.09	2.25	5.07	0.0049	145	12.00	0.08	17.23	0.78
S15FW-2	Basin 15	100YR-24HR	21.09	2.25	5.40	-0.0050	147	17.23	0.79	12.07	0.11
GWT_15	Basin 15	100YR-8HR	8.00	2.20	99.00	-0.0005	0	4.07	0.31	0.00	0.00
S15FW-1	Basin 15	100YR-8HR	4.08	2.69	5.07	-0.0038	116	4.00	0.24	0.00	0.00
S15FW-2	Basin 15	100YR-8HR	4.08	2.69	5.40	0.0039	116	4.03	0.01	4.07	0.31
GWT_15	Basin 15	10YR-1HR	0.00	1.45	99.00	0.0000	0	0.90	0.18	0.00	0.00
S15FW-1	Basin 15	10YR-1HR	0.90	1.89	5.07	-0.0071	168	0.70	0.18	0.00	0.00
S15FW-2	Basin 15	10YR-1HR	0.90	1.90	5.40	0.0071	168	0.29	0.00	0.90	0.18
GWT_15	Basin 15	10YR-24HR	24.00	2.20	99.00	-0.0002	0	12.09	0.06	0.00	0.00
S15FW-1	Basin 15	10YR-24HR	22.08	2.22	5.07	0.0049	149	12.00	0.05	18.62	0.76
S15FW-2	Basin 15	10YR-24HR	22.08	2.22	5.40	-0.0050	151	18.62	0.77	12.09	0.06
GWT_15	Basin 15	10YR-8HR	8.00	2.20	99.00	-0.0005	0	4.10	0.17	0.00	0.00
S15FW-1	Basin 15	10YR-8HR	4.12	2.37	5.07	-0.0038	116	4.00	0.14	0.00	0.00
S15FW-2	Basin 15	10YR-8HR	4.12	2.37	5.40	0.0039	116	0.00	0.00	4.10	0.17

Basins

Name: B15FW-1 Node: S15FW-1 Status: Onsite
Group: Basin 15 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.070 Time Shift(hrs): 0.00
Curve Number: 76.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B15FW-2 Node: S15FW-2 Status: Onsite
Group: Basin 15 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.030 Time Shift(hrs): 0.00
Curve Number: 72.70 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Nodes

Name: GWT_15 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	1.450
108.00	1.450

Name: S15FW-1 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 5.070
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.070	0.0004

Name: S15FW-2 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 15 Warn Stage(ft): 5.400
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.400	0.0004

Operating Tables

Name: E_OPT_15C Group: Basin 15
Type: Rating Curve

Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.450	1.45	0.00
1.450	2.20	0.03
1.450	3.90	0.10
1.450	5.45	0.10
2.200	2.20	0.00
2.200	3.90	0.08
2.200	5.45	0.10

Pipes

Name: S15FW-1-2 | From Node: S15FW-1 | Length(ft): 68.00
Group: Basin 15 | To Node: S15FW-2 | Count: 1
Friction Equation: Automatic
Solution Algorithm: Most Restrictive
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.50
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dn
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Horz Ellipse	Horz Ellipse
Span(in):	20.00	20.00
Rise(in):	15.00	15.00
Invert(ft):	1.090	1.110
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

Downstream FHWA Inlet Edge Description:
Horizontal Ellipse Concrete: Square edge with headwall

Rating Curves

Name: S15FW-2_EXF | From Node: S15FW-2 | Count: 10
Group: Basin 15 | To Node: GWT_15 | Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_15C	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Hydrology Simulations

Name: 100YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 5.00

Time(hrs)	Print Inc(min)
1.000	1.00
1.330	1.00

Name: 100YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 13.44

Time(hrs)	Print Inc(min)
8.000	5.00
16.000	1.00
24.000	5.00
24.330	5.00

Name: 100YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 9.60

Time(hrs)	Print Inc(min)
2.000	5.00
6.000	1.00
8.000	5.00
8.330	5.00

Name: 10YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 3.50

Time(hrs)	Print Inc(min)
1.000	1.00
1.330	1.00

Name: 10YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 8.88

Time(hrs)	Print Inc(min)
8.000	5.00
16.000	1.00
24.000	5.00
24.330	5.00

Name: 10YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 6.40

Time(hrs)	Print Inc(min)
2.000	5.00
6.000	1.00
8.000	5.00
8.330	5.00

Name: 25YR-72HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Sfwmd72
Rainfall Amount(in): 14.00

Time(hrs)	Print Inc(min)
48.000	15.00
56.000	5.00
64.000	1.00
72.000	5.00
96.000	5.00

==========
==== Routing Simulations ==========
==========

Name: 100YR-1HR Hydrology Sim: 100YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 25.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
1.000	1.000
25.000	15.000

Group	Run
Basin 15	Yes

Name: 100YR-24HR Hydrology Sim: 100YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 48.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 24HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
48.000	15.000

Group	Run
Basin 15	Yes

Name: 100YR-8HR Hydrology Sim: 100YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

```
     Execute: Yes         Restart: No            Patch: No
 Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
   Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 36.00
    Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
       Boundary Stages: 8HR                     Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           5.000
6.000           1.000
8.000           5.000
36.000          15.000

Group           Run
--------------- -----
Basin 15        Yes


-------------------------------------------------------------------------------------------------------
         Name: 10YR-1HR            Hydrology Sim: 10YR-1HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

     Execute: Yes         Restart: No            Patch: No
 Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.01000
   Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 25.00
    Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
       Boundary Stages:                         Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
1.000           1.000
25.000          15.000

Group           Run
--------------- -----
Basin 15        Yes


-------------------------------------------------------------------------------------------------------
         Name: 10YR-24HR           Hydrology Sim: 10YR-24HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

     Execute: Yes         Restart: No            Patch: No
 Alternative: No

       Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
   Time Step Optimizer: 10.000
       Start Time(hrs): 0.000                    End Time(hrs): 48.00
    Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
       Boundary Stages: 24HR                    Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.000
16.000          1.000
24.000          5.000
48.000          15.000

Group           Run
--------------- -----
Basin 15        Yes
```

```
-------------------------------------------------------------------------------------------------
         Name: 10YR-8HR            Hydrology Sim: 10YR-8HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 36.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages: 8HR                     Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           5.000
6.000           1.000
8.000           5.000
36.000          15.000

Group           Run
--------------- -----
Basin 15        Yes


-------------------------------------------------------------------------------------------------
         Name: 25YR-72HR           Hydrology Sim: 25YR-72HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 96.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages: 72HR                    Boundary Flows:



Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.000
16.000          1.000
24.000          5.000
96.000          15.000

Group           Run
--------------- -----
Basin 15        Yes


=================================================================================================
==== Boundary Conditions ========================================================================
=================================================================================================

      Name: 8HR                  Node: GWT_15               Type: Stage

      Time(hrs)       Stage(ft)
--------------- ---------------
          0.000           1.450
          1.000           1.470
          2.000           1.550
          3.000           1.660
          4.000           1.980
          5.000           2.100
          6.000           2.140
          7.000           2.180
          8.000           2.200
         12.000           1.450
         36.000           1.450
```

Name: 24HR Node: GWT_15 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.450
1.000	1.460
2.000	1.470
3.000	1.500
4.000	1.520
5.000	1.540
6.000	1.570
7.000	1.600
8.000	1.630
9.000	1.680
10.000	1.720
11.000	1.780
12.000	1.860
13.000	1.910
14.000	1.950
15.000	2.000
16.000	2.040
17.000	2.070
18.000	2.100
19.000	2.130
20.000	2.150
21.000	2.170
22.000	2.190
23.000	2.190
24.000	2.200
36.000	1.450
48.000	1.450

Name: 72HR Node: GWT_15 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.450
24.000	1.530
36.000	1.590
48.000	1.650
49.000	1.650
50.000	1.660
51.000	1.670
52.000	1.670
53.000	1.680
54.000	1.690
55.000	1.710
56.000	1.720
57.000	1.740
57.500	1.750
58.000	1.770
58.500	1.780
59.000	1.800
59.500	1.820
60.000	2.010
60.500	2.050
61.000	2.070
61.500	2.090
62.000	2.100
62.500	2.110
63.000	2.120
64.000	2.130
65.000	2.140
66.000	2.150
68.000	2.170
70.000	2.190
72.000	2.200
96.000	1.450

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	0.00	0.0	0.0	0.0	0.0	0.00
100YR-24HR	0.08	0.0	0.0	-0.0	0.0	-0.00
100YR-24HR	0.17	0.0	0.0	-0.0	0.0	-0.00
100YR-24HR	0.25	0.0	0.0	-0.0	0.0	-0.00
100YR-24HR	0.33	0.0	-0.0	0.0	0.0	0.00
100YR-24HR	0.42	0.0	-0.1	0.1	0.0	0.00
100YR-24HR	0.50	0.0	-0.2	0.2	0.0	0.00
100YR-24HR	0.59	0.0	-0.3	0.3	0.0	0.00
100YR-24HR	0.67	0.0	-0.5	0.5	0.0	0.00
100YR-24HR	0.75	0.0	-0.7	0.7	0.0	0.00
100YR-24HR	0.83	0.0	-1.0	1.0	0.0	0.00
100YR-24HR	0.92	0.0	-1.6	1.6	-0.0	-0.00
100YR-24HR	1.00	0.0	-2.1	2.1	-0.0	-0.00
100YR-24HR	1.08	0.0	-2.5	2.5	-0.0	-0.00
100YR-24HR	1.17	0.0	-2.9	2.9	-0.0	-0.00
100YR-24HR	1.25	0.0	-3.2	3.2	-0.0	-0.00
100YR-24HR	1.33	0.0	-3.6	3.6	-0.0	-0.00
100YR-24HR	1.42	0.0	-3.9	3.9	-0.0	-0.00
100YR-24HR	1.50	0.0	-4.2	4.2	-0.0	-0.00
100YR-24HR	1.58	0.0	-4.5	4.5	-0.0	-0.00
100YR-24HR	1.67	0.0	-4.8	4.8	-0.0	-0.00
100YR-24HR	1.75	0.0	-5.0	5.0	-0.0	-0.00
100YR-24HR	1.83	0.0	-5.3	5.3	-0.0	-0.00
100YR-24HR	1.92	0.0	-5.6	5.6	-0.0	-0.00
100YR-24HR	2.00	0.0	-5.9	5.9	-0.0	-0.00
100YR-24HR	2.09	0.0	-6.3	6.3	-0.0	-0.00
100YR-24HR	2.17	0.0	-6.8	6.8	-0.0	-0.00
100YR-24HR	2.25	0.0	-7.4	7.4	-0.0	-0.00
100YR-24HR	2.34	0.0	-8.0	8.0	-0.0	-0.00
100YR-24HR	2.42	0.0	-8.8	8.8	-0.0	-0.00
100YR-24HR	2.50	0.0	-9.5	9.5	-0.0	-0.00
100YR-24HR	2.58	0.0	-10.3	10.3	-0.0	-0.00
100YR-24HR	2.67	0.0	-11.1	11.1	-0.0	-0.00
100YR-24HR	2.75	0.1	-11.9	11.9	-0.0	-0.00
100YR-24HR	2.83	0.2	-12.7	12.8	-0.0	-0.00
100YR-24HR	2.92	0.4	-13.4	13.8	-0.0	-0.00
100YR-24HR	3.00	0.8	-14.1	14.9	-0.0	-0.00
100YR-24HR	3.08	1.3	-14.7	15.9	-0.0	-0.00
100YR-24HR	3.17	2.0	-15.0	17.0	-0.0	-0.00
100YR-24HR	3.25	2.9	-15.2	18.1	-0.0	-0.00
100YR-24HR	3.34	3.9	-15.2	19.2	-0.0	-0.00
100YR-24HR	3.42	5.2	-15.0	20.2	-0.0	-0.00
100YR-24HR	3.50	6.7	-14.7	21.3	-0.0	-0.00
100YR-24HR	3.59	8.3	-14.1	22.4	-0.0	-0.00
100YR-24HR	3.67	10.2	-13.3	23.5	-0.0	-0.00
100YR-24HR	3.75	12.2	-12.4	24.6	-0.0	-0.00
100YR-24HR	3.83	14.4	-11.2	25.7	-0.0	-0.00
100YR-24HR	3.92	16.8	-9.9	26.8	-0.0	-0.00
100YR-24HR	4.00	19.4	-8.4	27.8	-0.0	-0.00
100YR-24HR	4.09	22.2	-6.7	28.9	-0.0	-0.00
100YR-24HR	4.17	25.1	-4.9	29.9	-0.0	-0.00
100YR-24HR	4.25	28.1	-2.8	31.0	-0.0	-0.00
100YR-24HR	4.33	31.4	-0.6	32.0	-0.0	-0.00
100YR-24HR	4.42	34.8	1.8	33.0	-0.0	-0.00
100YR-24HR	4.50	38.4	4.3	34.0	-0.0	-0.00
100YR-24HR	4.59	42.1	7.1	35.0	-0.0	-0.00
100YR-24HR	4.67	45.8	9.8	36.0	-0.0	-0.00
100YR-24HR	4.75	49.8	12.9	36.9	-0.0	-0.00
100YR-24HR	4.83	53.9	16.0	37.9	-0.0	-0.00
100YR-24HR	4.92	58.2	19.3	38.8	-0.0	-0.00
100YR-24HR	5.00	62.5	22.8	39.8	-0.0	-0.00
100YR-24HR	5.08	67.1	26.3	40.8	-0.0	-0.00
100YR-24HR	5.17	72.1	29.9	42.2	-0.0	-0.00
100YR-24HR	5.25	77.8	33.9	43.9	-0.0	-0.00
100YR-24HR	5.33	83.8	38.1	45.7	-0.0	-0.00
100YR-24HR	5.42	90.1	42.7	47.4	-0.0	-0.00
100YR-24HR	5.50	96.8	47.7	49.1	-0.0	-0.00
100YR-24HR	5.58	103.6	52.8	50.8	-0.0	-0.00
100YR-24HR	5.67	110.7	58.3	52.4	-0.0	-0.00
100YR-24HR	5.75	118.1	64.2	54.0	-0.0	-0.00
100YR-24HR	5.83	125.6	70.2	55.5	-0.0	-0.00
100YR-24HR	5.92	133.3	76.4	56.9	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	6.00	141.4	83.0	58.4	-0.0	-0.00
100YR-24HR	6.08	149.4	89.6	59.8	-0.0	-0.00
100YR-24HR	6.17	157.5	96.5	61.1	-0.0	-0.00
100YR-24HR	6.25	165.9	103.5	62.4	-0.0	-0.00
100YR-24HR	6.33	174.4	110.7	63.7	-0.0	-0.00
100YR-24HR	6.42	183.1	118.2	65.0	-0.0	-0.00
100YR-24HR	6.50	191.9	125.7	66.2	-0.0	-0.00
100YR-24HR	6.58	200.9	133.4	67.4	-0.0	-0.00
100YR-24HR	6.67	209.9	141.2	68.7	-0.0	-0.00
100YR-24HR	6.75	219.1	149.2	69.9	-0.0	-0.00
100YR-24HR	6.83	228.3	157.2	71.1	-0.0	-0.00
100YR-24HR	6.92	237.7	165.5	72.2	-0.0	-0.00
100YR-24HR	7.00	247.3	173.9	73.4	-0.0	-0.00
100YR-24HR	7.08	256.9	182.3	74.6	-0.0	-0.00
100YR-24HR	7.17	266.7	191.0	75.8	-0.0	-0.00
100YR-24HR	7.25	276.6	199.7	76.9	-0.0	-0.00
100YR-24HR	7.33	286.7	208.6	78.1	-0.0	-0.00
100YR-24HR	7.42	296.8	217.5	79.2	0.0	0.00
100YR-24HR	7.50	307.0	226.6	80.4	0.0	0.00
100YR-24HR	7.58	317.3	235.8	81.5	0.0	0.00
100YR-24HR	7.67	327.6	245.0	82.6	0.0	0.00
100YR-24HR	7.75	338.1	254.4	83.7	0.0	0.00
100YR-24HR	7.83	348.7	263.9	84.8	0.0	0.00
100YR-24HR	7.92	359.3	273.4	85.9	0.0	0.00
100YR-24HR	8.00	370.1	283.1	87.0	0.0	0.00
100YR-24HR	8.08	381.4	292.9	88.5	0.0	0.00
100YR-24HR	8.10	383.6	294.8	88.9	0.0	0.00
100YR-24HR	8.12	386.1	296.7	89.3	0.0	0.00
100YR-24HR	8.13	388.6	298.8	89.9	0.0	0.00
100YR-24HR	8.15	391.2	300.8	90.5	0.0	0.00
100YR-24HR	8.17	393.9	302.8	91.1	0.0	0.00
100YR-24HR	8.18	396.4	304.7	91.7	-0.0	-0.00
100YR-24HR	8.20	399.2	306.9	92.3	0.0	0.00
100YR-24HR	8.22	402.1	309.1	93.1	-0.0	-0.00
100YR-24HR	8.23	404.9	311.1	93.7	0.0	0.00
100YR-24HR	8.25	407.8	313.4	94.5	0.0	0.00
100YR-24HR	8.27	410.6	315.5	95.1	0.0	0.00
100YR-24HR	8.28	413.6	317.8	95.9	-0.0	-0.00
100YR-24HR	8.30	416.6	320.0	96.6	0.0	0.00
100YR-24HR	8.32	419.5	322.2	97.2	-0.0	-0.00
100YR-24HR	8.33	422.6	324.6	98.0	-0.0	-0.00
100YR-24HR	8.35	425.8	327.1	98.7	-0.0	-0.00
100YR-24HR	8.37	428.7	329.4	99.4	-0.0	-0.00
100YR-24HR	8.38	431.8	331.7	100.1	-0.0	-0.00
100YR-24HR	8.40	435.0	334.3	100.8	-0.0	-0.00
100YR-24HR	8.42	438.1	336.6	101.4	-0.0	-0.00
100YR-24HR	8.43	441.3	339.2	102.1	-0.0	-0.00
100YR-24HR	8.45	444.4	341.7	102.7	-0.0	-0.00
100YR-24HR	8.47	447.8	344.4	103.4	-0.0	-0.00
100YR-24HR	8.48	450.9	346.9	104.1	-0.0	-0.00
100YR-24HR	8.50	454.3	349.6	104.7	-0.0	-0.00
100YR-24HR	8.52	457.4	352.1	105.3	-0.0	-0.00
100YR-24HR	8.53	460.9	354.9	106.0	-0.0	-0.00
100YR-24HR	8.55	464.1	357.5	106.5	-0.0	-0.00
100YR-24HR	8.57	467.5	360.3	107.2	-0.0	-0.00
100YR-24HR	8.58	470.7	363.0	107.7	-0.0	-0.00
100YR-24HR	8.60	474.2	365.8	108.3	-0.0	-0.00
100YR-24HR	8.62	477.5	368.6	108.9	-0.0	-0.00
100YR-24HR	8.63	480.9	371.4	109.5	-0.0	-0.00
100YR-24HR	8.65	484.4	374.3	110.1	-0.0	-0.00
100YR-24HR	8.67	487.6	377.0	110.6	-0.0	-0.00
100YR-24HR	8.68	491.0	379.9	111.1	-0.0	-0.00
100YR-24HR	8.70	494.5	382.8	111.7	-0.0	-0.00
100YR-24HR	8.72	498.0	385.8	112.2	-0.0	-0.00
100YR-24HR	8.73	501.3	388.6	112.7	-0.0	-0.00
100YR-24HR	8.75	504.8	391.6	113.2	-0.0	-0.00
100YR-24HR	8.77	508.3	394.6	113.8	-0.0	-0.00
100YR-24HR	8.78	511.9	397.6	114.3	-0.0	-0.00
100YR-24HR	8.80	515.4	400.7	114.8	-0.0	-0.00
100YR-24HR	8.82	518.8	403.5	115.2	-0.0	-0.00
100YR-24HR	8.83	522.3	406.6	115.7	-0.0	-0.00
100YR-24HR	8.85	525.9	409.7	116.2	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	8.87	529.5	412.8	116.7	-0.0	-0.00
100YR-24HR	8.88	532.8	415.7	117.1	-0.0	-0.00
100YR-24HR	8.90	536.4	418.8	117.6	-0.0	-0.00
100YR-24HR	8.92	540.0	422.0	118.0	-0.0	-0.00
100YR-24HR	8.93	543.6	425.1	118.5	-0.0	-0.00
100YR-24HR	8.95	547.2	428.3	118.9	-0.0	-0.00
100YR-24HR	8.97	550.6	431.3	119.3	-0.0	-0.00
100YR-24HR	8.98	554.3	434.5	119.8	-0.0	-0.00
100YR-24HR	9.00	557.9	437.7	120.2	-0.0	-0.00
100YR-24HR	9.02	561.5	440.9	120.6	-0.0	-0.00
100YR-24HR	9.03	564.9	443.9	121.0	-0.0	-0.00
100YR-24HR	9.05	568.6	447.2	121.4	-0.0	-0.00
100YR-24HR	9.07	572.2	450.4	121.8	-0.0	-0.00
100YR-24HR	9.08	575.9	453.7	122.2	-0.0	-0.00
100YR-24HR	9.10	579.6	457.0	122.6	-0.0	-0.00
100YR-24HR	9.12	583.0	460.1	122.9	-0.0	-0.00
100YR-24HR	9.13	586.7	463.4	123.3	-0.0	-0.00
100YR-24HR	9.15	590.4	466.7	123.6	-0.0	-0.00
100YR-24HR	9.17	594.0	470.0	124.0	-0.0	-0.00
100YR-24HR	9.18	597.5	473.2	124.3	-0.0	-0.00
100YR-24HR	9.20	601.2	476.5	124.7	-0.0	-0.00
100YR-24HR	9.22	604.9	479.9	125.0	-0.0	-0.00
100YR-24HR	9.23	608.6	483.2	125.4	-0.0	-0.00
100YR-24HR	9.25	612.3	486.6	125.7	-0.0	-0.00
100YR-24HR	9.27	615.8	489.8	126.0	-0.0	-0.00
100YR-24HR	9.28	619.5	493.2	126.4	-0.0	-0.00
100YR-24HR	9.30	623.2	496.6	126.7	-0.0	-0.00
100YR-24HR	9.32	627.0	500.0	127.0	-0.0	-0.00
100YR-24HR	9.33	630.5	503.2	127.3	-0.0	-0.00
100YR-24HR	9.35	634.2	506.6	127.6	-0.0	-0.00
100YR-24HR	9.37	637.8	509.9	127.9	-0.0	-0.00
100YR-24HR	9.38	641.7	513.4	128.3	-0.0	-0.00
100YR-24HR	9.40	645.4	516.8	128.6	-0.0	-0.00
100YR-24HR	9.42	649.1	520.2	128.9	-0.0	-0.00
100YR-24HR	9.43	652.8	523.6	129.2	-0.0	-0.00
100YR-24HR	9.45	656.4	527.0	129.5	-0.0	-0.00
100YR-24HR	9.47	660.2	530.4	129.8	-0.0	-0.00
100YR-24HR	9.48	663.9	533.8	130.1	-0.0	-0.00
100YR-24HR	9.50	667.6	537.2	130.3	-0.0	-0.00
100YR-24HR	9.52	671.3	540.6	130.6	-0.0	-0.00
100YR-24HR	9.53	675.0	544.1	130.9	-0.0	-0.00
100YR-24HR	9.55	678.9	547.7	131.2	-0.0	-0.00
100YR-24HR	9.57	682.7	551.1	131.5	-0.0	-0.00
100YR-24HR	9.58	686.4	554.6	131.8	-0.0	-0.00
100YR-24HR	9.60	690.1	558.0	132.1	-0.0	-0.00
100YR-24HR	9.62	693.8	561.5	132.4	-0.0	-0.00
100YR-24HR	9.63	697.6	564.9	132.7	-0.0	-0.00
100YR-24HR	9.65	701.3	568.4	133.0	-0.0	-0.00
100YR-24HR	9.67	705.1	571.9	133.2	-0.0	-0.00
100YR-24HR	9.68	708.8	575.3	133.5	-0.0	-0.00
100YR-24HR	9.70	712.6	578.8	133.8	-0.0	-0.00
100YR-24HR	9.72	716.6	582.5	134.1	-0.0	-0.00
100YR-24HR	9.73	720.2	585.8	134.4	-0.0	-0.00
100YR-24HR	9.75	724.1	589.4	134.7	-0.0	-0.00
100YR-24HR	9.77	727.9	593.0	135.0	-0.0	-0.00
100YR-24HR	9.78	731.7	596.4	135.2	-0.0	-0.00
100YR-24HR	9.80	735.5	600.0	135.5	-0.0	-0.00
100YR-24HR	9.82	739.2	603.4	135.8	-0.0	-0.00
100YR-24HR	9.83	743.1	607.0	136.1	-0.0	-0.00
100YR-24HR	9.85	746.8	610.5	136.3	-0.0	-0.00
100YR-24HR	9.87	750.7	614.0	136.6	-0.0	-0.00
100YR-24HR	9.88	754.4	617.5	136.9	-0.0	-0.00
100YR-24HR	9.90	758.3	621.1	137.2	-0.0	-0.00
100YR-24HR	9.92	762.3	624.8	137.5	-0.0	-0.00
100YR-24HR	9.93	766.1	628.4	137.7	-0.0	-0.00
100YR-24HR	9.95	769.9	631.9	138.0	-0.0	-0.00
100YR-24HR	9.97	773.7	635.5	138.3	-0.0	-0.00
100YR-24HR	9.98	777.6	639.0	138.6	-0.0	-0.00
100YR-24HR	10.00	781.4	642.6	138.8	-0.0	-0.00
100YR-24HR	10.02	785.3	646.1	139.1	-0.0	-0.00
100YR-24HR	10.03	789.1	649.7	139.4	-0.0	-0.00
100YR-24HR	10.05	793.0	653.3	139.8	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	10.07	796.9	656.8	140.1	-0.0	-0.00
100YR-24HR	10.08	800.9	660.4	140.6	-0.0	-0.00
100YR-24HR	10.10	805.2	664.1	141.1	-0.0	-0.00
100YR-24HR	10.12	809.4	667.7	141.7	-0.0	-0.00
100YR-24HR	10.13	813.6	671.3	142.3	-0.0	-0.00
100YR-24HR	10.15	817.9	675.0	143.0	-0.0	-0.00
100YR-24HR	10.17	822.3	678.6	143.7	-0.0	-0.00
100YR-24HR	10.18	826.8	682.3	144.4	-0.0	-0.00
100YR-24HR	10.20	831.2	686.0	145.2	-0.0	-0.00
100YR-24HR	10.22	835.8	689.8	146.0	-0.0	-0.00
100YR-24HR	10.23	840.4	693.6	146.8	-0.0	-0.00
100YR-24HR	10.25	845.3	697.6	147.7	-0.0	-0.00
100YR-24HR	10.27	849.9	701.4	148.5	-0.0	-0.00
100YR-24HR	10.28	854.8	705.4	149.4	-0.0	-0.00
100YR-24HR	10.30	859.5	709.3	150.2	-0.0	-0.00
100YR-24HR	10.32	864.5	713.4	151.0	-0.0	-0.00
100YR-24HR	10.33	869.2	717.4	151.8	-0.0	-0.00
100YR-24HR	10.35	874.0	721.4	152.6	-0.0	-0.00
100YR-24HR	10.37	879.1	725.6	153.5	-0.0	-0.00
100YR-24HR	10.38	883.9	729.7	154.3	-0.0	-0.00
100YR-24HR	10.40	889.0	734.0	155.1	-0.0	-0.00
100YR-24HR	10.42	893.9	738.1	155.8	-0.0	-0.00
100YR-24HR	10.43	899.1	742.5	156.6	-0.0	-0.00
100YR-24HR	10.45	904.0	746.7	157.4	-0.0	-0.00
100YR-24HR	10.47	909.3	751.1	158.1	-0.0	-0.00
100YR-24HR	10.48	914.2	755.4	158.9	-0.0	-0.00
100YR-24HR	10.50	919.5	759.9	159.6	-0.0	-0.00
100YR-24HR	10.52	924.5	764.2	160.3	-0.0	-0.00
100YR-24HR	10.53	929.8	768.8	161.0	-0.0	-0.00
100YR-24HR	10.55	934.8	773.1	161.7	-0.0	-0.00
100YR-24HR	10.57	940.2	777.8	162.4	-0.0	-0.00
100YR-24HR	10.58	945.3	782.2	163.1	-0.0	-0.00
100YR-24HR	10.60	950.6	786.9	163.7	-0.0	-0.00
100YR-24HR	10.62	955.7	791.4	164.4	-0.0	-0.00
100YR-24HR	10.63	961.2	796.1	165.0	-0.0	-0.00
100YR-24HR	10.65	966.3	800.6	165.7	-0.0	-0.00
100YR-24HR	10.67	971.4	805.2	166.3	-0.0	-0.00
100YR-24HR	10.68	976.9	810.0	166.9	-0.0	-0.00
100YR-24HR	10.70	982.1	814.6	167.5	-0.0	-0.00
100YR-24HR	10.72	987.5	819.4	168.1	-0.0	-0.00
100YR-24HR	10.73	992.7	824.1	168.7	-0.0	-0.00
100YR-24HR	10.75	998.2	829.0	169.3	-0.0	-0.00
100YR-24HR	10.77	1003.5	833.6	169.8	-0.0	-0.00
100YR-24HR	10.78	1009.0	838.6	170.4	-0.0	-0.00
100YR-24HR	10.80	1014.2	843.3	170.9	-0.0	-0.00
100YR-24HR	10.82	1019.7	848.2	171.5	-0.0	-0.00
100YR-24HR	10.83	1024.9	853.0	172.0	-0.0	-0.00
100YR-24HR	10.85	1030.4	857.9	172.5	-0.0	-0.00
100YR-24HR	10.87	1035.9	862.9	173.0	-0.0	-0.00
100YR-24HR	10.88	1041.2	867.7	173.5	-0.0	-0.00
100YR-24HR	10.90	1046.7	872.6	174.0	-0.0	-0.00
100YR-24HR	10.92	1052.2	877.7	174.5	0.0	0.00
100YR-24HR	10.93	1057.5	882.5	175.0	-0.0	-0.00
100YR-24HR	10.95	1063.0	887.5	175.5	-0.0	-0.00
100YR-24HR	10.97	1068.3	892.4	176.0	-0.0	-0.00
100YR-24HR	10.98	1073.9	897.4	176.4	-0.0	-0.00
100YR-24HR	11.00	1079.4	902.5	176.9	-0.0	-0.00
100YR-24HR	11.02	1084.8	907.4	177.4	-0.0	-0.00
100YR-24HR	11.03	1090.4	912.5	177.9	-0.0	-0.00
100YR-24HR	11.05	1095.9	917.5	178.4	-0.0	-0.00
100YR-24HR	11.07	1101.3	922.4	178.9	-0.0	-0.00
100YR-24HR	11.08	1107.1	927.6	179.5	-0.0	-0.00
100YR-24HR	11.10	1112.7	932.5	180.2	-0.0	-0.00
100YR-24HR	11.12	1118.6	937.6	180.9	-0.0	-0.00
100YR-24HR	11.13	1124.3	942.6	181.7	-0.0	-0.00
100YR-24HR	11.15	1130.4	947.8	182.6	-0.0	-0.00
100YR-24HR	11.17	1136.5	953.1	183.5	-0.0	-0.00
100YR-24HR	11.18	1142.7	958.4	184.4	-0.0	-0.00
100YR-24HR	11.20	1148.7	963.4	185.3	-0.0	-0.00
100YR-24HR	11.22	1155.0	968.8	186.3	-0.0	-0.00
100YR-24HR	11.23	1161.2	974.0	187.2	-0.0	-0.00
100YR-24HR	11.25	1167.6	979.4	188.2	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	11.27	1173.8	984.7	189.1	-0.0	-0.00
100YR-24HR	11.28	1180.3	990.2	190.1	-0.0	-0.00
100YR-24HR	11.30	1186.9	995.8	191.1	-0.0	-0.00
100YR-24HR	11.32	1193.2	1001.2	192.0	-0.0	-0.00
100YR-24HR	11.33	1199.8	1006.8	193.0	0.0	0.00
100YR-24HR	11.35	1206.4	1012.4	193.9	0.0	0.00
100YR-24HR	11.37	1212.9	1018.1	194.9	0.0	0.00
100YR-24HR	11.38	1219.5	1023.8	195.8	0.0	0.00
100YR-24HR	11.40	1226.2	1029.5	196.7	0.0	0.00
100YR-24HR	11.42	1232.8	1035.2	197.6	0.0	0.00
100YR-24HR	11.43	1239.8	1041.3	198.5	0.0	0.00
100YR-24HR	11.45	1246.5	1047.1	199.4	-0.0	-0.00
100YR-24HR	11.47	1253.2	1053.0	200.2	-0.0	-0.00
100YR-24HR	11.48	1259.9	1058.9	201.1	-0.0	-0.00
100YR-24HR	11.50	1266.7	1064.8	201.9	-0.0	-0.00
100YR-24HR	11.52	1273.4	1070.7	202.7	-0.0	-0.00
100YR-24HR	11.53	1280.2	1076.7	203.5	-0.0	-0.00
100YR-24HR	11.55	1287.1	1082.8	204.3	0.0	0.00
100YR-24HR	11.57	1293.9	1088.8	205.1	0.0	0.00
100YR-24HR	11.58	1300.7	1094.9	205.8	0.0	0.00
100YR-24HR	11.60	1307.6	1101.0	206.6	0.0	0.00
100YR-24HR	11.62	1314.8	1107.4	207.4	0.0	0.00
100YR-24HR	11.63	1321.7	1113.6	208.1	0.0	0.00
100YR-24HR	11.65	1328.6	1119.8	208.8	-0.0	-0.00
100YR-24HR	11.67	1335.5	1126.0	209.5	0.0	0.00
100YR-24HR	11.68	1342.5	1132.2	210.2	-0.0	-0.00
100YR-24HR	11.70	1349.4	1138.5	210.9	0.0	0.00
100YR-24HR	11.72	1356.4	1144.8	211.6	0.0	0.00
100YR-24HR	11.73	1363.4	1151.1	212.3	0.0	0.00
100YR-24HR	11.75	1370.4	1157.4	213.0	0.0	0.00
100YR-24HR	11.77	1377.4	1163.7	213.6	0.0	0.00
100YR-24HR	11.78	1384.4	1170.1	214.3	0.0	0.00
100YR-24HR	11.80	1391.7	1176.8	214.9	0.0	0.00
100YR-24HR	11.82	1398.7	1183.2	215.5	0.0	0.00
100YR-24HR	11.83	1405.8	1189.6	216.2	0.0	0.00
100YR-24HR	11.85	1412.8	1196.0	216.8	0.0	0.00
100YR-24HR	11.87	1419.8	1202.5	217.4	0.0	0.00
100YR-24HR	11.88	1426.9	1209.0	218.0	0.0	0.00
100YR-24HR	11.90	1434.0	1215.4	218.5	0.0	0.00
100YR-24HR	11.92	1441.0	1221.9	219.1	0.0	0.00
100YR-24HR	11.93	1448.2	1228.5	219.7	0.0	0.00
100YR-24HR	11.95	1455.2	1235.0	220.2	0.0	0.00
100YR-24HR	11.97	1462.3	1241.5	220.8	0.0	0.00
100YR-24HR	11.98	1469.6	1248.2	221.4	0.0	0.00
100YR-24HR	12.00	1476.6	1254.7	221.9	0.0	0.00
100YR-24HR	12.02	1483.7	1261.3	222.4	0.0	0.00
100YR-24HR	12.03	1491.0	1268.1	222.9	0.0	0.00
100YR-24HR	12.05	1498.0	1274.7	223.3	0.0	0.00
100YR-24HR	12.07	1504.9	1281.3	223.6	0.0	0.00
100YR-24HR	12.08	1511.8	1287.9	223.9	0.0	0.00
100YR-24HR	12.10	1518.7	1294.7	224.0	0.0	0.00
100YR-24HR	12.12	1525.3	1301.3	224.1	0.0	0.00
100YR-24HR	12.13	1531.8	1307.8	224.0	0.0	0.00
100YR-24HR	12.15	1538.4	1314.6	223.8	0.0	0.00
100YR-24HR	12.17	1544.7	1321.1	223.6	0.0	0.00
100YR-24HR	12.18	1550.8	1327.5	223.3	0.0	0.00
100YR-24HR	12.20	1556.9	1333.9	223.0	0.0	0.00
100YR-24HR	12.22	1563.1	1340.5	222.6	0.0	0.00
100YR-24HR	12.23	1569.0	1346.8	222.3	0.0	0.00
100YR-24HR	12.25	1574.9	1353.1	221.9	0.0	0.00
100YR-24HR	12.27	1580.7	1359.2	221.5	0.0	0.00
100YR-24HR	12.28	1586.7	1365.6	221.1	0.0	0.00
100YR-24HR	12.30	1592.4	1371.7	220.7	0.0	0.00
100YR-24HR	12.32	1598.1	1377.7	220.3	0.0	0.00
100YR-24HR	12.33	1603.8	1383.9	219.9	0.0	0.00
100YR-24HR	12.35	1609.5	1389.9	219.6	0.0	0.00
100YR-24HR	12.37	1615.0	1395.8	219.2	0.0	0.00
100YR-24HR	12.38	1620.5	1401.6	218.9	0.0	0.00
100YR-24HR	12.40	1626.2	1407.7	218.5	0.0	0.00
100YR-24HR	12.42	1631.7	1413.4	218.2	0.0	0.00
100YR-24HR	12.43	1637.1	1419.2	217.9	0.0	0.00
100YR-24HR	12.45	1642.5	1424.9	217.7	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	12.47	1647.9	1430.5	217.4	0.0	0.00
100YR-24HR	12.48	1653.3	1436.1	217.2	0.0	0.00
100YR-24HR	12.50	1658.7	1441.7	217.0	0.0	0.00
100YR-24HR	12.52	1664.0	1447.2	216.8	0.0	0.00
100YR-24HR	12.53	1669.3	1452.7	216.6	0.0	0.00
100YR-24HR	12.55	1674.6	1458.2	216.4	0.0	0.00
100YR-24HR	12.57	1679.9	1463.6	216.3	0.0	0.00
100YR-24HR	12.58	1685.4	1469.2	216.1	0.0	0.00
100YR-24HR	12.60	1690.6	1474.6	216.0	0.0	0.00
100YR-24HR	12.62	1695.9	1479.9	215.9	0.0	0.00
100YR-24HR	12.63	1701.1	1485.2	215.8	0.0	0.00
100YR-24HR	12.65	1706.3	1490.5	215.8	0.0	0.00
100YR-24HR	12.67	1711.5	1495.8	215.7	0.0	0.00
100YR-24HR	12.68	1716.6	1501.0	215.6	0.0	0.00
100YR-24HR	12.70	1721.8	1506.2	215.6	0.0	0.00
100YR-24HR	12.72	1727.0	1511.4	215.6	0.0	0.00
100YR-24HR	12.73	1732.1	1516.5	215.6	0.0	0.00
100YR-24HR	12.75	1737.2	1521.7	215.6	0.0	0.00
100YR-24HR	12.77	1742.6	1527.0	215.6	0.0	0.00
100YR-24HR	12.78	1747.7	1532.1	215.6	0.0	0.00
100YR-24HR	12.80	1752.8	1537.2	215.7	0.0	0.00
100YR-24HR	12.82	1758.0	1542.2	215.7	0.0	0.00
100YR-24HR	12.83	1763.1	1547.3	215.8	0.0	0.00
100YR-24HR	12.85	1768.2	1552.3	215.9	0.0	0.00
100YR-24HR	12.87	1773.3	1557.3	216.0	0.0	0.00
100YR-24HR	12.88	1778.4	1562.3	216.1	0.0	0.00
100YR-24HR	12.90	1783.5	1567.3	216.2	0.0	0.00
100YR-24HR	12.92	1788.6	1572.3	216.3	0.0	0.00
100YR-24HR	12.93	1793.7	1577.3	216.4	0.0	0.00
100YR-24HR	12.95	1799.0	1582.4	216.6	0.0	0.00
100YR-24HR	12.97	1804.1	1587.4	216.7	0.0	0.00
100YR-24HR	12.98	1809.2	1592.3	216.9	0.0	0.00
100YR-24HR	13.00	1814.3	1597.3	217.1	0.0	0.00
100YR-24HR	13.02	1819.4	1602.2	217.2	0.0	0.00
100YR-24HR	13.03	1824.5	1607.1	217.4	0.0	0.00
100YR-24HR	13.05	1829.6	1612.0	217.6	0.0	0.00
100YR-24HR	13.07	1834.7	1617.0	217.7	0.0	0.00
100YR-24HR	13.08	1839.7	1621.9	217.8	0.0	0.00
100YR-24HR	13.10	1844.7	1626.8	217.9	0.0	0.00
100YR-24HR	13.12	1849.6	1631.7	218.0	0.0	0.00
100YR-24HR	13.13	1854.8	1636.8	218.0	0.0	0.00
100YR-24HR	13.15	1859.6	1641.6	218.0	0.0	0.00
100YR-24HR	13.17	1864.5	1646.5	218.0	0.0	0.00
100YR-24HR	13.18	1869.3	1651.3	218.0	0.0	0.00
100YR-24HR	13.20	1874.1	1656.1	217.9	0.0	0.00
100YR-24HR	13.22	1878.8	1660.9	217.9	0.0	0.00
100YR-24HR	13.23	1883.5	1665.7	217.9	0.0	0.00
100YR-24HR	13.25	1888.2	1670.4	217.8	0.0	0.00
100YR-24HR	13.27	1892.9	1675.1	217.8	0.0	0.00
100YR-24HR	13.28	1897.6	1679.9	217.7	0.0	0.00
100YR-24HR	13.30	1902.2	1684.5	217.7	0.0	0.00
100YR-24HR	13.32	1907.1	1689.4	217.6	0.0	0.00
100YR-24HR	13.33	1911.7	1694.1	217.6	0.0	0.00
100YR-24HR	13.35	1916.3	1698.7	217.6	0.0	0.00
100YR-24HR	13.37	1920.9	1703.3	217.6	0.0	0.00
100YR-24HR	13.38	1925.5	1707.9	217.6	0.0	0.00
100YR-24HR	13.40	1930.0	1712.5	217.6	0.0	0.00
100YR-24HR	13.42	1934.6	1717.0	217.6	0.0	0.00
100YR-24HR	13.43	1939.2	1721.6	217.6	0.0	0.00
100YR-24HR	13.45	1943.7	1726.1	217.6	0.0	0.00
100YR-24HR	13.47	1948.2	1730.6	217.6	0.0	0.00
100YR-24HR	13.48	1952.8	1735.1	217.7	0.0	0.00
100YR-24HR	13.50	1957.5	1739.8	217.7	0.0	0.00
100YR-24HR	13.52	1962.0	1744.3	217.8	0.0	0.00
100YR-24HR	13.53	1966.5	1748.7	217.8	0.0	0.00
100YR-24HR	13.55	1971.0	1753.2	217.9	0.0	0.00
100YR-24HR	13.57	1975.5	1757.6	217.9	0.0	0.00
100YR-24HR	13.58	1980.0	1762.0	218.0	0.0	0.00
100YR-24HR	13.60	1984.5	1766.4	218.1	0.0	0.00
100YR-24HR	13.62	1989.0	1770.8	218.2	0.0	0.00
100YR-24HR	13.63	1993.5	1775.2	218.3	0.0	0.00
100YR-24HR	13.65	1998.0	1779.6	218.4	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	13.67	2002.4	1784.0	218.5	0.0	0.00
100YR-24HR	13.68	2007.1	1788.5	218.6	0.0	0.00
100YR-24HR	13.70	2011.6	1792.9	218.7	0.0	0.00
100YR-24HR	13.72	2016.0	1797.2	218.8	0.0	0.00
100YR-24HR	13.73	2020.5	1801.6	218.9	0.0	0.00
100YR-24HR	13.75	2024.9	1805.9	219.0	0.0	0.00
100YR-24HR	13.77	2029.4	1810.2	219.2	0.0	0.00
100YR-24HR	13.78	2033.8	1814.5	219.3	0.0	0.00
100YR-24HR	13.80	2038.4	1819.0	219.4	0.0	0.00
100YR-24HR	13.82	2042.8	1823.3	219.6	0.0	0.00
100YR-24HR	13.83	2047.2	1827.5	219.7	0.0	0.00
100YR-24HR	13.85	2051.7	1831.8	219.9	0.0	0.00
100YR-24HR	13.87	2056.3	1836.3	220.0	0.0	0.00
100YR-24HR	13.88	2060.7	1840.5	220.2	0.0	0.00
100YR-24HR	13.90	2065.1	1844.8	220.3	0.0	0.00
100YR-24HR	13.92	2069.5	1849.0	220.5	0.0	0.00
100YR-24HR	13.93	2074.1	1853.4	220.7	0.0	0.00
100YR-24HR	13.95	2078.6	1857.7	220.8	0.0	0.00
100YR-24HR	13.97	2083.0	1862.0	221.0	0.0	0.00
100YR-24HR	13.98	2087.5	1866.3	221.2	0.0	0.00
100YR-24HR	14.00	2092.0	1870.6	221.4	0.0	0.00
100YR-24HR	14.02	2096.4	1874.9	221.6	0.0	0.00
100YR-24HR	14.03	2100.8	1879.1	221.7	0.0	0.00
100YR-24HR	14.05	2105.4	1883.5	221.9	0.0	0.00
100YR-24HR	14.07	2109.8	1887.7	222.1	0.0	0.00
100YR-24HR	14.08	2114.3	1891.9	222.4	0.0	0.00
100YR-24HR	14.10	2118.7	1896.2	222.6	0.0	0.00
100YR-24HR	14.12	2123.3	1900.5	222.8	0.0	0.00
100YR-24HR	14.13	2127.7	1904.7	223.0	0.0	0.00
100YR-24HR	14.15	2132.2	1908.9	223.2	0.0	0.00
100YR-24HR	14.17	2136.7	1913.3	223.5	0.0	0.00
100YR-24HR	14.18	2141.2	1917.5	223.7	0.0	0.00
100YR-24HR	14.20	2145.6	1921.7	223.9	0.0	0.00
100YR-24HR	14.22	2150.0	1925.9	224.1	0.0	0.00
100YR-24HR	14.23	2154.6	1930.3	224.4	0.0	0.00
100YR-24HR	14.25	2159.1	1934.4	224.6	0.0	0.00
100YR-24HR	14.27	2163.5	1938.6	224.9	0.0	0.00
100YR-24HR	14.28	2168.0	1942.9	225.1	0.0	0.00
100YR-24HR	14.30	2172.5	1947.2	225.4	0.0	0.00
100YR-24HR	14.32	2177.0	1951.4	225.6	0.0	0.00
100YR-24HR	14.33	2181.4	1955.6	225.8	0.0	0.00
100YR-24HR	14.35	2186.0	1959.9	226.1	0.0	0.00
100YR-24HR	14.37	2190.4	1964.1	226.3	0.0	0.00
100YR-24HR	14.38	2194.9	1968.3	226.6	0.0	0.00
100YR-24HR	14.40	2199.3	1972.5	226.8	0.0	0.00
100YR-24HR	14.42	2203.9	1976.8	227.1	0.0	0.00
100YR-24HR	14.43	2208.4	1981.0	227.4	0.0	0.00
100YR-24HR	14.45	2212.8	1985.2	227.6	0.0	0.00
100YR-24HR	14.47	2217.3	1989.4	227.9	0.0	0.00
100YR-24HR	14.48	2221.9	1993.7	228.1	0.0	0.00
100YR-24HR	14.50	2226.3	1997.9	228.4	0.0	0.00
100YR-24HR	14.52	2230.8	2002.1	228.6	0.0	0.00
100YR-24HR	14.53	2235.3	2006.4	228.9	0.0	0.00
100YR-24HR	14.55	2239.8	2010.6	229.2	0.0	0.00
100YR-24HR	14.57	2244.3	2014.8	229.4	0.0	0.00
100YR-24HR	14.58	2248.7	2019.0	229.7	0.0	0.00
100YR-24HR	14.60	2253.3	2023.3	229.9	0.0	0.00
100YR-24HR	14.62	2257.8	2027.6	230.2	0.0	0.00
100YR-24HR	14.63	2262.2	2031.7	230.5	0.0	0.00
100YR-24HR	14.65	2266.8	2036.1	230.7	0.0	0.00
100YR-24HR	14.67	2271.3	2040.3	231.0	0.0	0.00
100YR-24HR	14.68	2275.7	2044.5	231.2	0.0	0.00
100YR-24HR	14.70	2280.2	2048.7	231.5	0.0	0.00
100YR-24HR	14.72	2284.8	2053.0	231.8	0.0	0.00
100YR-24HR	14.73	2289.2	2057.2	232.0	0.0	0.00
100YR-24HR	14.75	2293.7	2061.4	232.3	0.0	0.00
100YR-24HR	14.77	2298.1	2065.6	232.5	0.0	0.00
100YR-24HR	14.78	2302.8	2069.9	232.8	0.0	0.00
100YR-24HR	14.80	2307.2	2074.2	233.1	0.0	0.00
100YR-24HR	14.82	2311.7	2078.3	233.3	0.0	0.00
100YR-24HR	14.83	2316.3	2082.7	233.6	0.0	0.00
100YR-24HR	14.85	2320.8	2086.9	233.9	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	14.87	2325.2	2091.1	234.1	0.0	0.00
100YR-24HR	14.88	2329.7	2095.3	234.4	0.0	0.00
100YR-24HR	14.90	2334.3	2099.7	234.7	0.0	0.00
100YR-24HR	14.92	2338.8	2103.9	234.9	0.0	0.00
100YR-24HR	14.93	2343.3	2108.1	235.2	0.0	0.00
100YR-24HR	14.95	2347.7	2112.3	235.4	0.0	0.00
100YR-24HR	14.97	2352.3	2116.6	235.7	0.0	0.00
100YR-24HR	14.98	2356.8	2120.8	236.0	0.0	0.00
100YR-24HR	15.00	2361.3	2125.0	236.2	0.0	0.00
100YR-24HR	15.02	2365.9	2129.4	236.5	0.0	0.00
100YR-24HR	15.03	2370.4	2133.6	236.7	0.0	0.00
100YR-24HR	15.05	2374.8	2137.8	236.9	0.0	0.00
100YR-24HR	15.07	2379.2	2142.0	237.2	0.0	0.00
100YR-24HR	15.08	2383.8	2146.4	237.3	0.0	0.00
100YR-24HR	15.10	2388.1	2150.6	237.5	0.0	0.00
100YR-24HR	15.12	2392.4	2154.8	237.6	0.0	0.00
100YR-24HR	15.13	2396.7	2159.0	237.6	0.0	0.00
100YR-24HR	15.15	2401.0	2163.4	237.7	0.0	0.00
100YR-24HR	15.17	2405.2	2167.6	237.7	0.0	0.00
100YR-24HR	15.18	2409.4	2171.7	237.7	0.0	0.00
100YR-24HR	15.20	2413.6	2176.0	237.7	0.0	0.00
100YR-24HR	15.22	2417.7	2180.1	237.6	0.0	0.00
100YR-24HR	15.23	2421.8	2184.2	237.6	0.0	0.00
100YR-24HR	15.25	2425.8	2188.2	237.6	0.0	0.00
100YR-24HR	15.27	2430.0	2192.5	237.5	0.0	0.00
100YR-24HR	15.28	2434.0	2196.5	237.5	0.0	0.00
100YR-24HR	15.30	2438.0	2200.5	237.5	0.0	0.00
100YR-24HR	15.32	2441.9	2204.5	237.4	0.0	0.00
100YR-24HR	15.33	2446.0	2208.6	237.4	0.0	0.00
100YR-24HR	15.35	2450.0	2212.6	237.4	0.0	0.00
100YR-24HR	15.37	2453.9	2216.5	237.4	0.0	0.00
100YR-24HR	15.38	2457.9	2220.6	237.4	0.0	0.00
100YR-24HR	15.40	2461.9	2224.5	237.4	0.0	0.00
100YR-24HR	15.42	2465.7	2228.4	237.4	0.0	0.00
100YR-24HR	15.43	2469.6	2232.2	237.4	0.0	0.00
100YR-24HR	15.45	2473.6	2236.2	237.4	0.0	0.00
100YR-24HR	15.47	2477.5	2240.1	237.4	0.0	0.00
100YR-24HR	15.48	2481.3	2243.9	237.5	0.0	0.00
100YR-24HR	15.50	2485.2	2247.7	237.5	0.0	0.00
100YR-24HR	15.52	2489.2	2251.6	237.6	0.0	0.00
100YR-24HR	15.53	2493.0	2255.4	237.6	0.0	0.00
100YR-24HR	15.55	2496.8	2259.2	237.7	0.0	0.00
100YR-24HR	15.57	2500.8	2263.0	237.7	0.0	0.00
100YR-24HR	15.58	2504.6	2266.8	237.8	0.0	0.00
100YR-24HR	15.60	2508.4	2270.5	237.9	0.0	0.00
100YR-24HR	15.62	2512.2	2274.3	237.9	0.0	0.00
100YR-24HR	15.63	2516.1	2278.1	238.0	0.0	0.00
100YR-24HR	15.65	2519.9	2281.8	238.1	0.0	0.00
100YR-24HR	15.67	2523.7	2285.5	238.2	0.0	0.00
100YR-24HR	15.68	2527.5	2289.2	238.3	0.0	0.00
100YR-24HR	15.70	2531.4	2293.0	238.4	0.0	0.00
100YR-24HR	15.72	2535.2	2296.6	238.5	0.0	0.00
100YR-24HR	15.73	2539.0	2300.3	238.6	0.0	0.00
100YR-24HR	15.75	2542.9	2304.1	238.8	0.0	0.00
100YR-24HR	15.77	2546.6	2307.7	238.9	0.0	0.00
100YR-24HR	15.78	2550.4	2311.4	239.0	0.0	0.00
100YR-24HR	15.80	2554.2	2315.0	239.1	0.0	0.00
100YR-24HR	15.82	2558.0	2318.8	239.3	0.0	0.00
100YR-24HR	15.83	2561.8	2322.4	239.4	0.0	0.00
100YR-24HR	15.85	2565.6	2326.0	239.6	0.0	0.00
100YR-24HR	15.87	2569.5	2329.8	239.7	0.0	0.00
100YR-24HR	15.88	2573.2	2333.4	239.9	0.0	0.00
100YR-24HR	15.90	2577.0	2337.0	240.0	0.0	0.00
100YR-24HR	15.92	2580.7	2340.6	240.2	0.0	0.00
100YR-24HR	15.93	2584.6	2344.3	240.3	0.0	0.00
100YR-24HR	15.95	2588.4	2347.9	240.5	0.0	0.00
100YR-24HR	15.97	2592.1	2351.5	240.7	0.0	0.00
100YR-24HR	15.98	2595.9	2355.0	240.8	0.0	0.00
100YR-24HR	16.00	2599.8	2358.7	241.0	0.0	0.00
100YR-24HR	16.08	2618.4	2376.8	241.6	0.0	0.00
100YR-24HR	16.17	2636.3	2394.6	241.7	0.0	0.00
100YR-24HR	16.25	2653.5	2412.2	241.3	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	16.33	2669.9	2429.1	240.9	0.0	0.00
100YR-24HR	16.42	2686.2	2445.6	240.5	0.0	0.00
100YR-24HR	16.50	2702.0	2461.6	240.4	0.0	0.00
100YR-24HR	16.58	2717.7	2477.2	240.4	0.0	0.00
100YR-24HR	16.67	2733.3	2492.7	240.6	0.0	0.00
100YR-24HR	16.75	2748.6	2507.8	240.9	0.0	0.00
100YR-24HR	16.83	2763.9	2522.7	241.3	0.0	0.00
100YR-24HR	16.92	2779.3	2537.6	241.8	0.0	0.00
100YR-24HR	17.00	2794.6	2552.3	242.3	0.0	0.00
100YR-24HR	17.08	2810.0	2567.0	243.0	0.0	0.00
100YR-24HR	17.17	2825.2	2581.5	243.7	0.0	0.00
100YR-24HR	17.25	2840.5	2596.1	244.4	0.0	0.00
100YR-24HR	17.33	2855.8	2610.7	245.1	0.0	0.00
100YR-24HR	17.42	2871.0	2625.2	245.8	0.0	0.00
100YR-24HR	17.50	2886.4	2639.8	246.6	0.0	0.00
100YR-24HR	17.58	2901.7	2654.3	247.3	0.0	0.00
100YR-24HR	17.67	2916.9	2668.9	248.1	0.0	0.00
100YR-24HR	17.75	2932.3	2683.5	248.8	0.0	0.00
100YR-24HR	17.83	2947.6	2698.0	249.6	0.0	0.00
100YR-24HR	17.92	2962.9	2712.5	250.3	0.0	0.00
100YR-24HR	18.00	2978.3	2727.2	251.1	0.0	0.00
100YR-24HR	18.08	2993.6	2741.7	251.9	0.0	0.00
100YR-24HR	18.17	3008.9	2756.3	252.6	0.0	0.00
100YR-24HR	18.25	3024.3	2770.9	253.4	0.0	0.00
100YR-24HR	18.33	3039.6	2785.5	254.1	0.0	0.00
100YR-24HR	18.42	3054.9	2800.1	254.9	0.0	0.00
100YR-24HR	18.50	3070.4	2814.7	255.6	0.0	0.00
100YR-24HR	18.58	3085.7	2829.3	256.4	0.0	0.00
100YR-24HR	18.67	3101.0	2843.9	257.1	0.0	0.00
100YR-24HR	18.75	3116.5	2858.6	257.9	0.0	0.00
100YR-24HR	18.83	3131.8	2873.2	258.6	0.0	0.00
100YR-24HR	18.92	3147.2	2887.9	259.4	0.0	0.00
100YR-24HR	19.00	3162.6	2902.5	260.1	0.0	0.00
100YR-24HR	19.08	3177.8	2917.2	260.6	0.0	0.00
100YR-24HR	19.17	3192.1	2931.7	260.4	0.0	0.00
100YR-24HR	19.25	3205.5	2945.8	259.8	0.0	0.00
100YR-24HR	19.33	3218.5	2959.4	259.1	0.0	0.00
100YR-24HR	19.42	3231.0	2972.4	258.6	0.0	0.00
100YR-24HR	19.50	3243.2	2985.0	258.2	0.0	0.00
100YR-24HR	19.58	3255.3	2997.3	258.0	0.0	0.00
100YR-24HR	19.67	3267.1	3009.2	257.9	0.0	0.00
100YR-24HR	19.75	3278.8	3020.9	257.9	0.0	0.00
100YR-24HR	19.83	3290.6	3032.5	258.1	0.0	0.00
100YR-24HR	19.92	3302.2	3043.9	258.3	0.0	0.00
100YR-24HR	20.00	3313.8	3055.1	258.6	0.0	0.00
100YR-24HR	20.08	3325.4	3066.4	259.0	0.0	0.00
100YR-24HR	20.17	3337.0	3077.6	259.4	0.0	0.00
100YR-24HR	20.25	3348.6	3088.7	259.9	0.0	0.00
100YR-24HR	20.33	3360.3	3099.9	260.3	0.0	0.00
100YR-24HR	20.42	3371.8	3111.0	260.8	0.0	0.00
100YR-24HR	20.50	3383.4	3122.1	261.3	0.0	0.00
100YR-24HR	20.58	3395.0	3133.2	261.7	0.0	0.00
100YR-24HR	20.67	3406.7	3144.4	262.2	0.0	0.00
100YR-24HR	20.75	3418.2	3155.5	262.7	0.0	0.00
100YR-24HR	20.83	3429.8	3166.6	263.2	0.0	0.00
100YR-24HR	20.92	3441.5	3177.8	263.7	0.0	0.00
100YR-24HR	21.00	3453.1	3188.9	264.2	0.0	0.00
100YR-24HR	21.08	3464.4	3200.0	264.4	0.0	0.00
100YR-24HR	21.17	3475.0	3210.9	264.1	-0.0	-0.00
100YR-24HR	21.25	3484.6	3221.2	263.4	-0.0	-0.00
100YR-24HR	21.33	3493.7	3231.0	262.7	-0.0	-0.00
100YR-24HR	21.42	3502.4	3240.3	262.1	-0.0	-0.00
100YR-24HR	21.50	3510.8	3249.0	261.7	-0.0	-0.00
100YR-24HR	21.58	3518.9	3257.4	261.5	-0.0	-0.00
100YR-24HR	21.67	3527.0	3265.6	261.4	0.0	0.00
100YR-24HR	21.75	3534.9	3273.4	261.4	-0.0	-0.00
100YR-24HR	21.83	3542.7	3281.1	261.6	-0.0	-0.00
100YR-24HR	21.92	3550.5	3288.7	261.8	-0.0	-0.00
100YR-24HR	22.00	3558.3	3296.1	262.1	-0.0	-0.00
100YR-24HR	22.08	3565.7	3303.5	262.2	-0.0	-0.00
100YR-24HR	22.17	3572.4	3310.8	261.6	-0.0	-0.00
100YR-24HR	22.25	3578.2	3317.8	260.5	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	22.33	3583.4	3324.1	259.3	-0.0	-0.00
100YR-24HR	22.42	3588.3	3329.9	258.3	-0.0	-0.00
100YR-24HR	22.50	3592.8	3335.3	257.5	-0.0	-0.00
100YR-24HR	22.58	3597.1	3340.4	256.8	-0.0	-0.00
100YR-24HR	22.67	3601.3	3345.1	256.2	-0.0	-0.00
100YR-24HR	22.75	3605.4	3349.6	255.8	-0.0	-0.00
100YR-24HR	22.83	3609.3	3353.9	255.4	-0.0	-0.00
100YR-24HR	22.92	3613.2	3358.1	255.2	-0.0	-0.00
100YR-24HR	23.00	3617.2	3362.2	255.0	-0.0	-0.00
100YR-24HR	23.08	3621.0	3366.1	254.9	-0.0	-0.00
100YR-24HR	23.17	3624.9	3369.9	255.0	0.0	0.00
100YR-24HR	23.25	3628.8	3373.7	255.1	0.0	0.00
100YR-24HR	23.33	3632.7	3377.4	255.3	0.0	0.00
100YR-24HR	23.42	3636.6	3381.1	255.5	0.0	0.00
100YR-24HR	23.50	3640.5	3384.8	255.7	0.0	0.00
100YR-24HR	23.58	3644.4	3388.4	255.9	0.0	0.00
100YR-24HR	23.67	3648.2	3392.1	256.2	0.0	0.00
100YR-24HR	23.75	3652.1	3395.8	256.4	0.0	0.00
100YR-24HR	23.83	3656.0	3399.4	256.6	0.0	0.00
100YR-24HR	23.92	3659.9	3403.0	256.9	0.0	0.00
100YR-24HR	24.00	3663.8	3406.6	257.1	0.0	0.00
100YR-24HR	24.25	3672.1	3419.0	253.1	0.0	0.00
100YR-24HR	24.50	3673.4	3428.5	244.9	0.0	0.00
100YR-24HR	24.75	3673.4	3434.6	238.8	0.0	0.00
100YR-24HR	25.00	3673.4	3439.8	233.6	0.0	0.00
100YR-24HR	25.25	3673.4	3444.8	228.7	0.0	0.00
100YR-24HR	25.50	3673.4	3449.7	223.7	0.0	0.00
100YR-24HR	25.75	3673.4	3454.7	218.7	0.0	0.00
100YR-24HR	26.00	3673.4	3459.7	213.7	-0.0	-0.00
100YR-24HR	26.25	3673.4	3464.7	208.7	-0.0	-0.00
100YR-24HR	26.50	3673.4	3469.8	203.6	-0.0	-0.00
100YR-24HR	26.75	3673.4	3474.8	198.6	0.0	0.00
100YR-24HR	27.00	3673.4	3479.9	193.5	0.0	0.00
100YR-24HR	27.25	3673.4	3485.0	188.4	0.0	0.00
100YR-24HR	27.50	3673.4	3490.2	183.2	0.0	0.00
100YR-24HR	27.75	3673.4	3495.3	178.1	0.0	0.00
100YR-24HR	28.00	3673.4	3500.5	172.9	0.0	0.00
100YR-24HR	28.25	3673.4	3505.7	167.7	0.0	0.00
100YR-24HR	28.50	3673.4	3510.9	162.6	0.0	0.00
100YR-24HR	28.75	3673.4	3516.1	157.4	0.0	0.00
100YR-24HR	29.00	3673.4	3521.3	152.1	0.0	0.00
100YR-24HR	29.25	3673.4	3526.5	146.9	0.0	0.00
100YR-24HR	29.50	3673.4	3531.8	141.6	0.0	0.00
100YR-24HR	29.75	3673.4	3537.0	136.4	0.0	0.00
100YR-24HR	30.00	3673.4	3542.3	131.2	0.0	0.00
100YR-24HR	30.25	3673.4	3547.5	125.9	0.0	0.00
100YR-24HR	30.50	3673.4	3552.8	120.6	0.0	0.00
100YR-24HR	30.75	3673.4	3558.1	115.4	0.0	0.00
100YR-24HR	31.00	3673.4	3563.3	110.1	0.0	0.00
100YR-24HR	31.25	3673.4	3568.6	104.8	0.0	0.00
100YR-24HR	31.50	3673.4	3573.9	99.5	0.0	0.00
100YR-24HR	31.75	3673.4	3579.2	94.2	0.0	0.00
100YR-24HR	32.00	3673.4	3584.5	88.9	0.0	0.00
100YR-24HR	32.25	3673.4	3589.7	83.7	0.0	0.00
100YR-24HR	32.50	3673.4	3595.0	78.4	0.0	0.00
100YR-24HR	32.75	3673.4	3600.3	73.1	0.0	0.00
100YR-24HR	33.00	3673.4	3605.6	67.8	0.0	0.00
100YR-24HR	33.25	3673.4	3610.9	62.5	0.0	0.00
100YR-24HR	33.50	3673.4	3616.1	57.3	0.0	0.00
100YR-24HR	33.75	3673.4	3621.4	52.0	0.0	0.00
100YR-24HR	34.00	3673.4	3626.7	46.7	0.0	0.00
100YR-24HR	34.25	3673.4	3631.9	41.5	0.0	0.00
100YR-24HR	34.50	3673.4	3637.2	36.2	0.0	0.00
100YR-24HR	34.75	3673.4	3642.5	31.0	0.0	0.00
100YR-24HR	35.00	3673.4	3647.7	25.7	0.0	0.00
100YR-24HR	35.25	3673.4	3652.9	20.5	0.0	0.00
100YR-24HR	35.50	3673.4	3658.1	15.3	0.0	0.00
100YR-24HR	35.75	3673.4	3663.4	10.0	0.0	0.00
100YR-24HR	36.00	3673.4	3668.5	4.9	0.0	0.00
100YR-24HR	36.25	3673.4	3671.7	1.7	0.0	0.00
100YR-24HR	36.50	3673.4	3672.8	0.6	0.0	0.00
100YR-24HR	36.75	3673.4	3673.3	0.1	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	37.00	3673.4	3673.6	-0.2	0.0	-0.00
100YR-24HR	37.25	3673.4	3673.8	-0.4	0.0	-0.00
100YR-24HR	37.50	3673.4	3673.9	-0.5	0.0	-0.00
100YR-24HR	37.75	3673.4	3674.0	-0.6	0.0	-0.00
100YR-24HR	38.00	3673.4	3674.0	-0.6	0.0	-0.00
100YR-24HR	38.25	3673.4	3674.0	-0.6	0.0	-0.00
100YR-24HR	38.50	3673.4	3674.0	-0.6	0.0	-0.00
100YR-24HR	38.75	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	39.00	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	39.25	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	39.50	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	39.75	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	40.00	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	40.25	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	40.50	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	40.75	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	41.00	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	41.25	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	41.50	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	41.75	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	42.00	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	42.25	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	42.50	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	42.75	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	43.00	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	43.25	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	43.50	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	43.75	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	44.00	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	44.25	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	44.50	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	44.75	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	45.00	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	45.25	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	45.50	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	45.75	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	46.00	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	46.25	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	46.50	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	46.75	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	47.00	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	47.25	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	47.50	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	47.75	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	48.00	3673.4	3674.1	-0.6	0.0	-0.00
100YR-24HR	48.00	3673.4	3674.1	-0.6	0.0	-0.00

Basin 16_FRONTAGE

SUMMARY OF MAX STAGE - PROPODSED CONDITIONS - BASIN 16_FRONTAGE

NODE	STORM EVENT						WARNING STAGE (FT)
	100YR-1HR	100YR-24HR	100YR-8HR	10YR-1HR	10YR-24HR	10YR-8HR	
GWT_16	1.45	2.2	2.2	1.45	2.2	2.2	99
S16FE-2	3.72	2.3	3.23	2.89	2.25	2.79	6.42
S16FE-3	3.2	2.27	3	2.53	2.24	2.62	6.69
S16FE-4	4.98	2.41	3.55	3.14	2.27	2.98	6.69
S16FE-5	5.53	2.42	3.58	3.26	2.27	3	6.48
S16FE-6	3.36	2.27	2.99	2.7	2.23	2.64	6.43
S16FE-7	3.09	2.26	2.86	2.52	2.23	2.55	6.14

CN CALCULATIONS -POST-DEVELOPMENT CONDITIONS - FRONTAGE ROAD - BASIN 16

SUB-BASIN	TOTAL AREA (AC)	PERVIOUS AREA (AC)	PERVIOUS CN	IMPERVIOUS AREA (AC)	IMPERVIOUS CN	COMPOSITE CN
16FE-1	0.18	0	61	0.18	96	96.0
16FE-2	0.29	0.06	61	0.23	96	88.8
16FE-3	0.24	0.07	61	0.17	96	85.8
16FE-4	0.37	0.1	61	0.27	96	86.5
16FE-5	0.37	0.08	61	0.29	96	88.4
16FE-6	0.23	0.03	61	0.2	96	91.4
16FE-7	0.2	0.03	61	0.17	96	90.8
TOTAL AREA	1.88	0.37		1.51		

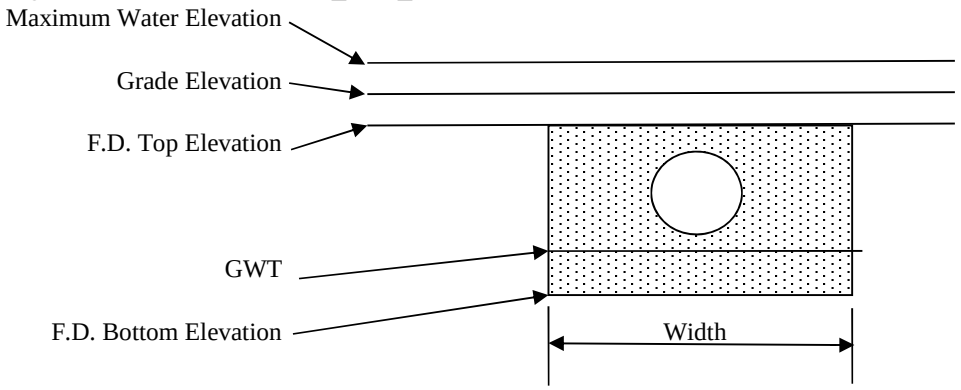
Average Hydraulic Conductivity

Basin B-16		
Percolation Test	P-27	P-28
Average Flow to 10 ft. depth (gpm)	0.10	49.82
Depth to Water Table (ft)	1.90	3.40
Head Maintained (ft)	0.90	2.40
Borehole Diameter (ft)	0.604	0.604
Borehole Depth (ft)	10.00	10.00
Du (ft)	0.90	2.40
Average Flow (cfs)	0.0002	0.1110
Ds (ft)	8.10	6.60
Hydraulic Conductivity K (cfs/ft2-ft head)	1.48E-05	3.06E-03
Average Hydraulic Conductivity K	**1.54E-03**	

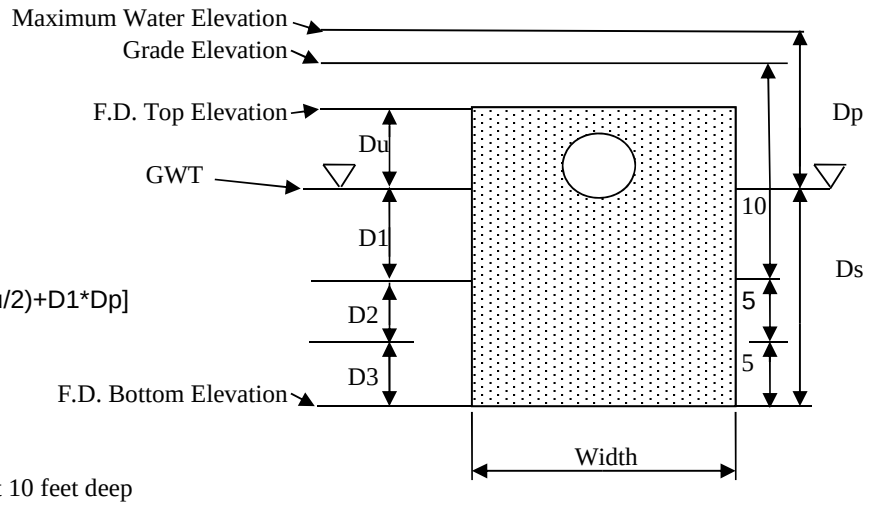
Made by: _____ _____
Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT_16



Maximum Water Elevation =	**5.45**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**4.45**	ft.NAVD	
F.D.Top Elevation =	**4.04**	ft.NAVD	
Ground Water Table =	**1.45**	ft.NAVD	
F.D. Bottom Elevation =	**-11.54**	ft.NAVD	
Width =	**4.50**	feet.	
Pipe Diameter =	**24**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**1.54E-03**	cfs/ft^2-ft head	(Ave. P-27,P-28)
Hydraulic Conductivity K15 =	**1.54E-03**	cfs/ft^2-ft head	(Ave. P-27,P-28)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____

Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT_16

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs/ft)	(cfs/ft)
1.45	0.000	0.000
2.20	0.026	0.000
3.90	0.107	0.076
5.45	0.182	0.151

Rating Curve (Q)

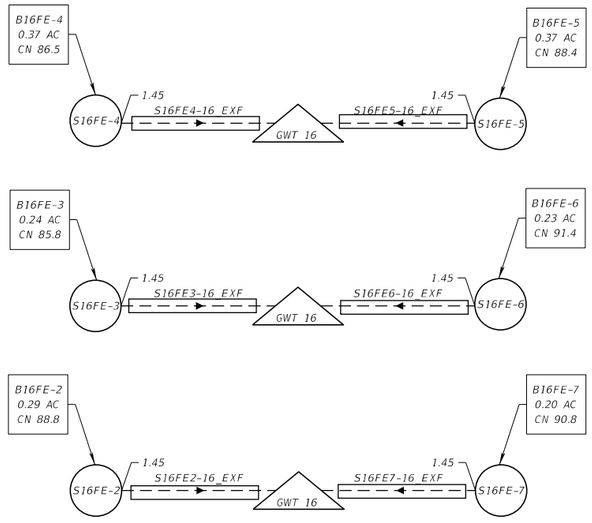
Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs)	(cfs)
1.45	0.00	0.00
2.20	0.03	0.00
3.90	0.11	0.08
5.45	0.18	0.15

Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

Rating Curve Adjusted (Q)

Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.45	1.45	0.00
1.45	2.20	0.03
1.45	3.90	0.10
1.45	5.45	0.10
2.20	2.20	0.00
2.20	3.90	0.08
2.20	5.45	0.10

POST-DEVELOPMENT CONDITIONS



LEGEND

B16-3 0.81 AC CN 96	CONTRIBUTING BASIN BASIN NAME BASIN AREA CURVE NUMBER
S16-1	NODE NAME
OFFSITE_LAKE	BOUNDARY NODE WITH CONSTANT TAILWATER
GWT 1-5	BOUNDARY NODE WITH VARIABLE TAILWATER
S16-14_S16-15 18"-37' (-) 0.85 (-) 1.95	PIPE LINK WITH (QUANTITY)SIZE-LENGTH INVERT ELEVATIONS
EX2-1_WEIR	WEIR LINK
S16-12_EXF	RATING CURVE LINK
S16-15_S16-17 24"x38"-126' 0.64 0.64	EXFILTRATION TRENCH LINK WITH LENGTH AND INVERT ELEVATIONS

PROPOSED DESIGN

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01 441830-1-52-01 441831-1-52-01

NODAL DIAGRAM
BASIN 16

SHEET NO.

SR-826 / PALMETTO EXPRESSWAY IMPROVEMENTS - BASIN 16 - FRONTAGE ROAD
POST-DEVELOPMENT CONDITIONS
NODE MAX REPORT

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
GWT_16	Basin 16	100YR-1HR	0.00	1.45	99.00	0.0000	0	0.69	10.16	0.00	0.00
S16FE-2	Basin 16	100YR-1HR	0.69	3.72	6.42	0.0041	113	0.67	1.88	0.69	1.85
S16FE-3	Basin 16	100YR-1HR	0.70	3.20	6.69	0.0031	113	0.67	1.45	0.70	1.42
S16FE-4	Basin 16	100YR-1HR	0.79	4.98	6.69	-0.0050	113	0.67	2.27	0.61	2.00
S16FE-5	Basin 16	100YR-1HR	0.81	5.53	6.48	-0.0050	937	0.67	2.38	0.58	2.00
S16FE-6	Basin 16	100YR-1HR	0.69	3.36	6.43	0.0049	113	0.65	1.58	0.69	1.56
S16FE-7	Basin 16	100YR-1HR	0.69	3.09	6.14	0.0039	113	0.65	1.36	0.69	1.34
GWT_16	Basin 16	100YR-24HR	24.00	2.20	99.00	0.0013	0	12.01	2.22	0.00	0.00
S16FE-2	Basin 16	100YR-24HR	12.03	2.30	6.42	0.0041	113	12.00	0.38	12.01	0.38
S16FE-3	Basin 16	100YR-24HR	21.01	2.27	6.69	0.0036	113	12.00	0.31	12.01	0.31
S16FE-4	Basin 16	100YR-24HR	12.03	2.41	6.69	0.0049	113	12.00	0.48	12.01	0.48
S16FE-5	Basin 16	100YR-24HR	12.03	2.42	6.48	0.0049	113	12.00	0.49	12.01	0.48
S16FE-6	Basin 16	100YR-24HR	21.01	2.27	6.43	0.0036	113	12.00	0.31	12.01	0.30
S16FE-7	Basin 16	100YR-24HR	21.01	2.26	6.14	0.0033	113	12.00	0.27	12.01	0.26
GWT_16	Basin 16	100YR-8HR	8.00	2.20	99.00	0.0034	0	4.02	6.57	0.00	0.00
S16FE-2	Basin 16	100YR-8HR	4.02	3.23	6.42	-0.0043	113	4.00	1.13	4.02	1.13
S16FE-3	Basin 16	100YR-8HR	4.02	3.00	6.69	-0.0039	113	4.00	0.92	4.02	0.91
S16FE-4	Basin 16	100YR-8HR	4.02	3.55	6.69	-0.0049	113	4.00	1.42	4.02	1.41
S16FE-5	Basin 16	100YR-8HR	4.02	3.58	6.48	0.0050	113	4.00	1.44	4.02	1.43
S16FE-6	Basin 16	100YR-8HR	4.02	2.99	6.43	0.0049	113	4.00	0.91	4.02	0.91
S16FE-7	Basin 16	100YR-8HR	4.02	2.86	6.14	0.0040	113	4.00	0.79	4.02	0.78
GWT_16	Basin 16	10YR-1HR	0.00	1.45	99.00	0.0000	0	0.70	6.76	0.00	0.00
S16FE-2	Basin 16	10YR-1HR	0.70	2.89	6.42	0.0084	113	0.67	1.19	0.70	1.17
S16FE-3	Basin 16	10YR-1HR	0.71	2.53	6.69	0.0059	113	0.67	0.89	0.71	0.87
S16FE-4	Basin 16	10YR-1HR	0.71	3.14	6.69	-0.0093	113	0.67	1.41	0.71	1.38
S16FE-5	Basin 16	10YR-1HR	0.70	3.26	6.48	0.0100	113	0.67	1.50	0.70	1.47
S16FE-6	Basin 16	10YR-1HR	0.69	2.70	6.43	0.0099	113	0.67	1.03	0.69	1.01
S16FE-7	Basin 16	10YR-1HR	0.70	2.52	6.14	0.0079	113	0.67	0.88	0.70	0.86
GWT_16	Basin 16	10YR-24HR	24.00	2.20	99.00	0.0013	0	12.01	1.42	0.00	0.00
S16FE-2	Basin 16	10YR-24HR	21.01	2.25	6.42	0.0040	113	12.00	0.25	12.01	0.24
S16FE-3	Basin 16	10YR-24HR	21.03	2.24	6.69	0.0035	113	12.00	0.20	12.03	0.20
S16FE-4	Basin 16	10YR-24HR	21.01	2.27	6.69	-0.0048	113	12.00	0.31	12.01	0.30
S16FE-5	Basin 16	10YR-24HR	21.01	2.27	6.48	-0.0048	113	12.00	0.31	12.01	0.31
S16FE-6	Basin 16	10YR-24HR	21.03	2.23	6.43	0.0035	113	12.00	0.20	12.01	0.20
S16FE-7	Basin 16	10YR-24HR	22.01	2.23	6.14	0.0032	113	12.00	0.17	12.03	0.17
GWT_16	Basin 16	10YR-8HR	7.99	2.20	99.00	0.0043	0	4.02	4.19	0.00	0.00
S16FE-2	Basin 16	10YR-8HR	4.03	2.79	6.42	-0.0044	113	4.00	0.73	4.02	0.72
S16FE-3	Basin 16	10YR-8HR	4.04	2.62	6.69	-0.0041	113	4.00	0.58	4.03	0.57
S16FE-4	Basin 16	10YR-8HR	4.03	2.98	6.69	-0.0050	113	4.00	0.90	4.02	0.89
S16FE-5	Basin 16	10YR-8HR	4.03	3.00	6.48	-0.0050	113	4.00	0.92	4.02	0.92
S16FE-6	Basin 16	10YR-8HR	4.03	2.64	6.43	-0.0041	113	4.00	0.59	4.02	0.59
S16FE-7	Basin 16	10YR-8HR	4.04	2.55	6.14	-0.0039	113	4.00	0.51	4.02	0.51

==========
==== Basins ====
==========

Name: B16FE-2 Node: S16FE-2 Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.290 Time Shift(hrs): 0.00
Curve Number: 88.80 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B16FE-3 Node: S16FE-3 Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.240 Time Shift(hrs): 0.00
Curve Number: 85.80 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B16FE-4 Node: S16FE-4 Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.370 Time Shift(hrs): 0.00
Curve Number: 86.50 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B16FE-5 Node: S16FE-5 Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.370 Time Shift(hrs): 0.00
Curve Number: 88.40 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B16FE-6 Node: S16FE-6 Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.230 Time Shift(hrs): 0.00
Curve Number: 91.40 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B16FE-7 Node: S16FE-7 Status: Onsite
Group: Basin 16 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00

Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.200 Time Shift(hrs): 0.00
Curve Number: 90.80 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

==========
==== Nodes ==========
==========

Name: GWT_16 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	1.450
108.00	1.450

Name: S16FE-2 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 6.420
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.400	0.0004
6.420	0.0600

Name: S16FE-3 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 6.690
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.990	0.0004
6.000	0.0300
6.690	0.0700

Name: S16FE-4 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 6.690
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.990	0.0004
6.000	0.0500
6.690	0.1100

Name: S16FE-5 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 6.480
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.490	0.0004
5.500	0.0200

6.480	0.0700

Name: S16FE-6 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 6.430
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.430	0.0004

Name: S16FE-7 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 16 Warn Stage(ft): 6.140
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
6.140	0.0004

Operating Tables

Name: E_OPT_16 Group: Basin 16
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.450	1.45	0.00
1.450	2.20	0.03
1.450	3.90	0.10
1.450	5.45	0.10
2.200	2.20	0.00
2.200	3.90	0.08
2.200	5.45	0.10

Rating Curves

Name: S16FE2-16_EXF From Node: S16FE-2 Count: 20
Group: Basin 16 To Node: GWT_16 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_16	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S16FE3-16_EXF From Node: S16FE-3 Count: 20
Group: Basin 16 To Node: GWT_16 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_16	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S16FE4-16_EXF From Node: S16FE-4 Count: 20

Group: Basin 16 To Node: GWT_16 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_16	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S16FE5-16_EXF From Node: S16FE-5 Count: 20
Group: Basin 16 To Node: GWT_16 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_16	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S16FE6-16_EXF From Node: S16FE-6 Count: 20
Group: Basin 16 To Node: GWT_16 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_16	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S16FE7-16_EXF From Node: S16FE-7 Count: 20
Group: Basin 16 To Node: GWT_16 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_16	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

==========
==== Hydrology Simulations ==========
==========

Name: 100YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 5.00

Time(hrs)	Print Inc(min)
1.000	1.00
1.330	1.00

Name: 100YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 13.44

Time(hrs)	Print Inc(min)
8.000	5.00

16.000 1.00
24.000 5.00
24.330 5.00

Name: 100YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 9.60

Time(hrs)	Print Inc(min)
2.000	5.00
6.000	1.00
8.000	5.00
8.330	5.00

Name: 10YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 3.50

Time(hrs)	Print Inc(min)
1.000	1.00
1.330	1.00

Name: 10YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 8.88

Time(hrs)	Print Inc(min)
8.000	5.00
16.000	1.00
24.000	5.00
24.330	5.00

Name: 10YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 6.40

Time(hrs)	Print Inc(min)
2.000	5.00
6.000	1.00
8.000	5.00
8.330	5.00

Name: 25YR-72HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Sfwmd72
Rainfall Amount(in): 14.00

Time(hrs)	Print Inc(min)
48.000	15.00
56.000	5.00
64.000	1.00
72.000	5.00
72.330	5.00

==========
==== Routing Simulations ==========
==========

Name: 100YR-1HR Hydrology Sim: 100YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 25.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
1.000	1.000
25.000	15.000

Group	Run
Basin 16	Yes

Name: 100YR-24HR Hydrology Sim: 100YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 48.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 24HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
48.000	15.000

Group	Run
Basin 16	Yes

Name: 100YR-8HR Hydrology Sim: 100YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 36.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 8HR Boundary Flows:

Time(hrs)	Print Inc(min)
2.000	5.000
6.000	1.000
8.000	5.000
36.000	15.000

Group	Run
Basin 16	Yes

Name: 10YR-1HR Hydrology Sim: 10YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.01000
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 25.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
1.000	1.000
25.000	15.000

Group	Run
Basin 16	Yes

Name: 10YR-24HR Hydrology Sim: 10YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 48.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 24HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
48.000	15.000

Group	Run
Basin 16	Yes

Name: 10YR-8HR Hydrology Sim: 10YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500

```
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                   End Time(hrs): 36.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages: 8HR                     Boundary Flows:
```

Time(hrs)	Print Inc(min)
2.000	5.000
6.000	1.000
8.000	5.000
36.000	15.000

Group	Run
Basin 16	Yes

```
---------------------------------------------------------------------------------------------------
         Name: 25YR-72HR          Hydrology Sim: 25YR-72HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                   End Time(hrs): 96.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages: 72HR                    Boundary Flows:
```

Time(hrs)	Print Inc(min)
48.000	15.000
56.000	5.000
64.000	1.000
72.000	5.000
96.000	5.000

Group	Run
Basin 16	Yes

```
===================================================================================================
==== Boundary Conditions ==========================================================================
===================================================================================================

      Name: 8HR                  Node: GWT_16               Type: Stage
```

Time(hrs)	Stage(ft)
0.000	1.450
1.000	1.470
2.000	1.550
3.000	1.660
4.000	1.980
5.000	2.100
6.000	2.140
7.000	2.180
8.000	2.200
12.000	1.450
36.000	1.450

```
---------------------------------------------------------------------------------------------------
      Name: 24HR                 Node: GWT_16               Type: Stage
```

Time(hrs)	Stage(ft)
0.000	1.450
1.000	1.460
2.000	1.470

3.000	1.500
4.000	1.520
5.000	1.540
6.000	1.570
7.000	1.600
8.000	1.630
9.000	1.680
10.000	1.720
11.000	1.780
12.000	1.860
13.000	1.910
14.000	1.950
15.000	2.000
16.000	2.040
17.000	2.070
18.000	2.100
19.000	2.130
20.000	2.150
21.000	2.170
22.000	2.190
23.000	2.190
24.000	2.200
36.000	1.450
48.000	1.450

Name: 72HR Node: GWT_16 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.450
24.000	1.530
36.000	1.590
48.000	1.650
49.000	1.650
50.000	1.660
51.000	1.670
52.000	1.670
53.000	1.680
54.000	1.690
55.000	1.710
56.000	1.720
57.000	1.740
57.500	1.750
58.000	1.770
58.500	1.780
59.000	1.800
59.500	1.820
60.000	2.010
60.500	2.050
61.000	2.070
61.500	2.090
62.000	2.100
62.500	2.110
63.000	2.120
64.000	2.130
65.000	2.140
66.000	2.150
68.000	2.170
70.000	2.190
72.000	2.200
96.000	1.450

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	0.00	0.0	0.0	0.0	0.0	0.00
100YR-24HR	0.08	0.0	-0.3	0.3	-0.0	-0.00
100YR-24HR	0.18	0.0	-0.9	0.9	-0.0	-0.00
100YR-24HR	0.26	0.0	-1.5	1.5	0.0	0.00
100YR-24HR	0.34	0.0	-2.0	2.0	-0.0	-0.00
100YR-24HR	0.42	0.0	-2.6	2.6	-0.0	-0.00
100YR-24HR	0.50	0.0	-3.1	3.1	-0.0	-0.00
100YR-24HR	0.60	0.0	-3.8	3.8	-0.0	-0.00
100YR-24HR	0.68	0.0	-4.4	4.4	-0.0	-0.00
100YR-24HR	0.77	0.0	-4.9	4.9	-0.0	-0.00
100YR-24HR	0.85	0.0	-5.5	5.5	-0.0	-0.00
100YR-24HR	0.93	0.0	-6.1	6.1	-0.0	-0.00
100YR-24HR	1.02	0.0	-6.6	6.6	-0.0	-0.00
100YR-24HR	1.10	0.0	-7.2	7.2	-0.0	-0.00
100YR-24HR	1.18	0.0	-7.8	7.8	0.0	0.00
100YR-24HR	1.27	0.0	-8.3	8.3	0.0	0.00
100YR-24HR	1.35	0.2	-8.8	9.0	0.0	0.00
100YR-24HR	1.43	0.7	-9.0	9.7	0.0	0.00
100YR-24HR	1.52	2.1	-8.6	10.7	0.0	0.00
100YR-24HR	1.60	4.5	-7.3	11.8	0.0	0.00
100YR-24HR	1.68	8.6	-4.5	13.1	0.0	0.00
100YR-24HR	1.77	14.8	0.1	14.7	0.0	0.00
100YR-24HR	1.85	23.4	7.0	16.4	0.0	0.00
100YR-24HR	1.93	34.9	16.6	18.4	0.0	0.00
100YR-24HR	2.02	49.6	29.2	20.5	0.0	0.00
100YR-24HR	2.10	69.1	44.9	24.2	0.0	0.00
100YR-24HR	2.18	95.9	66.5	29.4	0.0	0.00
100YR-24HR	2.27	130.5	95.8	34.7	0.0	0.00
100YR-24HR	2.35	172.5	132.7	39.8	0.0	0.00
100YR-24HR	2.43	221.6	176.8	44.8	0.0	0.00
100YR-24HR	2.52	277.4	227.8	49.6	0.0	0.00
100YR-24HR	2.60	339.5	285.3	54.3	0.0	0.00
100YR-24HR	2.68	407.8	349.0	58.8	0.0	0.00
100YR-24HR	2.77	481.9	418.7	63.1	0.0	0.00
100YR-24HR	2.85	561.3	494.0	67.3	0.0	0.00
100YR-24HR	2.93	645.9	574.5	71.4	0.0	0.00
100YR-24HR	3.02	735.1	659.9	75.2	0.0	0.00
100YR-24HR	3.10	828.8	750.2	78.5	0.0	0.00
100YR-24HR	3.18	926.6	845.0	81.6	0.0	0.00
100YR-24HR	3.27	1028.4	943.9	84.5	0.0	0.00
100YR-24HR	3.35	1133.9	1046.5	87.4	0.0	0.00
100YR-24HR	3.43	1242.9	1152.8	90.1	0.0	0.00
100YR-24HR	3.52	1355.3	1262.5	92.8	-0.0	-0.00
100YR-24HR	3.60	1470.9	1375.5	95.4	-0.0	-0.00
100YR-24HR	3.68	1589.4	1491.6	97.9	-0.0	-0.00
100YR-24HR	3.77	1710.9	1610.6	100.3	-0.0	-0.00
100YR-24HR	3.85	1835.1	1732.4	102.7	-0.0	-0.00
100YR-24HR	3.93	1961.8	1856.8	105.0	-0.0	-0.00
100YR-24HR	4.02	2091.1	1983.8	107.3	0.0	0.00
100YR-24HR	4.10	2222.7	2113.2	109.5	0.0	0.00
100YR-24HR	4.18	2356.7	2245.0	111.7	0.0	0.00
100YR-24HR	4.27	2492.9	2379.1	113.8	0.0	0.00
100YR-24HR	4.35	2631.2	2515.3	115.9	0.0	0.00
100YR-24HR	4.43	2771.6	2653.6	117.9	0.0	0.00
100YR-24HR	4.52	2913.8	2793.9	119.9	0.0	0.00
100YR-24HR	4.60	3057.9	2936.0	121.9	0.0	0.00
100YR-24HR	4.68	3203.8	3080.0	123.8	0.0	0.00
100YR-24HR	4.77	3351.3	3225.6	125.7	0.0	0.00
100YR-24HR	4.85	3500.4	3372.9	127.5	0.0	0.00
100YR-24HR	4.93	3651.1	3521.8	129.3	0.0	0.00
100YR-24HR	5.02	3803.4	3672.1	131.3	0.0	0.00
100YR-24HR	5.10	3962.3	3826.1	136.2	-0.0	-0.00
100YR-24HR	5.18	4134.7	3990.4	144.3	-0.0	-0.00
100YR-24HR	5.27	4319.7	4168.3	151.5	0.0	0.00
100YR-24HR	5.35	4513.9	4356.7	157.2	0.0	0.00
100YR-24HR	5.43	4714.7	4552.8	161.9	-0.0	-0.00
100YR-24HR	5.52	4920.8	4754.9	165.9	-0.0	-0.00
100YR-24HR	5.60	5131.4	4961.8	169.6	-0.0	-0.00
100YR-24HR	5.68	5345.8	5172.8	173.0	-0.0	-0.00
100YR-24HR	5.77	5563.5	5387.4	176.1	-0.0	-0.00
100YR-24HR	5.85	5783.7	5604.8	178.9	-0.0	-0.00
100YR-24HR	5.93	6006.2	5824.6	181.6	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	6.02	6230.4	6046.4	184.0	-0.0	-0.00
100YR-24HR	6.10	6456.2	6269.8	186.4	-0.0	-0.00
100YR-24HR	6.18	6683.3	6494.7	188.7	-0.0	-0.00
100YR-24HR	6.27	6911.9	6720.9	190.9	-0.0	-0.00
100YR-24HR	6.35	7141.7	6948.5	193.2	-0.0	-0.00
100YR-24HR	6.43	7372.8	7177.4	195.4	-0.0	-0.00
100YR-24HR	6.52	7605.1	7407.5	197.6	-0.0	-0.00
100YR-24HR	6.60	7838.5	7638.8	199.7	-0.0	-0.00
100YR-24HR	6.68	8073.0	7871.1	201.9	-0.0	-0.00
100YR-24HR	6.77	8308.6	8104.6	204.0	-0.0	-0.00
100YR-24HR	6.85	8545.2	8339.1	206.1	-0.0	-0.00
100YR-24HR	6.93	8782.8	8574.6	208.2	-0.0	-0.00
100YR-24HR	7.02	9021.4	8811.1	210.3	-0.0	-0.00
100YR-24HR	7.10	9260.9	9048.5	212.3	-0.0	-0.00
100YR-24HR	7.18	9501.4	9287.0	214.4	-0.0	-0.00
100YR-24HR	7.27	9742.9	9526.4	216.5	-0.0	-0.00
100YR-24HR	7.35	9985.3	9766.8	218.6	-0.0	-0.00
100YR-24HR	7.43	10228.6	10008.0	220.6	-0.0	-0.00
100YR-24HR	7.52	10472.7	10250.1	222.6	-0.0	-0.00
100YR-24HR	7.60	10717.5	10492.9	224.6	-0.0	-0.00
100YR-24HR	7.68	10963.1	10736.5	226.6	-0.0	-0.00
100YR-24HR	7.77	11209.3	10980.8	228.5	-0.0	-0.00
100YR-24HR	7.85	11456.3	11225.8	230.5	-0.0	-0.00
100YR-24HR	7.93	11703.9	11471.5	232.4	-0.0	-0.00
100YR-24HR	8.02	11952.3	11717.8	234.5	-0.0	-0.00
100YR-24HR	8.10	12200.4	11957.8	242.6	-0.0	-0.00
100YR-24HR	8.11	12244.5	11999.3	245.1	-0.0	-0.00
100YR-24HR	8.12	12280.4	12033.2	247.2	-0.0	-0.00
100YR-24HR	8.14	12354.1	12102.4	251.7	-0.0	-0.00
100YR-24HR	8.15	12391.7	12137.8	254.0	-0.0	-0.00
100YR-24HR	8.17	12468.6	12210.2	258.4	-0.0	-0.00
100YR-24HR	8.18	12507.7	12247.2	260.6	-0.0	-0.00
100YR-24HR	8.21	12587.3	12322.7	264.7	-0.0	-0.00
100YR-24HR	8.23	12668.5	12400.0	268.5	-0.0	-0.00
100YR-24HR	8.24	12709.6	12439.3	270.2	-0.0	-0.00
100YR-24HR	8.26	12792.7	12519.2	273.6	-0.0	-0.00
100YR-24HR	8.27	12834.8	12559.6	275.2	-0.0	-0.00
100YR-24HR	8.29	12919.7	12641.5	278.1	-0.0	-0.00
100YR-24HR	8.30	12962.5	12683.0	279.5	-0.0	-0.00
100YR-24HR	8.32	13049.0	12766.7	282.2	-0.0	-0.00
100YR-24HR	8.33	13092.5	12809.0	283.5	-0.0	-0.00
100YR-24HR	8.35	13180.3	12894.4	285.9	-0.0	-0.00
100YR-24HR	8.38	13268.9	12980.7	288.2	-0.0	-0.00
100YR-24HR	8.39	13313.5	13024.2	289.3	-0.0	-0.00
100YR-24HR	8.41	13403.1	13111.8	291.4	-0.0	-0.00
100YR-24HR	8.42	13448.2	13155.8	292.3	-0.0	-0.00
100YR-24HR	8.45	13561.5	13266.8	294.7	-0.0	-0.00
100YR-24HR	8.46	13618.5	13322.7	295.8	-0.0	-0.00
100YR-24HR	8.47	13675.7	13378.8	296.9	-0.0	-0.00
100YR-24HR	8.49	13733.1	13435.1	298.0	-0.0	-0.00
100YR-24HR	8.51	13848.5	13548.5	300.1	-0.0	-0.00
100YR-24HR	8.53	13906.5	13605.5	301.1	-0.0	-0.00
100YR-24HR	8.54	13964.7	13662.7	302.1	-0.0	-0.00
100YR-24HR	8.55	14023.1	13720.0	303.0	-0.0	-0.00
100YR-24HR	8.58	14155.0	13849.8	305.2	-0.0	-0.00
100YR-24HR	8.60	14228.7	13922.4	306.3	-0.0	-0.00
100YR-24HR	8.62	14302.6	13995.1	307.4	-0.0	-0.00
100YR-24HR	8.63	14376.7	14068.2	308.5	-0.0	-0.00
100YR-24HR	8.65	14451.0	14141.4	309.6	-0.0	-0.00
100YR-24HR	8.67	14525.6	14214.9	310.6	-0.0	-0.00
100YR-24HR	8.68	14600.3	14288.6	311.6	-0.0	-0.00
100YR-24HR	8.70	14675.2	14362.6	312.6	-0.0	-0.00
100YR-24HR	8.72	14750.3	14436.7	313.6	-0.0	-0.00
100YR-24HR	8.73	14825.5	14511.0	314.5	-0.0	-0.00
100YR-24HR	8.75	14900.9	14585.5	315.4	-0.0	-0.00
100YR-24HR	8.77	14976.5	14660.2	316.3	-0.0	-0.00
100YR-24HR	8.78	15052.1	14735.0	317.2	-0.0	-0.00
100YR-24HR	8.80	15127.9	14809.9	318.0	-0.0	-0.00
100YR-24HR	8.82	15203.8	14885.0	318.8	-0.0	-0.00
100YR-24HR	8.83	15279.8	14960.2	319.6	-0.0	-0.00
100YR-24HR	8.85	15355.9	15035.5	320.4	-0.0	-0.00
100YR-24HR	8.87	15432.0	15110.9	321.1	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	8.88	15508.3	15186.4	321.9	-0.0	-0.00
100YR-24HR	8.90	15584.6	15262.0	322.6	-0.0	-0.00
100YR-24HR	8.92	15661.0	15337.7	323.3	-0.0	-0.00
100YR-24HR	8.93	15737.5	15413.4	324.0	-0.0	-0.00
100YR-24HR	8.95	15814.0	15489.3	324.7	-0.0	-0.00
100YR-24HR	8.97	15890.6	15565.2	325.4	-0.0	-0.00
100YR-24HR	8.98	15967.2	15641.1	326.1	-0.0	-0.00
100YR-24HR	9.00	16043.9	15717.2	326.7	-0.0	-0.00
100YR-24HR	9.02	16120.6	15793.3	327.4	-0.0	-0.00
100YR-24HR	9.03	16197.3	15869.4	327.9	-0.0	-0.00
100YR-24HR	9.05	16274.1	15945.6	328.5	-0.0	-0.00
100YR-24HR	9.07	16350.9	16021.9	329.0	-0.0	-0.00
100YR-24HR	9.08	16427.8	16098.2	329.5	-0.0	-0.00
100YR-24HR	9.10	16504.6	16174.6	330.0	-0.0	-0.00
100YR-24HR	9.12	16581.5	16251.0	330.5	-0.0	-0.00
100YR-24HR	9.13	16658.5	16327.4	331.0	-0.0	-0.00
100YR-24HR	9.15	16735.4	16403.9	331.5	-0.0	-0.00
100YR-24HR	9.17	16812.4	16480.4	332.0	-0.0	-0.00
100YR-24HR	9.18	16889.5	16556.9	332.5	-0.0	-0.00
100YR-24HR	9.20	16966.5	16633.5	333.0	-0.0	-0.00
100YR-24HR	9.22	17043.6	16710.1	333.5	-0.0	-0.00
100YR-24HR	9.23	17120.7	16786.7	334.0	-0.0	-0.00
100YR-24HR	9.25	17197.9	16863.3	334.5	-0.0	-0.00
100YR-24HR	9.27	17275.1	16940.0	335.0	-0.0	-0.00
100YR-24HR	9.28	17352.3	17016.7	335.5	-0.0	-0.00
100YR-24HR	9.30	17429.5	17093.5	336.0	0.0	0.00
100YR-24HR	9.32	17506.8	17170.3	336.5	0.0	0.00
100YR-24HR	9.33	17584.1	17247.1	337.0	0.0	0.00
100YR-24HR	9.35	17661.4	17323.9	337.5	0.0	0.00
100YR-24HR	9.37	17738.8	17400.8	338.0	0.0	0.00
100YR-24HR	9.38	17816.1	17477.6	338.5	0.0	0.00
100YR-24HR	9.40	17893.5	17554.6	339.0	0.0	0.00
100YR-24HR	9.42	17971.0	17631.5	339.5	0.0	0.00
100YR-24HR	9.43	18048.5	17708.5	340.0	0.0	0.00
100YR-24HR	9.45	18125.9	17785.5	340.5	0.0	0.00
100YR-24HR	9.47	18203.5	17862.5	340.9	0.0	0.00
100YR-24HR	9.48	18281.0	17939.6	341.4	0.0	0.00
100YR-24HR	9.50	18358.6	18016.7	341.9	0.0	0.00
100YR-24HR	9.52	18436.2	18093.8	342.4	0.0	0.00
100YR-24HR	9.53	18513.8	18170.9	342.9	0.0	0.00
100YR-24HR	9.55	18591.5	18248.1	343.4	0.0	0.00
100YR-24HR	9.57	18669.1	18325.3	343.9	0.0	0.00
100YR-24HR	9.58	18746.9	18402.5	344.4	0.0	0.00
100YR-24HR	9.60	18824.6	18479.7	344.8	0.0	0.00
100YR-24HR	9.62	18902.3	18557.0	345.3	0.0	0.00
100YR-24HR	9.63	18980.1	18634.3	345.8	0.0	0.00
100YR-24HR	9.65	19057.9	18711.6	346.3	-0.0	-0.00
100YR-24HR	9.67	19135.8	18789.0	346.8	-0.0	-0.00
100YR-24HR	9.68	19213.6	18866.4	347.3	0.0	0.00
100YR-24HR	9.70	19291.5	18943.8	347.7	0.0	0.00
100YR-24HR	9.72	19369.4	19021.2	348.2	0.0	0.00
100YR-24HR	9.73	19447.3	19098.6	348.7	0.0	0.00
100YR-24HR	9.75	19525.3	19176.1	349.2	0.0	0.00
100YR-24HR	9.77	19603.3	19253.6	349.7	0.0	0.00
100YR-24HR	9.78	19681.3	19331.1	350.2	0.0	0.00
100YR-24HR	9.80	19759.3	19408.6	350.6	0.0	0.00
100YR-24HR	9.82	19837.3	19486.2	351.1	0.0	0.00
100YR-24HR	9.83	19915.4	19563.8	351.6	0.0	0.00
100YR-24HR	9.85	19993.5	19641.4	352.1	0.0	0.00
100YR-24HR	9.87	20071.6	19719.1	352.5	0.0	0.00
100YR-24HR	9.88	20149.7	19796.7	353.0	0.0	0.00
100YR-24HR	9.90	20227.9	19874.4	353.5	0.0	0.00
100YR-24HR	9.92	20306.1	19952.1	354.0	0.0	0.00
100YR-24HR	9.93	20384.3	20029.8	354.5	0.0	0.00
100YR-24HR	9.95	20462.5	20107.6	354.9	0.0	0.00
100YR-24HR	9.97	20540.8	20185.3	355.4	0.0	0.00
100YR-24HR	9.98	20619.0	20263.1	355.9	0.0	0.00
100YR-24HR	10.00	20697.3	20341.0	356.4	0.0	0.00
100YR-24HR	10.02	20775.7	20418.8	357.0	0.0	0.00
100YR-24HR	10.03	20854.5	20496.6	357.9	0.0	0.00
100YR-24HR	10.05	20933.8	20574.6	359.2	0.0	0.00
100YR-24HR	10.07	21013.8	20653.0	360.9	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	10.08	21095.1	20731.8	363.3	0.0	0.00
100YR-24HR	10.10	21161.2	20795.6	365.6	0.0	0.00
100YR-24HR	10.11	21228.2	20860.0	368.2	0.0	0.00
100YR-24HR	10.12	21282.6	20912.2	370.4	0.0	0.00
100YR-24HR	10.14	21393.2	21018.1	375.2	0.0	0.00
100YR-24HR	10.15	21449.4	21071.9	377.6	0.0	0.00
100YR-24HR	10.17	21563.5	21181.2	382.3	0.0	0.00
100YR-24HR	10.18	21621.3	21236.7	384.6	0.0	0.00
100YR-24HR	10.20	21738.2	21349.3	389.0	0.0	0.00
100YR-24HR	10.23	21856.9	21463.8	393.0	0.0	0.00
100YR-24HR	10.24	21916.7	21521.8	394.9	0.0	0.00
100YR-24HR	10.26	22037.5	21639.0	398.5	0.0	0.00
100YR-24HR	10.27	22098.3	21698.2	400.2	0.0	0.00
100YR-24HR	10.29	22221.0	21817.6	403.4	0.0	0.00
100YR-24HR	10.30	22282.7	21877.8	404.9	0.0	0.00
100YR-24HR	10.32	22406.9	21999.2	407.7	0.0	0.00
100YR-24HR	10.34	22532.1	22121.7	410.4	0.0	0.00
100YR-24HR	10.35	22595.0	22183.3	411.7	0.0	0.00
100YR-24HR	10.38	22721.5	22307.4	414.1	0.0	0.00
100YR-24HR	10.39	22785.0	22369.7	415.3	0.0	0.00
100YR-24HR	10.41	22912.6	22495.1	417.5	0.0	0.00
100YR-24HR	10.42	22976.7	22558.1	418.6	0.0	0.00
100YR-24HR	10.44	23105.2	22684.6	420.6	0.0	0.00
100YR-24HR	10.45	23185.9	22764.0	421.8	0.0	0.00
100YR-24HR	10.48	23347.8	22923.6	424.2	0.0	0.00
100YR-24HR	10.49	23429.1	23003.8	425.3	0.0	0.00
100YR-24HR	10.51	23510.6	23084.2	426.4	0.0	0.00
100YR-24HR	10.52	23592.3	23164.8	427.5	0.0	0.00
100YR-24HR	10.55	23756.3	23326.6	429.7	0.0	0.00
100YR-24HR	10.56	23838.5	23407.8	430.7	0.0	0.00
100YR-24HR	10.57	23921.0	23489.2	431.7	0.0	0.00
100YR-24HR	10.59	24003.5	23570.8	432.7	0.0	0.00
100YR-24HR	10.60	24107.0	23673.1	434.0	0.0	0.00
100YR-24HR	10.62	24210.7	23775.5	435.2	0.0	0.00
100YR-24HR	10.64	24314.6	23878.3	436.3	0.0	0.00
100YR-24HR	10.65	24418.8	23981.3	437.5	0.0	0.00
100YR-24HR	10.67	24523.1	24084.5	438.6	0.0	0.00
100YR-24HR	10.69	24627.6	24188.0	439.7	0.0	0.00
100YR-24HR	10.70	24732.3	24291.6	440.7	0.0	0.00
100YR-24HR	10.72	24837.2	24395.4	441.8	0.0	0.00
100YR-24HR	10.74	24942.3	24499.5	442.8	0.0	0.00
100YR-24HR	10.75	25047.4	24603.7	443.8	0.0	0.00
100YR-24HR	10.77	25152.7	24708.0	444.7	0.0	0.00
100YR-24HR	10.79	25258.2	24812.5	445.7	0.0	0.00
100YR-24HR	10.80	25363.7	24917.1	446.6	0.0	0.00
100YR-24HR	10.82	25469.3	25021.9	447.4	0.0	0.00
100YR-24HR	10.84	25575.0	25126.7	448.3	0.0	0.00
100YR-24HR	10.85	25680.9	25231.7	449.2	0.0	0.00
100YR-24HR	10.87	25786.8	25336.8	450.0	0.0	0.00
100YR-24HR	10.89	25892.7	25441.9	450.8	0.0	0.00
100YR-24HR	10.90	25998.8	25547.2	451.6	0.0	0.00
100YR-24HR	10.92	26104.9	25652.5	452.4	0.0	0.00
100YR-24HR	10.94	26211.0	25757.9	453.2	0.0	0.00
100YR-24HR	10.95	26317.2	25863.3	453.9	0.0	0.00
100YR-24HR	10.97	26423.5	25968.8	454.7	0.0	0.00
100YR-24HR	10.99	26529.8	26074.4	455.4	0.0	0.00
100YR-24HR	11.00	26636.1	26180.0	456.1	0.0	0.00
100YR-24HR	11.02	26742.7	26285.6	457.1	0.0	0.00
100YR-24HR	11.04	26849.6	26391.3	458.3	0.0	0.00
100YR-24HR	11.05	26957.1	26497.2	459.9	0.0	0.00
100YR-24HR	11.07	27065.6	26603.6	462.0	-0.0	-0.00
100YR-24HR	11.09	27175.3	26710.5	464.8	0.0	0.00
100YR-24HR	11.11	27336.1	26866.4	469.6	0.0	0.00
100YR-24HR	11.12	27408.5	26936.5	472.0	0.0	0.00
100YR-24HR	11.14	27555.3	27078.4	477.0	0.0	0.00
100YR-24HR	11.15	27629.6	27150.1	479.5	0.0	0.00
100YR-24HR	11.17	27779.8	27295.4	484.4	0.0	0.00
100YR-24HR	11.18	27855.6	27368.9	486.7	0.0	0.00
100YR-24HR	11.21	28008.7	27517.4	491.3	0.0	0.00
100YR-24HR	11.22	28085.8	27592.4	493.4	0.0	0.00
100YR-24HR	11.24	28241.2	27743.7	497.4	0.0	0.00
100YR-24HR	11.26	28397.9	27896.8	501.1	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	11.27	28476.7	27973.8	502.9	0.0	0.00
100YR-24HR	11.29	28635.3	28129.0	506.3	0.0	0.00
100YR-24HR	11.30	28715.0	28207.1	507.9	0.0	0.00
100YR-24HR	11.32	28875.2	28364.3	510.9	0.0	0.00
100YR-24HR	11.33	28955.6	28443.2	512.4	0.0	0.00
100YR-24HR	11.36	29117.1	28602.0	515.1	0.0	0.00
100YR-24HR	11.38	29279.5	28761.7	517.8	0.0	0.00
100YR-24HR	11.39	29361.0	28841.9	519.0	0.0	0.00
100YR-24HR	11.41	29524.4	29003.0	521.5	0.0	0.00
100YR-24HR	11.42	29606.4	29083.8	522.6	0.0	0.00
100YR-24HR	11.44	29770.8	29245.9	524.9	0.0	0.00
100YR-24HR	11.45	29853.2	29327.3	525.9	0.0	0.00
100YR-24HR	11.48	30059.9	29531.3	528.6	0.0	0.00
100YR-24HR	11.49	30163.5	29633.7	529.9	0.0	0.00
100YR-24HR	11.50	30267.4	29736.3	531.1	0.0	0.00
100YR-24HR	11.52	30371.4	29839.1	532.3	0.0	0.00
100YR-24HR	11.54	30580.1	30045.3	534.7	0.0	0.00
100YR-24HR	11.56	30684.6	30148.7	535.9	0.0	0.00
100YR-24HR	11.57	30789.4	30252.3	537.1	0.0	0.00
100YR-24HR	11.58	30894.3	30356.1	538.2	0.0	0.00
100YR-24HR	11.61	31131.0	30590.2	540.7	0.0	0.00
100YR-24HR	11.63	31262.8	30720.7	542.1	0.0	0.00
100YR-24HR	11.65	31394.8	30851.4	543.4	0.0	0.00
100YR-24HR	11.66	31527.0	30982.3	544.7	0.0	0.00
100YR-24HR	11.68	31659.4	31113.4	546.0	0.0	0.00
100YR-24HR	11.70	31792.0	31244.7	547.2	0.0	0.00
100YR-24HR	11.71	31924.7	31376.2	548.5	0.0	0.00
100YR-24HR	11.73	32057.6	31507.9	549.7	0.0	0.00
100YR-24HR	11.75	32190.6	31639.8	550.8	0.0	0.00
100YR-24HR	11.76	32323.8	31771.8	552.0	0.0	0.00
100YR-24HR	11.78	32457.1	31904.0	553.1	0.0	0.00
100YR-24HR	11.80	32590.5	32036.3	554.2	0.0	0.00
100YR-24HR	11.81	32724.0	32168.8	555.2	0.0	0.00
100YR-24HR	11.83	32857.6	32301.3	556.3	0.0	0.00
100YR-24HR	11.85	32991.3	32434.0	557.3	0.0	0.00
100YR-24HR	11.86	33125.0	32566.7	558.3	0.0	0.00
100YR-24HR	11.88	33258.9	32699.5	559.4	0.0	0.00
100YR-24HR	11.90	33392.8	32832.4	560.3	0.0	0.00
100YR-24HR	11.91	33526.7	32965.4	561.3	0.0	0.00
100YR-24HR	11.93	33660.8	33098.5	562.3	0.0	0.00
100YR-24HR	11.95	33794.8	33231.6	563.2	0.0	0.00
100YR-24HR	11.96	33929.0	33364.8	564.2	0.0	0.00
100YR-24HR	11.98	34063.1	33498.0	565.1	0.0	0.00
100YR-24HR	12.00	34197.3	33631.3	566.0	-0.0	-0.00
100YR-24HR	12.01	34331.3	33764.6	566.7	-0.0	-0.00
100YR-24HR	12.03	34464.9	33898.0	566.9	-0.0	-0.00
100YR-24HR	12.05	34597.8	34031.2	566.6	-0.0	-0.00
100YR-24HR	12.06	34729.4	34163.9	565.6	-0.0	-0.00
100YR-24HR	12.08	34859.4	34295.8	563.6	-0.0	-0.00
100YR-24HR	12.09	34961.7	34400.3	561.4	-0.0	-0.00
100YR-24HR	12.11	35042.5	34483.2	559.3	-0.0	-0.00
100YR-24HR	12.13	35201.3	34646.7	554.5	-0.0	-0.00
100YR-24HR	12.14	35263.7	34711.2	552.5	-0.0	-0.00
100YR-24HR	12.15	35387.0	34838.5	548.5	-0.0	-0.00
100YR-24HR	12.17	35508.1	34963.6	544.5	-0.0	-0.00
100YR-24HR	12.19	35627.3	35086.6	540.7	-0.0	-0.00
100YR-24HR	12.20	35744.8	35207.6	537.2	-0.0	-0.00
100YR-24HR	12.22	35860.7	35326.7	533.9	-0.0	-0.00
100YR-24HR	12.24	35975.2	35444.1	531.1	-0.0	-0.00
100YR-24HR	12.25	36088.4	35559.9	528.5	-0.0	-0.00
100YR-24HR	12.27	36200.4	35674.3	526.1	-0.0	-0.00
100YR-24HR	12.29	36311.4	35787.4	524.0	-0.0	-0.00
100YR-24HR	12.31	36421.3	35899.2	522.1	-0.0	-0.00
100YR-24HR	12.32	36530.2	36009.9	520.3	-0.0	-0.00
100YR-24HR	12.34	36638.3	36119.6	518.8	-0.0	-0.00
100YR-24HR	12.36	36759.0	36241.8	517.2	-0.0	-0.00
100YR-24HR	12.37	36825.6	36309.2	516.4	-0.0	-0.00
100YR-24HR	12.39	36958.0	36443.1	515.0	-0.0	-0.00
100YR-24HR	12.40	37023.9	36509.5	514.3	-0.0	-0.00
100YR-24HR	12.42	37154.8	36641.6	513.2	-0.0	-0.00
100YR-24HR	12.43	37220.0	36707.3	512.7	-0.0	-0.00
100YR-24HR	12.46	37349.7	36837.9	511.9	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	12.48	37494.8	36983.8	511.0	-0.0	-0.00
100YR-24HR	12.49	37574.9	37064.3	510.6	-0.0	-0.00
100YR-24HR	12.51	37654.8	37144.6	510.2	-0.0	-0.00
100YR-24HR	12.52	37734.5	37224.6	509.9	-0.0	-0.00
100YR-24HR	12.55	37893.0	37383.7	509.2	-0.0	-0.00
100YR-24HR	12.56	37971.8	37462.9	509.0	-0.0	-0.00
100YR-24HR	12.57	38050.5	37541.8	508.7	-0.0	-0.00
100YR-24HR	12.59	38128.9	37620.4	508.5	-0.0	-0.00
100YR-24HR	12.61	38285.2	37777.1	508.1	-0.0	-0.00
100YR-24HR	12.63	38382.4	37874.5	507.9	-0.0	-0.00
100YR-24HR	12.65	38479.4	37971.6	507.8	-0.0	-0.00
100YR-24HR	12.66	38576.1	38068.4	507.7	-0.0	-0.00
100YR-24HR	12.68	38672.6	38165.0	507.6	-0.0	-0.00
100YR-24HR	12.70	38768.8	38261.2	507.6	-0.0	-0.00
100YR-24HR	12.71	38864.8	38357.2	507.6	-0.0	-0.00
100YR-24HR	12.73	38960.7	38453.0	507.7	-0.0	-0.00
100YR-24HR	12.75	39056.3	38548.5	507.8	-0.0	-0.00
100YR-24HR	12.76	39151.8	38643.9	507.9	-0.0	-0.00
100YR-24HR	12.78	39247.1	38739.1	508.1	-0.0	-0.00
100YR-24HR	12.80	39342.4	38834.1	508.3	-0.0	-0.00
100YR-24HR	12.81	39437.5	38928.9	508.5	-0.0	-0.00
100YR-24HR	12.83	39532.5	39023.7	508.8	-0.0	-0.00
100YR-24HR	12.85	39627.4	39118.3	509.1	-0.0	-0.00
100YR-24HR	12.86	39722.3	39212.9	509.4	-0.0	-0.00
100YR-24HR	12.88	39817.1	39307.3	509.8	-0.0	-0.00
100YR-24HR	12.90	39911.8	39401.6	510.1	-0.0	-0.00
100YR-24HR	12.91	40006.4	39495.9	510.5	-0.0	-0.00
100YR-24HR	12.93	40101.0	39590.1	510.9	-0.0	-0.00
100YR-24HR	12.95	40195.6	39684.3	511.4	-0.0	-0.00
100YR-24HR	12.96	40290.2	39778.4	511.8	-0.0	-0.00
100YR-24HR	12.98	40384.7	39872.4	512.3	-0.0	-0.00
100YR-24HR	13.00	40479.2	39966.5	512.7	-0.0	-0.00
100YR-24HR	13.01	40573.7	40060.5	513.2	-0.0	-0.00
100YR-24HR	13.03	40668.1	40154.5	513.5	-0.0	-0.00
100YR-24HR	13.05	40762.2	40248.5	513.7	-0.0	-0.00
100YR-24HR	13.06	40856.0	40342.3	513.6	-0.0	-0.00
100YR-24HR	13.08	40949.2	40435.9	513.3	-0.0	-0.00
100YR-24HR	13.10	41041.7	40529.1	512.7	-0.0	-0.00
100YR-24HR	13.11	41133.5	40621.7	511.8	-0.0	-0.00
100YR-24HR	13.13	41224.5	40713.7	510.8	-0.0	-0.00
100YR-24HR	13.15	41314.7	40805.0	509.7	-0.0	-0.00
100YR-24HR	13.16	41404.3	40895.7	508.6	-0.0	-0.00
100YR-24HR	13.18	41493.2	40985.6	507.6	-0.0	-0.00
100YR-24HR	13.20	41581.6	41074.9	506.7	-0.0	-0.00
100YR-24HR	13.21	41669.5	41163.6	505.9	-0.0	-0.00
100YR-24HR	13.23	41756.9	41251.7	505.2	-0.0	-0.00
100YR-24HR	13.25	41843.8	41339.2	504.6	-0.0	-0.00
100YR-24HR	13.26	41930.4	41426.3	504.1	-0.0	-0.00
100YR-24HR	13.28	42016.6	41513.0	503.6	-0.0	-0.00
100YR-24HR	13.30	42102.5	41599.3	503.2	-0.0	-0.00
100YR-24HR	13.31	42188.1	41685.2	502.9	-0.0	-0.00
100YR-24HR	13.33	42273.4	41770.7	502.6	-0.0	-0.00
100YR-24HR	13.35	42358.4	41855.9	502.4	-0.0	-0.00
100YR-24HR	13.36	42443.1	41940.9	502.3	-0.0	-0.00
100YR-24HR	13.38	42527.7	42025.5	502.1	-0.0	-0.00
100YR-24HR	13.40	42612.0	42110.0	502.0	-0.0	-0.00
100YR-24HR	13.41	42696.1	42194.1	502.0	-0.0	-0.00
100YR-24HR	13.43	42780.1	42278.1	502.0	-0.0	-0.00
100YR-24HR	13.45	42863.9	42361.9	502.0	-0.0	-0.00
100YR-24HR	13.46	42947.5	42445.4	502.1	-0.0	-0.00
100YR-24HR	13.48	43031.0	42528.8	502.2	-0.0	-0.00
100YR-24HR	13.50	43114.3	42612.1	502.2	-0.0	-0.00
100YR-24HR	13.51	43197.5	42695.2	502.4	-0.0	-0.00
100YR-24HR	13.53	43280.6	42778.1	502.5	-0.0	-0.00
100YR-24HR	13.55	43363.5	42860.9	502.6	-0.0	-0.00
100YR-24HR	13.56	43446.3	42943.6	502.8	-0.0	-0.00
100YR-24HR	13.58	43529.0	43026.1	502.9	-0.0	-0.00
100YR-24HR	13.60	43611.6	43108.5	503.1	-0.0	-0.00
100YR-24HR	13.61	43694.1	43190.8	503.3	-0.0	-0.00
100YR-24HR	13.63	43776.5	43273.0	503.5	-0.0	-0.00
100YR-24HR	13.65	43858.8	43355.1	503.7	-0.0	-0.00
100YR-24HR	13.66	43941.0	43437.1	503.9	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	13.68	44023.1	43518.9	504.2	-0.0	-0.00
100YR-24HR	13.70	44105.2	43600.7	504.4	-0.0	-0.00
100YR-24HR	13.71	44187.1	43682.5	504.7	-0.0	-0.00
100YR-24HR	13.73	44269.1	43764.1	505.0	-0.0	-0.00
100YR-24HR	13.75	44350.9	43845.7	505.2	-0.0	-0.00
100YR-24HR	13.76	44432.7	43927.2	505.5	-0.0	-0.00
100YR-24HR	13.78	44514.5	44008.6	505.9	-0.0	-0.00
100YR-24HR	13.80	44596.2	44090.0	506.2	-0.0	-0.00
100YR-24HR	13.81	44677.9	44171.4	506.5	-0.0	-0.00
100YR-24HR	13.83	44759.6	44252.7	506.9	-0.0	-0.00
100YR-24HR	13.85	44841.2	44334.0	507.2	-0.0	-0.00
100YR-24HR	13.86	44922.8	44415.2	507.6	-0.0	-0.00
100YR-24HR	13.88	45004.4	44496.5	508.0	-0.0	-0.00
100YR-24HR	13.90	45086.0	44577.7	508.3	-0.0	-0.00
100YR-24HR	13.91	45167.5	44658.8	508.7	-0.0	-0.00
100YR-24HR	13.93	45249.1	44740.0	509.1	-0.0	-0.00
100YR-24HR	13.95	45330.6	44821.1	509.5	-0.0	-0.00
100YR-24HR	13.96	45412.1	44902.2	509.9	-0.0	-0.00
100YR-24HR	13.98	45493.6	44983.3	510.3	-0.0	-0.00
100YR-24HR	14.00	45575.2	45064.4	510.7	-0.0	-0.00
100YR-24HR	14.01	45656.7	45145.5	511.2	-0.0	-0.00
100YR-24HR	14.03	45738.2	45226.6	511.6	-0.0	-0.00
100YR-24HR	14.05	45819.7	45307.6	512.1	-0.0	-0.00
100YR-24HR	14.06	45901.2	45388.6	512.6	-0.0	-0.00
100YR-24HR	14.08	45982.8	45469.6	513.1	-0.0	-0.00
100YR-24HR	14.10	46064.3	45550.6	513.7	-0.0	-0.00
100YR-24HR	14.11	46145.8	45631.6	514.2	-0.0	-0.00
100YR-24HR	14.13	46227.3	45712.6	514.7	-0.0	-0.00
100YR-24HR	14.15	46308.7	45793.5	515.2	-0.0	-0.00
100YR-24HR	14.16	46390.2	45874.5	515.7	-0.0	-0.00
100YR-24HR	14.18	46471.7	45955.4	516.3	-0.0	-0.00
100YR-24HR	14.20	46553.2	46036.4	516.8	-0.0	-0.00
100YR-24HR	14.21	46634.6	46117.3	517.3	-0.0	-0.00
100YR-24HR	14.23	46716.1	46198.3	517.8	-0.0	-0.00
100YR-24HR	14.25	46797.6	46279.2	518.4	-0.0	-0.00
100YR-24HR	14.26	46879.0	46360.2	518.9	-0.0	-0.00
100YR-24HR	14.28	46960.5	46441.1	519.4	-0.0	-0.00
100YR-24HR	14.30	47042.0	46522.0	519.9	-0.0	-0.00
100YR-24HR	14.31	47123.4	46602.9	520.5	-0.0	-0.00
100YR-24HR	14.33	47204.9	46683.9	521.0	-0.0	-0.00
100YR-24HR	14.35	47286.3	46764.8	521.5	-0.0	-0.00
100YR-24HR	14.36	47367.8	46845.7	522.1	-0.0	-0.00
100YR-24HR	14.38	47449.2	46926.6	522.6	-0.0	-0.00
100YR-24HR	14.40	47530.7	47007.6	523.1	-0.0	-0.00
100YR-24HR	14.41	47612.2	47088.5	523.7	-0.0	-0.00
100YR-24HR	14.43	47693.6	47169.4	524.2	-0.0	-0.00
100YR-24HR	14.45	47775.1	47250.3	524.7	-0.0	-0.00
100YR-24HR	14.46	47856.5	47331.3	525.3	0.0	0.00
100YR-24HR	14.48	47938.0	47412.2	525.8	0.0	0.00
100YR-24HR	14.50	48019.5	47493.1	526.3	0.0	0.00
100YR-24HR	14.51	48100.9	47574.1	526.9	0.0	0.00
100YR-24HR	14.53	48182.4	47655.0	527.4	0.0	0.00
100YR-24HR	14.55	48263.9	47735.9	528.0	0.0	0.00
100YR-24HR	14.56	48345.4	47816.9	528.5	0.0	0.00
100YR-24HR	14.58	48426.8	47897.8	529.0	0.0	0.00
100YR-24HR	14.60	48508.3	47978.7	529.6	0.0	0.00
100YR-24HR	14.61	48589.8	48059.7	530.1	0.0	0.00
100YR-24HR	14.63	48671.3	48140.6	530.6	0.0	0.00
100YR-24HR	14.65	48752.7	48221.6	531.2	0.0	0.00
100YR-24HR	14.66	48834.2	48302.5	531.7	0.0	0.00
100YR-24HR	14.68	48915.7	48383.5	532.3	0.0	0.00
100YR-24HR	14.70	48997.2	48464.4	532.8	0.0	0.00
100YR-24HR	14.71	49078.7	48545.4	533.3	0.0	0.00
100YR-24HR	14.73	49160.2	48626.3	533.9	0.0	0.00
100YR-24HR	14.75	49241.7	48707.3	534.4	0.0	0.00
100YR-24HR	14.76	49323.2	48788.2	534.9	0.0	0.00
100YR-24HR	14.78	49404.7	48869.2	535.5	0.0	0.00
100YR-24HR	14.80	49486.2	48950.2	536.0	0.0	0.00
100YR-24HR	14.81	49567.7	49031.1	536.6	0.0	0.00
100YR-24HR	14.83	49649.2	49112.1	537.1	0.0	0.00
100YR-24HR	14.85	49730.7	49193.1	537.6	0.0	0.00
100YR-24HR	14.86	49812.2	49274.1	538.2	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	14.88	49893.8	49355.0	538.7	0.0	0.00
100YR-24HR	14.90	49975.3	49436.0	539.3	0.0	0.00
100YR-24HR	14.91	50056.8	49517.0	539.8	0.0	0.00
100YR-24HR	14.93	50138.3	49598.0	540.3	0.0	0.00
100YR-24HR	14.95	50219.9	49679.0	540.9	0.0	0.00
100YR-24HR	14.96	50301.4	49760.0	541.4	0.0	0.00
100YR-24HR	14.98	50382.9	49841.0	542.0	0.0	0.00
100YR-24HR	15.00	50464.5	49922.0	542.5	0.0	0.00
100YR-24HR	15.01	50546.0	50003.0	543.0	0.0	0.00
100YR-24HR	15.03	50627.3	50084.0	543.3	0.0	0.00
100YR-24HR	15.05	50708.4	50165.0	543.5	0.0	0.00
100YR-24HR	15.06	50789.2	50245.8	543.4	0.0	0.00
100YR-24HR	15.08	50869.3	50326.3	543.0	0.0	0.00
100YR-24HR	15.10	50948.8	50406.4	542.4	0.0	0.00
100YR-24HR	15.11	51027.4	50486.0	541.5	0.0	0.00
100YR-24HR	15.13	51105.3	50564.9	540.4	0.0	0.00
100YR-24HR	15.15	51182.4	50643.1	539.3	0.0	0.00
100YR-24HR	15.16	51258.8	50720.5	538.3	0.0	0.00
100YR-24HR	15.18	51334.6	50797.3	537.3	0.0	0.00
100YR-24HR	15.20	51409.8	50873.4	536.4	0.0	0.00
100YR-24HR	15.21	51484.4	50948.9	535.6	0.0	0.00
100YR-24HR	15.23	51558.6	51023.8	534.9	0.0	0.00
100YR-24HR	15.25	51632.4	51098.1	534.3	0.0	0.00
100YR-24HR	15.26	51705.7	51172.0	533.7	0.0	0.00
100YR-24HR	15.28	51778.7	51245.4	533.3	0.0	0.00
100YR-24HR	15.30	51851.3	51318.4	532.9	0.0	0.00
100YR-24HR	15.31	51923.6	51391.1	532.6	0.0	0.00
100YR-24HR	15.33	51995.7	51463.3	532.3	0.0	0.00
100YR-24HR	15.35	52067.4	51535.3	532.1	0.0	0.00
100YR-24HR	15.36	52138.9	51607.0	531.9	0.0	0.00
100YR-24HR	15.38	52210.2	51678.3	531.8	0.0	0.00
100YR-24HR	15.40	52281.2	51749.5	531.7	0.0	0.00
100YR-24HR	15.41	52352.0	51820.3	531.7	0.0	0.00
100YR-24HR	15.43	52422.7	51891.0	531.7	0.0	0.00
100YR-24HR	15.45	52493.2	51961.4	531.7	0.0	0.00
100YR-24HR	15.46	52563.5	52031.7	531.8	0.0	0.00
100YR-24HR	15.48	52633.6	52101.8	531.8	0.0	0.00
100YR-24HR	15.50	52703.7	52171.7	531.9	0.0	0.00
100YR-24HR	15.51	52773.5	52241.5	532.0	0.0	0.00
100YR-24HR	15.53	52843.2	52311.1	532.2	0.0	0.00
100YR-24HR	15.55	52912.8	52380.5	532.3	0.0	0.00
100YR-24HR	15.56	52982.3	52449.8	532.5	0.0	0.00
100YR-24HR	15.58	53051.6	52519.0	532.6	0.0	0.00
100YR-24HR	15.60	53120.9	52588.1	532.8	0.0	0.00
100YR-24HR	15.61	53190.0	52657.0	533.0	0.0	0.00
100YR-24HR	15.63	53259.0	52725.8	533.2	0.0	0.00
100YR-24HR	15.65	53327.9	52794.6	533.4	0.0	0.00
100YR-24HR	15.66	53396.8	52863.2	533.6	0.0	0.00
100YR-24HR	15.68	53465.5	52931.7	533.8	0.0	0.00
100YR-24HR	15.70	53534.2	53000.1	534.1	0.0	0.00
100YR-24HR	15.71	53602.8	53068.4	534.4	0.0	0.00
100YR-24HR	15.73	53671.3	53136.7	534.6	0.0	0.00
100YR-24HR	15.75	53739.8	53204.9	534.9	0.0	0.00
100YR-24HR	15.76	53808.2	53273.0	535.2	0.0	0.00
100YR-24HR	15.78	53876.6	53341.0	535.5	0.0	0.00
100YR-24HR	15.80	53944.9	53409.0	535.9	0.0	0.00
100YR-24HR	15.81	54013.2	53477.0	536.2	0.0	0.00
100YR-24HR	15.83	54081.4	53544.9	536.6	0.0	0.00
100YR-24HR	15.85	54149.7	53612.8	536.9	0.0	0.00
100YR-24HR	15.86	54217.9	53680.6	537.3	0.0	0.00
100YR-24HR	15.88	54286.0	53748.4	537.6	0.0	0.00
100YR-24HR	15.90	54354.2	53816.2	538.0	0.0	0.00
100YR-24HR	15.91	54422.3	53883.9	538.4	0.0	0.00
100YR-24HR	15.93	54490.4	53951.6	538.8	0.0	0.00
100YR-24HR	15.95	54558.5	54019.3	539.2	0.0	0.00
100YR-24HR	15.96	54626.6	54087.0	539.6	0.0	0.00
100YR-24HR	15.98	54694.7	54154.7	540.0	0.0	0.00
100YR-24HR	16.00	54762.8	54222.4	540.4	0.0	0.00
100YR-24HR	16.01	54830.7	54290.0	540.7	0.0	0.00
100YR-24HR	16.10	55164.9	54625.6	539.3	0.0	0.00
100YR-24HR	16.18	55484.1	54949.8	534.3	0.0	0.00
100YR-24HR	16.26	55788.7	55258.4	530.3	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	16.35	56083.7	55555.5	528.2	0.0	0.00
100YR-24HR	16.43	56372.2	55844.9	527.2	0.0	0.00
100YR-24HR	16.51	56656.1	56129.0	527.1	0.0	0.00
100YR-24HR	16.60	56936.5	56409.3	527.3	0.0	0.00
100YR-24HR	16.68	57214.3	56686.4	527.8	0.0	0.00
100YR-24HR	16.76	57490.0	56961.3	528.7	0.0	0.00
100YR-24HR	16.85	57764.5	57234.6	529.8	0.0	0.00
100YR-24HR	16.93	58038.2	57507.0	531.2	0.0	0.00
100YR-24HR	17.01	58311.6	57778.9	532.7	0.0	0.00
100YR-24HR	17.10	58584.9	58050.7	534.3	-0.0	-0.00
100YR-24HR	17.18	58858.1	58322.3	535.9	-0.0	-0.00
100YR-24HR	17.26	59131.2	58593.7	537.5	-0.0	-0.00
100YR-24HR	17.35	59404.2	58865.1	539.1	-0.0	-0.00
100YR-24HR	17.43	59677.1	59136.5	540.7	-0.0	-0.00
100YR-24HR	17.51	59950.1	59407.8	542.3	-0.0	-0.00
100YR-24HR	17.60	60223.0	59679.1	543.9	-0.0	-0.00
100YR-24HR	17.68	60495.9	59950.4	545.6	0.0	0.00
100YR-24HR	17.76	60768.8	60221.7	547.2	0.0	0.00
100YR-24HR	17.85	61041.8	60493.0	548.8	0.0	0.00
100YR-24HR	17.93	61314.7	60764.3	550.5	0.0	0.00
100YR-24HR	18.01	61587.7	61035.6	552.1	0.0	0.00
100YR-24HR	18.10	61860.7	61307.0	553.7	0.0	0.00
100YR-24HR	18.18	62133.7	61578.3	555.4	0.0	0.00
100YR-24HR	18.26	62406.8	61849.7	557.0	0.0	0.00
100YR-24HR	18.35	62679.8	62121.2	558.7	0.0	0.00
100YR-24HR	18.43	62952.9	62392.6	560.3	0.0	0.00
100YR-24HR	18.51	63226.0	62664.1	561.9	0.0	0.00
100YR-24HR	18.60	63499.1	62935.6	563.6	0.0	0.00
100YR-24HR	18.68	63772.3	63207.1	565.2	0.0	0.00
100YR-24HR	18.76	64045.4	63478.6	566.9	0.0	0.00
100YR-24HR	18.85	64318.6	63750.1	568.5	0.0	0.00
100YR-24HR	18.93	64591.8	64021.7	570.1	0.0	0.00
100YR-24HR	19.01	64864.9	64293.3	571.6	0.0	0.00
100YR-24HR	19.10	65131.9	64562.1	569.8	0.0	0.00
100YR-24HR	19.18	65383.7	64819.4	564.3	0.0	0.00
100YR-24HR	19.26	65620.9	65061.0	559.9	0.0	0.00
100YR-24HR	19.35	65848.4	65291.1	557.2	0.0	0.00
100YR-24HR	19.43	66069.3	65513.5	555.8	0.0	0.00
100YR-24HR	19.51	66285.6	65730.4	555.1	0.0	0.00
100YR-24HR	19.60	66498.3	65943.5	554.8	0.0	0.00
100YR-24HR	19.68	66708.4	66153.5	554.8	0.0	0.00
100YR-24HR	19.76	66916.4	66361.2	555.2	0.0	0.00
100YR-24HR	19.85	67123.1	66567.3	555.8	0.0	0.00
100YR-24HR	19.93	67329.1	66772.5	556.6	0.0	0.00
100YR-24HR	20.01	67534.8	66977.2	557.6	0.0	0.00
100YR-24HR	20.10	67740.3	67181.6	558.6	0.0	0.00
100YR-24HR	20.18	67945.7	67386.0	559.7	0.0	0.00
100YR-24HR	20.26	68151.0	67590.3	560.8	0.0	0.00
100YR-24HR	20.35	68356.3	67794.5	561.8	0.0	0.00
100YR-24HR	20.43	68561.5	67998.6	562.9	0.0	0.00
100YR-24HR	20.51	68766.7	68202.7	564.0	0.0	0.00
100YR-24HR	20.60	68971.9	68406.8	565.1	0.0	0.00
100YR-24HR	20.68	69177.1	68610.9	566.2	0.0	0.00
100YR-24HR	20.76	69382.2	68815.0	567.3	0.0	0.00
100YR-24HR	20.85	69587.4	69019.0	568.4	0.0	0.00
100YR-24HR	20.93	69792.6	69223.1	569.5	0.0	0.00
100YR-24HR	21.01	69997.6	69427.2	570.4	0.0	0.00
100YR-24HR	21.10	70196.4	69628.0	568.4	0.0	0.00
100YR-24HR	21.18	70379.8	69816.9	562.9	0.0	0.00
100YR-24HR	21.26	70548.5	69990.0	558.5	0.0	0.00
100YR-24HR	21.35	70707.4	70151.5	555.9	0.0	0.00
100YR-24HR	21.43	70859.7	70305.2	554.5	0.0	0.00
100YR-24HR	21.51	71007.3	70453.5	553.8	0.0	0.00
100YR-24HR	21.60	71151.5	70597.9	553.5	0.0	0.00
100YR-24HR	21.68	71292.8	70739.2	553.6	0.0	0.00
100YR-24HR	21.76	71432.2	70878.2	553.9	0.0	0.00
100YR-24HR	21.85	71570.2	71015.7	554.6	0.0	0.00
100YR-24HR	21.93	71707.5	71152.1	555.4	0.0	0.00
100YR-24HR	22.01	71844.2	71288.0	556.2	0.0	0.00
100YR-24HR	22.10	71974.8	71421.4	553.4	0.0	0.00
100YR-24HR	22.18	72090.1	71543.2	546.8	0.0	0.00
100YR-24HR	22.26	72190.6	71649.2	541.4	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	22.35	72281.3	71743.6	537.7	0.0	0.00
100YR-24HR	22.43	72365.4	71830.3	535.1	0.0	0.00
100YR-24HR	22.51	72444.9	71911.5	533.4	0.0	0.00
100YR-24HR	22.60	72520.8	71988.8	532.0	0.0	0.00
100YR-24HR	22.68	72593.9	72063.0	530.9	0.0	0.00
100YR-24HR	22.76	72665.1	72134.9	530.2	0.0	0.00
100YR-24HR	22.85	72734.9	72205.2	529.7	0.0	0.00
100YR-24HR	22.93	72803.9	72274.5	529.4	0.0	0.00
100YR-24HR	23.01	72872.6	72343.3	529.3	0.0	0.00
100YR-24HR	23.10	72941.2	72411.5	529.7	0.0	0.00
100YR-24HR	23.18	73009.7	72479.5	530.2	0.0	0.00
100YR-24HR	23.26	73078.3	72547.5	530.7	0.0	0.00
100YR-24HR	23.35	73146.7	72615.4	531.3	0.0	0.00
100YR-24HR	23.43	73215.2	72683.4	531.8	0.0	0.00
100YR-24HR	23.51	73283.7	72751.3	532.4	0.0	0.00
100YR-24HR	23.60	73352.1	72819.2	533.0	0.0	0.00
100YR-24HR	23.68	73420.6	72887.1	533.5	0.0	0.00
100YR-24HR	23.76	73489.1	72955.0	534.1	0.0	0.00
100YR-24HR	23.85	73557.5	73022.9	534.6	0.0	0.00
100YR-24HR	23.93	73625.9	73090.8	535.2	0.0	0.00
100YR-24HR	24.01	73694.2	73158.7	535.6	0.0	0.00
100YR-24HR	24.26	73834.5	73323.6	510.9	0.0	0.00
100YR-24HR	24.51	73854.3	73365.8	488.5	0.0	0.00
100YR-24HR	24.76	73854.3	73376.4	477.9	0.0	0.00
100YR-24HR	25.01	73854.3	73387.0	467.3	0.0	0.00
100YR-24HR	25.26	73854.3	73397.6	456.7	0.0	0.00
100YR-24HR	25.51	73854.3	73408.2	446.2	-0.0	-0.00
100YR-24HR	25.76	73854.3	73418.8	435.6	-0.0	-0.00
100YR-24HR	26.01	73854.3	73429.4	425.0	-0.0	-0.00
100YR-24HR	26.26	73854.3	73440.0	414.4	-0.0	-0.00
100YR-24HR	26.51	73854.3	73450.5	403.8	-0.0	-0.00
100YR-24HR	26.76	73854.3	73461.1	393.2	-0.0	-0.00
100YR-24HR	27.01	73854.3	73471.7	382.6	-0.0	-0.00
100YR-24HR	27.26	73854.3	73482.3	372.0	-0.0	-0.00
100YR-24HR	27.51	73854.3	73492.9	361.4	-0.0	-0.00
100YR-24HR	27.76	73854.3	73503.5	350.9	-0.0	-0.00
100YR-24HR	28.01	73854.3	73514.1	340.3	-0.0	-0.00
100YR-24HR	28.26	73854.3	73524.7	329.7	-0.0	-0.00
100YR-24HR	28.51	73854.3	73535.3	319.1	-0.0	-0.00
100YR-24HR	28.76	73854.3	73545.8	308.5	-0.0	-0.00
100YR-24HR	29.01	73854.3	73556.4	297.9	-0.0	-0.00
100YR-24HR	29.26	73854.3	73567.0	287.3	-0.0	-0.00
100YR-24HR	29.51	73854.3	73577.6	276.7	-0.0	-0.00
100YR-24HR	29.76	73854.3	73588.2	266.1	-0.0	-0.00
100YR-24HR	30.01	73854.3	73598.8	255.6	-0.0	-0.00
100YR-24HR	30.26	73854.3	73609.4	245.0	-0.0	-0.00
100YR-24HR	30.51	73854.3	73620.0	234.4	-0.0	-0.00
100YR-24HR	30.76	73854.3	73630.5	223.8	-0.0	-0.00
100YR-24HR	31.01	73854.3	73641.1	213.2	-0.0	-0.00
100YR-24HR	31.26	73854.3	73651.7	202.6	-0.0	-0.00
100YR-24HR	31.51	73854.3	73662.3	192.0	-0.0	-0.00
100YR-24HR	31.76	73854.3	73672.9	181.4	-0.0	-0.00
100YR-24HR	32.01	73854.3	73683.5	170.8	-0.0	-0.00
100YR-24HR	32.26	73854.3	73694.1	160.3	-0.0	-0.00
100YR-24HR	32.51	73854.3	73704.7	149.7	-0.0	-0.00
100YR-24HR	32.76	73854.3	73715.3	139.1	-0.0	-0.00
100YR-24HR	33.01	73854.3	73725.8	128.5	-0.0	-0.00
100YR-24HR	33.26	73854.3	73736.4	117.9	-0.0	-0.00
100YR-24HR	33.51	73854.3	73747.0	107.3	-0.0	-0.00
100YR-24HR	33.76	73854.3	73757.6	96.7	-0.0	-0.00
100YR-24HR	34.01	73854.3	73768.2	86.1	-0.0	-0.00
100YR-24HR	34.26	73854.3	73778.8	75.6	-0.0	-0.00
100YR-24HR	34.51	73854.3	73789.4	65.0	-0.0	-0.00
100YR-24HR	34.76	73854.3	73800.0	54.4	-0.0	-0.00
100YR-24HR	35.01	73854.3	73810.6	43.8	-0.0	-0.00
100YR-24HR	35.26	73854.3	73821.1	33.2	-0.0	-0.00
100YR-24HR	35.51	73854.3	73831.7	22.6	-0.0	-0.00
100YR-24HR	35.76	73854.3	73842.3	12.0	-0.0	-0.00
100YR-24HR	36.01	73854.3	73852.9	1.4	-0.0	-0.00
100YR-24HR	36.26	73854.3	73854.3	0.0	-0.0	-0.00
100YR-24HR	36.51	73854.3	73854.3	0.0	-0.0	-2.08
100YR-24HR	36.76	73854.3	73854.3	0.0	-0.0	103.86

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	37.01	73854.3	73854.3	-0.0	-0.0	99.94
100YR-24HR	37.26	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	37.51	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	37.76	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	38.01	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	38.26	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	38.51	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	38.76	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	39.01	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	39.26	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	39.51	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	39.76	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	40.01	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	40.26	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	40.51	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	40.76	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	41.01	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	41.26	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	41.51	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	41.76	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	42.01	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	42.26	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	42.51	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	42.76	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	43.01	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	43.26	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	43.51	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	43.76	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	44.01	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	44.26	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	44.51	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	44.76	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	45.01	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	45.26	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	45.51	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	45.76	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	46.01	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	46.26	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	46.51	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	46.76	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	47.01	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	47.26	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	47.51	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	47.76	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	48.01	73854.3	73854.3	-0.0	-0.0	99.93
100YR-24HR	48.01	73854.3	73854.3	-0.0	-0.0	99.93

Basin 17_FRONTAGE

SUMMARY OF MAX STAGE - PROPOSED CONDITIONS - BASIN 17_FRONTAGE

NODE	STORM EVENT						WARNING STAGE (FT)
	100YR-1HR	100YR-24HR	100YR-8HR	10YR-1HR	10YR-24HR	10YR-8HR	
S17FE-1	4.46	2.62	3.87	3.37	2.37	3.31	6.57
S17FW-1	1.96	2.22	2.38	1.72	2.21	2.22	6.01
S17FW-2	2.57	2.25	2.75	2.27	2.22	2.48	5.22

CN CALCULATIONS -POST-DEVELOPMENT CONDITIONS - FRONTAGE ROAD - BASIN 17

SUB-BASIN	TOTAL AREA (AC)	PERVIOUS AREA (AC)	PERVIOUS CN	IMPERVIOUS AREA (AC)	IMPERVIOUS CN	COMPOSITE CN
17FE-1	0.13	0.01	61	0.12	96	93.3
17FW-1	0.03	0.02	61	0.01	96	72.7
17FW-2	0.42	0.12	61	0.3	96	86.0
17FW-14A	0.17	0.01	61	0.16	96	93.9
TOTAL AREA	0.75	0.16		0.59		

Average Hydraulic Conductivity

Basin B-17		
Percolation Test	P-29	P-30
Average Flow to 10 ft. depth (gpm)	0.20	14.27
Depth to Water Table (ft)	2.90	2.40
Head Maintained (ft)	1.90	1.40
Borehole Diameter (ft)	0.604	0.604
Borehole Depth (ft)	10.00	10.00
Du (ft)	1.90	1.40
Average Flow (cfs)	0.0004	0.0318
Ds (ft)	7.10	7.60
Hydraulic Conductivity K (cfs/ft2-ft head)	1.50E-05	1.42E-03
Average Hydraulic Conductivity K	**7.16E-04**	

APCTE Corporation

Made by: _____ _____
Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-17D

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs/ft)	(cfs/ft)
1.45	0.000	0.000
2.20	0.009	0.000
3.45	0.031	0.020
5.45	0.067	0.056

Rating Curve (Q)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs)	(cfs)
1.45	0.00	0.00
2.20	0.01	0.00
3.45	0.03	0.02
5.45	0.07	0.06

Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

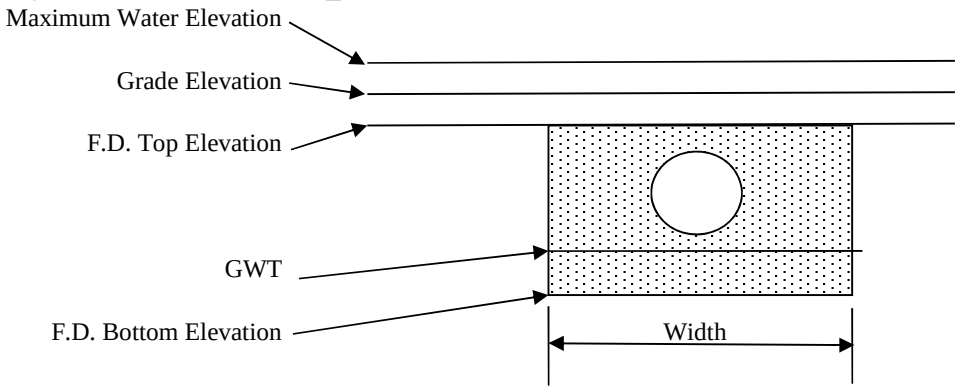
Rating Curve Adjusted (Q)

Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.45	1.45	0.00
1.45	2.20	0.01
1.45	3.45	0.03
1.45	5.45	0.07
2.20	2.20	0.00
2.20	3.45	0.02
2.20	5.45	0.06

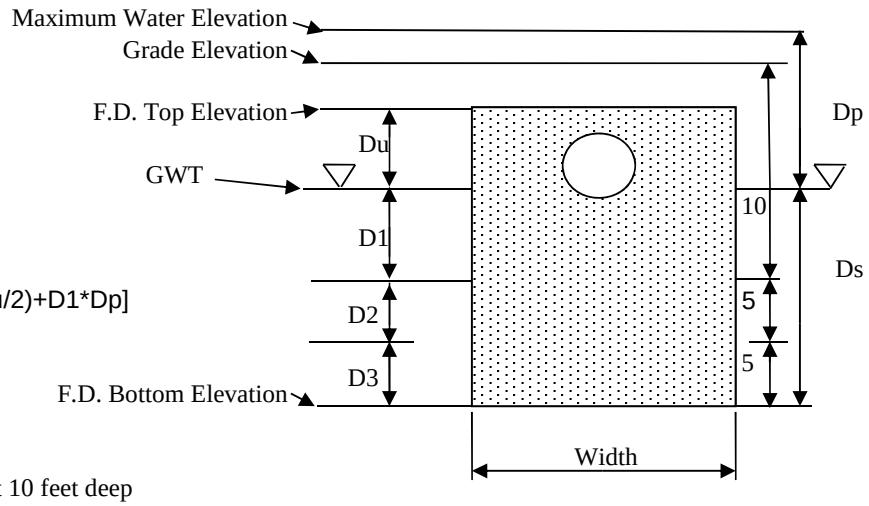
Made by: _____ _____
Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-17E



Maximum Water Elevation =	**5.45**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**4.45**	ft.NAVD	
F.D.Top Elevation =	**3.45**	ft.NAVD	
Ground Water Table =	**1.45**	ft.NAVD	
F.D. Bottom Elevation =	**-8.66**	ft.NAVD	
Width =	**5.00**	feet.	
Pipe Diameter =	**30**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**7.16E-04**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K15 =	**7.16E-04**	cfs/ft^2-ft head	(Ave. P-29,P-30)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____

Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-17E

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs/ft)	(cfs/ft)
1.45	0.000	0.000
2.20	0.010	0.000
3.45	0.032	0.021
5.45	0.067	0.055

Rating Curve (Q)

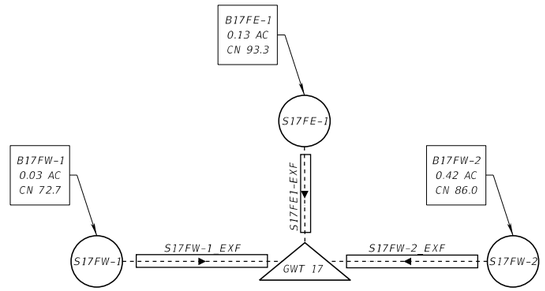
Headwater	***Water Table Elev. (ft)***	
	1.45	***2.20***
(ft)	(cfs)	(cfs)
1.45	0.00	0.00
2.20	0.01	0.00
3.45	0.03	0.02
5.45	0.07	0.06

Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

Rating Curve Adjusted (Q)

Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.45	1.45	0.00
1.45	2.20	0.01
1.45	3.45	0.03
1.45	5.45	0.07
2.20	2.20	0.00
2.20	3.45	0.02
2.20	5.45	0.06

POST-DEVELOPMENT CONDITIONS



LEGEND

B17-1 0.12 AC CN 96	CONTRIBUTING BASIN BASIN NAME BASIN AREA CURVE NUMBER
S17-2	NODE NAME
58ST_CANAL	BOUNDARY NODE WITH CONSTANT TAILWATER
GWT 17-12	BOUNDARY NODE WITH VARIABLE TAILWATER
S17-2_S17-3 18"-42" 21.50 21.40	PIPE LINK WITH (QUANTITY)SIZE-LENGTH INVERT ELEVATIONS
WEX17_14	WEIR LINK
AREA 1_EXF	RATING CURVE LINK

PROPOSED DESIGN

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01 441830-1-52-01 441831-1-52-01

NODAL DIAGRAM
BASIN 17

SHEET NO.

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
GWT-17	Basin 17	100YR-1HR	0.00	1.45	99.00	0.0000	0	0.69	3.41	0.00	0.00
S17FE-1	Basin 17	100YR-1HR	0.76	4.46	6.57	0.0050	113	0.65	0.93	0.76	0.83
S17FW-1	Basin 17	100YR-1HR	0.85	1.96	6.01	0.0015	113	0.68	0.12	0.85	0.10
S17FW-2	Basin 17	100YR-1HR	0.67	2.57	5.22	-0.0048	113	0.67	2.55	0.67	2.54
GWT-17	Basin 17	100YR-24HR	23.99	2.20	99.00	0.0013	0	12.02	0.75	0.00	0.00
S17FE-1	Basin 17	100YR-24HR	12.05	2.62	6.57	-0.0050	113	11.98	0.17	12.03	0.17
S17FW-1	Basin 17	100YR-24HR	22.06	2.22	6.01	0.0020	113	12.00	0.03	12.07	0.03
S17FW-2	Basin 17	100YR-24HR	21.01	2.25	5.22	0.0045	113	11.98	0.55	12.00	0.54
GWT-17	Basin 17	100YR-8HR	8.00	2.20	99.00	0.0039	0	4.01	2.19	0.00	0.00
S17FE-1	Basin 17	100YR-8HR	4.05	3.87	6.57	-0.0050	113	4.00	0.52	4.04	0.51
S17FW-1	Basin 17	100YR-8HR	4.10	2.38	6.01	-0.0031	113	4.00	0.10	4.08	0.09
S17FW-2	Basin 17	100YR-8HR	4.02	2.75	5.22	-0.0049	113	4.00	1.61	4.01	1.60
GWT-17	Basin 17	10YR-1HR	0.00	1.45	99.00	0.0000	0	0.70	2.16	0.00	0.00
S17FE-1	Basin 17	10YR-1HR	0.74	3.37	6.57	0.0100	113	0.65	0.62	0.74	0.57
S17FW-1	Basin 17	10YR-1HR	0.87	1.72	6.01	0.0022	113	0.72	0.06	0.87	0.05
S17FW-2	Basin 17	10YR-1HR	0.68	2.27	5.22	-0.0100	113	0.67	1.57	0.68	1.56
GWT-17	Basin 17	10YR-24HR	24.00	2.20	99.00	0.0013	0	12.02	0.47	0.00	0.00
S17FE-1	Basin 17	10YR-24HR	12.07	2.37	6.57	0.0048	113	12.00	0.11	12.03	0.11
S17FW-1	Basin 17	10YR-24HR	24.02	2.21	6.01	0.0020	113	12.00	0.02	12.08	0.02
S17FW-2	Basin 17	10YR-24HR	22.02	2.22	5.22	-0.0034	113	12.00	0.35	12.02	0.34
GWT-17	Basin 17	10YR-8HR	8.00	2.20	99.00	0.0034	0	4.02	1.38	0.00	0.00
S17FE-1	Basin 17	10YR-8HR	4.06	3.31	6.57	-0.0050	113	4.00	0.34	4.05	0.33
S17FW-1	Basin 17	10YR-8HR	8.01	2.22	6.01	-0.0031	113	4.01	0.06	4.10	0.05
S17FW-2	Basin 17	10YR-8HR	4.02	2.48	5.22	-0.0050	113	4.00	1.02	4.02	1.01

```
================================================================================
==== Basins ====================================================================
================================================================================

        Name: B17FE-1                Node: S17FE-1               Status: Onsite
       Group: Basin 17               Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                   Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
            Area(ac): 0.130                   Time Shift(hrs): 0.00
        Curve Number: 93.30              Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


--------------------------------------------------------------------------------
        Name: B17FW-1                Node: S17FW-1               Status: Onsite
       Group: Basin 17               Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                   Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
            Area(ac): 0.030                   Time Shift(hrs): 0.00
        Curve Number: 72.70              Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


--------------------------------------------------------------------------------
        Name: B17FW-2                Node: S17FW-2               Status: Onsite
       Group: Basin 17               Type: SCS Unit Hydrograph CN

       Unit Hydrograph: Uh256                 Peaking Factor: 256.0
         Rainfall File:                   Storm Duration(hrs): 0.00
   Rainfall Amount(in): 0.000               Time of Conc(min): 10.00
            Area(ac): 0.420                   Time Shift(hrs): 0.00
        Curve Number: 86.00              Max Allowable Q(cfs): 999999.000
             DCIA(%): 0.00


================================================================================
==== Nodes =====================================================================
================================================================================

      Name: GWT-17             Base Flow(cfs): 0.000          Init Stage(ft): 1.450
     Group: Basin 17                                         Warn Stage(ft): 99.000
      Type: Time/Stage


      Time(hrs)       Stage(ft)
--------------- ---------------
           0.00           1.450
         108.00           1.450

--------------------------------------------------------------------------------
      Name: S17FE-1            Base Flow(cfs): 0.000          Init Stage(ft): 1.450
     Group: Basin 17                                         Warn Stage(ft): 6.570
      Type: Stage/Area


      Stage(ft)        Area(ac)
--------------- ---------------
          1.450          0.0004
          6.570          0.0004

--------------------------------------------------------------------------------
      Name: S17FW-1            Base Flow(cfs): 0.000          Init Stage(ft): 1.450
     Group: Basin 17                                         Warn Stage(ft): 6.010
      Type: Stage/Area
```

Stage(ft)	Area(ac)
1.450	0.0004
6.010	0.0004

Name: S17FW-2 Base Flow(cfs): 0.000 Init Stage(ft): 1.450
Group: Basin 17 Warn Stage(ft): 5.220
Type: Stage/Area

Stage(ft)	Area(ac)
1.450	0.0004
5.220	0.0004

==========
==== Operating Tables ==========
==========

Name: E_OPT-17A Group: Basin 17
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.450	1.45	0.00
1.450	2.20	0.01
1.450	3.45	0.04
1.450	5.45	0.07
2.200	2.20	0.00
2.200	3.45	0.02
2.200	5.45	0.06

Name: E_OPT-17B Group: Basin 17
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.450	1.45	0.00
1.450	2.20	0.01
1.450	3.45	0.03
1.450	5.45	0.07
2.200	2.20	0.00
2.200	3.45	0.02
2.200	5.45	0.06

Name: E_OPT-17C Group: Basin 17
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.450	1.45	0.00
1.450	2.20	0.01
1.450	3.45	0.04
1.450	5.45	0.08
2.200	2.20	0.00
2.200	3.45	0.03
2.200	5.45	0.07

Name: E_OPT-17D Group: Basin 17

Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.450	1.45	0.00
1.450	2.20	0.01
1.450	3.45	0.03
1.450	5.45	0.07
2.200	2.20	0.00
2.200	3.45	0.02
2.200	5.45	0.06

Name: E_OPT-17E Group: Basin 17
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.450	1.45	0.00
1.450	2.20	0.01
1.450	3.45	0.03
1.450	5.45	0.07
2.200	2.20	0.00
2.200	3.45	0.02
2.200	5.45	0.06

Name: E_OPT-17F Group: Basin 17
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.450	1.45	0.00
1.450	2.20	0.01
1.450	3.45	0.03
1.450	5.45	0.07
2.200	2.20	0.00
2.200	3.45	0.02
2.200	5.45	0.06

==========
==== Rating Curves ====
==========

Name: S17FE1-EXF From Node: S17FE-1 Count: 15
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S17FW1_EXF From Node: S17FW-1 Count: 15
Group: Basin 17 To Node: GWT-17 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-17A	1.450	1.450
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

```
-------------------------------------------------------------------------------------------------
         Name: S17FW2_EXF          From Node: S17FW-2                Count: 135
        Group: Basin 17              To Node: GWT-17                  Flow: Both

              TABLE           ELEV ON(ft)     ELEV OFF(ft)
           #1: E_OPT-17A      1.450           1.450
           #2:                0.000           0.000
           #3:                0.000           0.000
           #4:                0.000           0.000



=================================================================================================
==== Hydrology Simulations =====================================================================
=================================================================================================

         Name: 100YR-1HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 1.00
          Rainfall File: Fdot-1
    Rainfall Amount(in): 5.00

Time(hrs)       Print Inc(min)
--------------- ---------------
1.000           1.00
1.330           1.00

-------------------------------------------------------------------------------------------------
         Name: 100YR-24HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Fdot-24
    Rainfall Amount(in): 13.44

Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.00
16.000          1.00
24.000          5.00
24.330          5.00

-------------------------------------------------------------------------------------------------
         Name: 100YR-8HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 8.00
          Rainfall File: Fdot-8
    Rainfall Amount(in): 9.60

Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           5.00
6.000           1.00
8.000           5.00
8.330           5.00

-------------------------------------------------------------------------------------------------
         Name: 10YR-1HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 1.00
          Rainfall File: Fdot-1
    Rainfall Amount(in): 3.50

Time(hrs)       Print Inc(min)
--------------- ---------------
1.000           1.00
1.330           1.00
```

```
--------------------------------------------------------------------------------------------------------
         Name: 10YR-24HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Fdot-24
    Rainfall Amount(in): 8.88

Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.00
16.000          1.00
24.000          5.00
24.330          5.00

--------------------------------------------------------------------------------------------------------
         Name: 10YR-8HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 8.00
          Rainfall File: Fdot-8
    Rainfall Amount(in): 6.40

Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           5.00
6.000           1.00
8.000           5.00
8.330           5.00

--------------------------------------------------------------------------------------------------------
         Name: 25YR-72HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 72.00
          Rainfall File: Sfwmd72
    Rainfall Amount(in): 14.00

Time(hrs)       Print Inc(min)
--------------- ---------------
48.000          15.00
56.000          5.00
64.000          1.00
72.000          5.00
72.330          5.00

================================================================================
==== Routing Simulations ======================================================
================================================================================

         Name: 100YR-1HR           Hydrology Sim: 100YR-1HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Execute: Yes         Restart: No            Patch: No
  Alternative: No

        Max Delta Z(ft): 1.00                    Delta Z Factor: 0.00500
    Time Step Optimizer: 10.000
        Start Time(hrs): 0.000                    End Time(hrs): 25.00
     Min Calc Time(sec): 0.5000              Max Calc Time(sec): 60.0000
        Boundary Stages:                         Boundary Flows:


Time(hrs)       Print Inc(min)
--------------- ---------------
1.000           1.000
25.000          15.000

Group           Run
--------------- -----
```

Basin 17 Yes

Name: 100YR-24HR Hydrology Sim: 100YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 48.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 24HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
48.000	15.000

Group	Run
Basin 17	Yes

Name: 100YR-8HR Hydrology Sim: 100YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 36.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 8HR Boundary Flows:

Time(hrs)	Print Inc(min)
2.000	5.000
6.000	1.000
8.000	5.000
36.000	15.000

Group	Run
Basin 17	Yes

Name: 10YR-1HR Hydrology Sim: 10YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.01000
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 25.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
1.000	1.000

25.000 15.000

Group	Run
Basin 17	Yes

Name: 10YR-24HR Hydrology Sim: 10YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 48.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 24HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
48.000	15.000

Group	Run
Basin 17	Yes

Name: 10YR-8HR Hydrology Sim: 10YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 36.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 8HR Boundary Flows:

Time(hrs)	Print Inc(min)
2.000	5.000
6.000	1.000
8.000	5.000
36.000	15.000

Group	Run
Basin 17	Yes

Name: 25YR-72HR Hydrology Sim: 25YR-72HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 96.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 72HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
96.000	15.000

Group	Run
Basin 17	Yes

Boundary Conditions

Name: 8HR Node: GWT-17 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.450
1.000	1.470
2.000	1.550
3.000	1.660
4.000	1.980
5.000	2.100
6.000	2.140
7.000	2.180
8.000	2.200
12.000	1.450
36.000	1.450

Name: 24HR Node: GWT-17 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.450
1.000	1.460
2.000	1.470
3.000	1.500
4.000	1.520
5.000	1.540
6.000	1.570
7.000	1.600
8.000	1.630
9.000	1.680
10.000	1.720
11.000	1.780
12.000	1.860
13.000	1.910
14.000	1.950
15.000	2.000
16.000	2.040
17.000	2.070
18.000	2.100
19.000	2.130
20.000	2.150
21.000	2.170
22.000	2.190
23.000	2.190
24.000	2.200
36.000	1.450
48.000	1.450

Name: 72HR Node: GWT-17 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.450
24.000	1.530
36.000	1.590
48.000	1.650

49.000	1.650
50.000	1.660
51.000	1.670
52.000	1.670
53.000	1.680
54.000	1.690
55.000	1.710
56.000	1.720
57.000	1.740
57.500	1.750
58.000	1.770
58.500	1.780
59.000	1.800
59.500	1.820
60.000	2.010
60.500	2.050
61.000	2.070
61.500	2.090
62.000	2.100
62.500	2.110
63.000	2.120
64.000	2.130
65.000	2.140
66.000	2.150
68.000	2.170
70.000	2.190
72.000	2.200
96.000	1.450

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-1HR	0.00	0.0	0.0	0.0	0.0	0.00
100YR-1HR	0.02	0.0	0.0	0.0	0.0	0.00
100YR-1HR	0.03	0.0	0.0	0.0	0.0	0.00
100YR-1HR	0.05	0.0	0.0	0.0	0.0	0.00
100YR-1HR	0.07	0.0	0.0	0.0	0.0	0.00
100YR-1HR	0.08	0.0	0.0	0.0	0.0	0.00
100YR-1HR	0.10	0.0	0.0	0.0	-0.0	-0.00
100YR-1HR	0.12	0.0	0.0	0.0	-0.0	-0.00
100YR-1HR	0.13	0.0	0.0	0.0	-0.0	-0.00
100YR-1HR	0.16	0.1	0.0	0.1	-0.0	-0.00
100YR-1HR	0.18	0.3	0.0	0.3	-0.0	-0.00
100YR-1HR	0.19	0.6	0.1	0.5	-0.0	-0.00
100YR-1HR	0.21	1.5	0.2	1.3	-0.0	-0.00
100YR-1HR	0.22	2.8	0.4	2.4	-0.0	-0.00
100YR-1HR	0.24	4.6	0.8	3.8	-0.0	-0.00
100YR-1HR	0.25	8.2	1.9	6.3	-0.0	-0.00
100YR-1HR	0.27	14.7	4.2	10.5	-0.0	-0.00
100YR-1HR	0.28	24.1	8.0	16.1	-0.0	-0.00
100YR-1HR	0.30	37.3	13.9	23.4	-0.0	-0.00
100YR-1HR	0.32	56.5	23.3	33.2	-0.0	-0.00
100YR-1HR	0.33	81.3	36.4	44.9	-0.0	-0.00
100YR-1HR	0.35	116.1	55.9	60.2	-0.0	-0.00
100YR-1HR	0.37	159.8	81.5	78.3	-0.0	-0.00
100YR-1HR	0.38	213.7	114.5	99.2	-0.0	-0.00
100YR-1HR	0.40	281.6	157.7	123.9	-0.0	-0.00
100YR-1HR	0.42	361.9	211.1	150.8	-0.0	-0.00
100YR-1HR	0.43	456.4	277.4	179.0	-0.0	-0.00
100YR-1HR	0.45	567.9	359.2	208.7	0.0	0.00
100YR-1HR	0.47	690.0	452.2	237.8	0.0	0.00
100YR-1HR	0.48	825.3	559.5	265.7	0.0	0.00
100YR-1HR	0.50	973.1	682.3	290.7	0.0	0.00
100YR-1HR	0.52	1132.7	818.1	314.7	0.0	0.00
100YR-1HR	0.53	1303.4	965.7	337.7	0.0	0.00
100YR-1HR	0.55	1483.8	1124.2	359.6	0.0	0.00
100YR-1HR	0.57	1672.8	1292.0	380.7	0.0	0.00
100YR-1HR	0.58	1869.2	1467.9	401.2	0.0	0.00
100YR-1HR	0.60	2072.0	1651.1	420.9	0.0	0.00
100YR-1HR	0.62	2279.9	1840.6	439.3	-0.0	-0.00
100YR-1HR	0.63	2491.5	2035.4	456.1	-0.0	-0.00
100YR-1HR	0.65	2711.6	2240.0	471.6	0.0	0.00
100YR-1HR	0.67	2923.9	2439.4	484.5	0.0	0.00
100YR-1HR	0.68	3139.9	2644.8	495.1	0.0	0.00
100YR-1HR	0.70	3358.5	2855.2	503.3	0.0	0.00
100YR-1HR	0.72	3559.9	3051.1	508.8	0.0	0.00
100YR-1HR	0.73	3772.6	3260.0	512.7	0.0	0.00
100YR-1HR	0.75	3982.0	3467.5	514.5	0.0	0.00
100YR-1HR	0.77	4185.5	3671.3	514.3	0.0	0.00
100YR-1HR	0.78	4363.8	3851.2	512.5	0.0	0.00
100YR-1HR	0.80	4574.2	4065.7	508.5	0.0	0.00
100YR-1HR	0.82	4736.4	4232.3	504.0	0.0	0.00
100YR-1HR	0.83	4917.8	4420.5	497.3	0.0	0.00
100YR-1HR	0.85	5086.4	4597.0	489.4	0.0	0.00
100YR-1HR	0.87	5238.0	4757.5	480.5	0.0	0.00
100YR-1HR	0.88	5395.2	4926.3	468.9	0.0	0.00
100YR-1HR	0.90	5545.4	5090.0	455.4	0.0	0.00
100YR-1HR	0.92	5679.3	5238.0	441.3	0.0	0.00
100YR-1HR	0.93	5807.9	5381.9	426.0	0.0	0.00
100YR-1HR	0.95	5928.8	5518.6	410.1	0.0	0.00
100YR-1HR	0.97	6042.3	5648.5	393.9	0.0	0.00
100YR-1HR	0.98	6149.1	5772.3	376.8	0.0	0.00
100YR-1HR	1.00	6253.5	5895.7	357.8	0.0	0.00
100YR-1HR	1.25	7192.5	7028.5	163.9	0.0	0.00
100YR-1HR	1.50	7337.8	7300.9	36.9	0.0	0.00
100YR-1HR	1.75	7337.8	7330.3	7.4	-0.0	-0.00
100YR-1HR	2.01	7337.8	7336.3	1.4	-0.0	-0.00
100YR-1HR	2.25	7337.8	7337.5	0.3	-0.0	-0.00
100YR-1HR	2.50	7337.8	7337.7	0.1	-0.0	-0.00
100YR-1HR	2.75	7337.8	7337.7	0.0	-0.0	-0.00
100YR-1HR	3.00	7337.8	7337.8	0.0	-0.0	-0.00
100YR-1HR	3.25	7337.8	7337.8	0.0	-0.0	-0.00
100YR-1HR	3.50	7337.8	7337.8	0.0	-0.0	-0.00
100YR-1HR	3.75	7337.8	7337.8	0.0	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-1HR	4.00	7337.8	7337.8	0.0	-0.0	-0.00
100YR-1HR	4.25	7337.8	7337.8	0.0	-0.0	-0.00
100YR-1HR	4.50	7337.8	7337.8	0.0	-0.0	-0.01
100YR-1HR	4.75	7337.8	7337.8	0.0	-0.0	-0.07
100YR-1HR	5.00	7337.8	7337.8	0.0	-0.0	-0.33
100YR-1HR	5.25	7337.8	7337.8	0.0	-0.0	-1.68
100YR-1HR	5.50	7337.8	7337.8	0.0	-0.0	-7.79
100YR-1HR	5.75	7337.8	7337.8	0.0	-0.0	-44.14
100YR-1HR	6.00	7337.8	7337.8	0.0	-0.0	471.31
100YR-1HR	6.25	7337.8	7337.8	0.0	-0.0	147.03
100YR-1HR	6.50	7337.8	7337.8	0.0	-0.0	121.51
100YR-1HR	6.75	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	7.00	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	7.25	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	7.50	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	7.75	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	8.00	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	8.25	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	8.50	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	8.75	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	9.00	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	9.25	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	9.50	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	9.75	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	10.00	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	10.25	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	10.50	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	10.75	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	11.00	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	11.25	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	11.50	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	11.75	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	12.00	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	12.25	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	12.50	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	12.75	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	13.00	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	13.25	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	13.50	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	13.75	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	14.00	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	14.25	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	14.50	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	14.75	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	15.00	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	15.25	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	15.50	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	15.75	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	16.00	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	16.25	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	16.50	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	16.75	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	17.00	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	17.25	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	17.50	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	17.75	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	18.00	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	18.25	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	18.50	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	18.75	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	19.00	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	19.25	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	19.50	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	19.75	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	20.00	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	20.25	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	20.50	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	20.75	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	21.00	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	21.25	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	21.50	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	21.75	7337.8	7337.8	0.0	-0.0	118.75

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-1HR	22.00	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	22.25	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	22.50	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	22.75	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	23.00	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	23.25	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	23.50	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	23.75	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	24.00	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	24.25	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	24.50	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	24.75	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	25.00	7337.8	7337.8	0.0	-0.0	118.75
100YR-1HR	25.01	7337.8	7337.8	0.0	-0.0	118.75
10YR-1HR	0.00	0.0	0.0	0.0	0.0	0.00
10YR-1HR	0.02	0.0	0.0	0.0	0.0	0.00
10YR-1HR	0.03	0.0	0.0	0.0	0.0	0.00
10YR-1HR	0.05	0.0	0.0	0.0	0.0	0.00
10YR-1HR	0.07	0.0	0.0	0.0	0.0	0.00
10YR-1HR	0.08	0.0	0.0	0.0	0.0	0.00
10YR-1HR	0.10	0.0	0.0	0.0	0.0	0.00
10YR-1HR	0.12	0.0	0.0	0.0	0.0	0.00
10YR-1HR	0.13	0.0	0.0	0.0	-0.0	-0.00
10YR-1HR	0.16	0.0	0.0	0.0	-0.0	-0.00
10YR-1HR	0.18	0.1	0.0	0.0	-0.0	-0.00
10YR-1HR	0.19	0.1	0.0	0.1	-0.0	-0.00
10YR-1HR	0.21	0.3	0.0	0.3	-0.0	-0.00
10YR-1HR	0.22	0.6	0.1	0.5	-0.0	-0.00
10YR-1HR	0.23	1.1	0.1	1.0	-0.0	-0.00
10YR-1HR	0.26	3.3	0.6	2.8	-0.0	-0.00
10YR-1HR	0.27	4.8	0.9	3.9	-0.0	-0.00
10YR-1HR	0.29	8.5	2.0	6.5	-0.0	-0.00
10YR-1HR	0.31	14.5	4.1	10.3	-0.0	-0.00
10YR-1HR	0.32	21.4	6.9	14.5	-0.0	-0.00
10YR-1HR	0.33	31.8	11.6	20.2	-0.0	-0.00
10YR-1HR	0.35	48.6	19.7	28.9	-0.0	-0.00
10YR-1HR	0.37	67.3	29.4	37.9	-0.0	-0.00
10YR-1HR	0.38	95.4	45.0	50.4	-0.0	-0.00
10YR-1HR	0.40	128.3	64.3	64.0	-0.0	-0.00
10YR-1HR	0.42	172.4	91.5	81.0	-0.0	-0.00
10YR-1HR	0.43	224.5	125.1	99.4	0.0	0.00
10YR-1HR	0.45	280.1	162.4	117.7	0.0	0.00
10YR-1HR	0.47	351.7	212.5	139.2	-0.0	-0.00
10YR-1HR	0.48	424.5	265.9	158.6	-0.0	-0.00
10YR-1HR	0.50	510.9	331.9	179.1	-0.0	-0.00
10YR-1HR	0.52	605.6	406.6	199.0	-0.0	-0.00
10YR-1HR	0.53	708.1	489.8	218.3	-0.0	-0.00
10YR-1HR	0.55	810.1	574.8	235.3	-0.0	-0.00
10YR-1HR	0.57	925.5	673.0	252.5	-0.0	-0.00
10YR-1HR	0.58	1046.5	778.1	268.4	-0.0	-0.00
10YR-1HR	0.60	1172.4	889.8	282.5	-0.0	-0.00
10YR-1HR	0.62	1304.5	1010.0	294.5	-0.0	-0.00
10YR-1HR	0.63	1426.3	1122.5	303.8	-0.0	-0.00
10YR-1HR	0.65	1558.6	1246.1	312.5	-0.0	-0.00
10YR-1HR	0.67	1700.7	1380.5	320.2	-0.0	-0.00
10YR-1HR	0.68	1835.7	1510.0	325.7	-0.0	-0.00
10YR-1HR	0.70	1967.8	1638.3	329.5	-0.0	-0.00
10YR-1HR	0.72	2098.5	1766.5	332.0	-0.0	-0.00
10YR-1HR	0.74	2243.4	1909.9	333.4	-0.0	-0.00
10YR-1HR	0.75	2375.0	2041.5	333.5	-0.0	-0.00
10YR-1HR	0.77	2484.8	2152.1	332.7	-0.0	-0.00
10YR-1HR	0.79	2611.0	2280.2	330.8	-0.0	-0.00
10YR-1HR	0.80	2734.0	2405.9	328.1	-0.0	-0.00
10YR-1HR	0.82	2853.3	2528.8	324.5	-0.0	-0.00
10YR-1HR	0.84	2968.8	2649.0	319.8	-0.0	-0.00
10YR-1HR	0.85	3080.0	2766.3	313.7	-0.0	-0.00
10YR-1HR	0.87	3160.2	2851.9	308.3	-0.0	-0.00
10YR-1HR	0.88	3267.3	2967.9	299.5	-0.0	-0.00
10YR-1HR	0.90	3363.2	3073.4	289.9	-0.0	-0.00
10YR-1HR	0.92	3453.2	3173.7	279.6	-0.0	-0.00
10YR-1HR	0.94	3534.3	3265.0	269.4	-0.0	-0.00
10YR-1HR	0.95	3610.6	3351.5	259.0	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
10YR-1HR	0.97	3682.2	3433.4	248.8	-0.0	-0.00
10YR-1HR	0.99	3749.5	3510.8	238.7	-0.0	-0.00
10YR-1HR	1.00	3812.8	3584.0	228.8	-0.0	-0.00
10YR-1HR	1.25	4413.4	4296.2	117.2	0.0	0.00
10YR-1HR	1.50	4505.3	4478.0	27.3	-0.0	-0.00
10YR-1HR	1.76	4505.3	4500.0	5.3	-0.0	-0.00
10YR-1HR	2.00	4505.3	4504.3	1.0	-0.0	-0.00
10YR-1HR	2.25	4505.3	4505.1	0.2	-0.0	-0.00
10YR-1HR	2.50	4505.3	4505.3	0.0	-0.0	-0.00
10YR-1HR	2.75	4505.3	4505.3	0.0	-0.0	-0.00
10YR-1HR	3.00	4505.3	4505.3	0.0	-0.0	-0.00
10YR-1HR	3.25	4505.3	4505.3	0.0	-0.0	-0.00
10YR-1HR	3.50	4505.3	4505.3	0.0	-0.0	-0.00
10YR-1HR	3.75	4505.3	4505.3	0.0	-0.0	-0.00
10YR-1HR	4.00	4505.3	4505.3	0.0	-0.0	-0.00
10YR-1HR	4.25	4505.3	4505.3	0.0	0.0	0.00
10YR-1HR	4.50	4505.3	4505.3	0.0	0.0	0.00
10YR-1HR	4.75	4505.3	4505.3	0.0	0.0	0.01
10YR-1HR	5.00	4505.3	4505.3	0.0	0.0	0.05
10YR-1HR	5.25	4505.3	4505.3	0.0	-0.0	-0.07
10YR-1HR	5.50	4505.3	4505.3	0.0	0.0	0.48
10YR-1HR	5.75	4505.3	4505.3	0.0	0.0	7.26
10YR-1HR	6.00	4505.3	4505.3	0.0	0.0	47.69
10YR-1HR	6.25	4505.3	4505.3	0.0	0.0	91.52
10YR-1HR	6.50	4505.3	4505.3	0.0	0.0	98.88
10YR-1HR	6.75	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	7.00	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	7.25	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	7.50	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	7.75	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	8.00	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	8.25	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	8.50	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	8.75	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	9.00	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	9.25	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	9.50	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	9.75	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	10.00	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	10.25	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	10.50	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	10.75	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	11.00	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	11.25	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	11.50	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	11.75	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	12.00	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	12.25	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	12.50	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	12.75	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	13.00	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	13.25	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	13.50	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	13.75	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	14.00	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	14.25	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	14.50	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	14.75	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	15.00	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	15.25	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	15.50	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	15.75	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	16.00	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	16.25	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	16.50	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	16.75	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	17.00	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	17.25	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	17.50	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	17.75	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	18.00	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	18.25	4505.3	4505.3	0.0	0.0	99.49

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
10YR-1HR	18.50	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	18.75	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	19.00	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	19.25	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	19.50	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	19.75	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	20.00	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	20.25	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	20.50	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	20.75	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	21.00	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	21.25	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	21.50	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	21.75	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	22.00	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	22.25	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	22.50	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	22.75	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	23.00	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	23.25	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	23.50	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	23.75	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	24.00	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	24.25	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	24.50	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	24.75	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	25.00	4505.3	4505.3	0.0	0.0	99.49
10YR-1HR	25.01	4505.3	4505.3	0.0	0.0	99.49

Basin 18_FRONTAGE

SUMMARY OF MAX STAGE - PROPOSED CONDITIONS - BASIN 18_FRONTAGE

NODE	STORM EVENT						WARNING STAGE (FT)
	100YR-1HR	100YR-24HR	100YR-8HR	10YR-1HR	10YR-24HR	10YR-8HR	
S18FE-1	5.05	2.86	4.03	4.07	2.67	3.46	6.55
S18FE-2	5.05	2.87	4.07	4.03	2.67	3.47	6.1
S18FE-3	4.25	2.71	3.59	3.53	2.55	3.16	6.18
S18FE-4	4.25	2.71	3.59	3.53	2.55	3.16	6.27
S18FE-5	3.93	2.65	3.41	3.31	2.5	3.04	6.21
S18FW-1	4.27	2.7	3.56	3.54	2.55	3.15	6.56
S18FW-2	5.04	2.86	4.03	4.03	2.66	3.45	6.56
S18FW-3	4.43	2.74	3.68	3.64	2.58	3.22	6.4
S18FW-4	5.13	2.89	4.13	4.05	2.68	3.5	6.67

CN CALCULATIONS -POST-DEVELOPMENT CONDITIONS - FRONTAGE ROAD - BASIN 18

SUB-BASIN	TOTAL AREA (AC)	PERVIOUS AREA (AC)	PERVIOUS CN	IMPERVIOUS AREA (AC)	IMPERVIOUS CN	COMPOSITE CN
18FE-1	0.19	0.01	61	0.18	96	94.2
18FE-2	0.26	0.03	61	0.23	96	92.0
18FE-3	0.14	0.01	61	0.13	96	93.5
18FE-4	0.14	0.01	61	0.13	96	93.5
18FE-5	0.12	0.01	61	0.11	96	93.1
18FW-1	0.82	0.07	61	0.75	96	93.0
18FW-2	0.38	0.04	61	0.34	96	92.3
18FW-3	0.3	0.03	61	0.27	96	92.5
18FW-4	1.42	0.24	61	1.18	96	90.1
TOTAL AREA	3.77	0.45		3.32		

Average Hydraulic Conductivity

Basin B-18		
Percolation Test	P-2A	P-3A
Average Flow to 10 ft. depth (gpm)	20.00	0.10
Depth to Water Table (ft)	7.00	8.00
Head Maintained (ft)	7.00	8.00
Borehole Diameter (ft)	0.500	0.500
Borehole Depth (ft)	10.00	10.00
Du (ft)	7.00	8.00
Average Flow (cfs)	0.0446	0.0002
Ds (ft)	3.00	2.00
Hydraulic Conductivity K (cfs/ft2-ft head)	6.12E-04	2.89E-06
Average Hydraulic Conductivity K	3.07E-04	

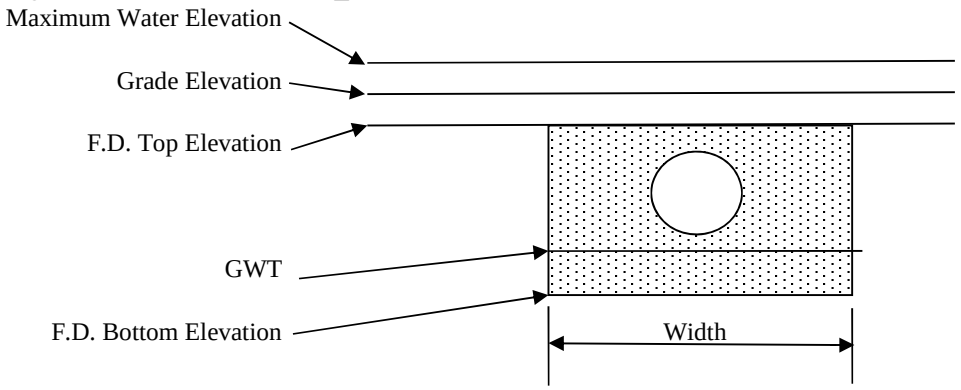
Basin B-18		
Percolation Test	P-2B	P-3B
Average Flow to 15 ft. depth (gpm)	41.00	38.00
Depth to Water Table (ft)	7.00	8.00
Head Maintained (ft)	7.00	8.00
Borehole Diameter (ft)	0.267	0.267
Borehole Depth (ft)	5.00	5.00
Du (ft)	7.00	8.00
Average Flow (cfs)	0.0913	0.0847
Ds (ft)	8.00	7.00
Hydraulic Conductivity K (cfs/ft2-ft head)	3.12E-03	2.53E-03
Average Hydraulic Conductivity K	2.82E-03	
Total Average Hydraulic Conductivity K	**1.15E-03**	

Made by: _____ _____

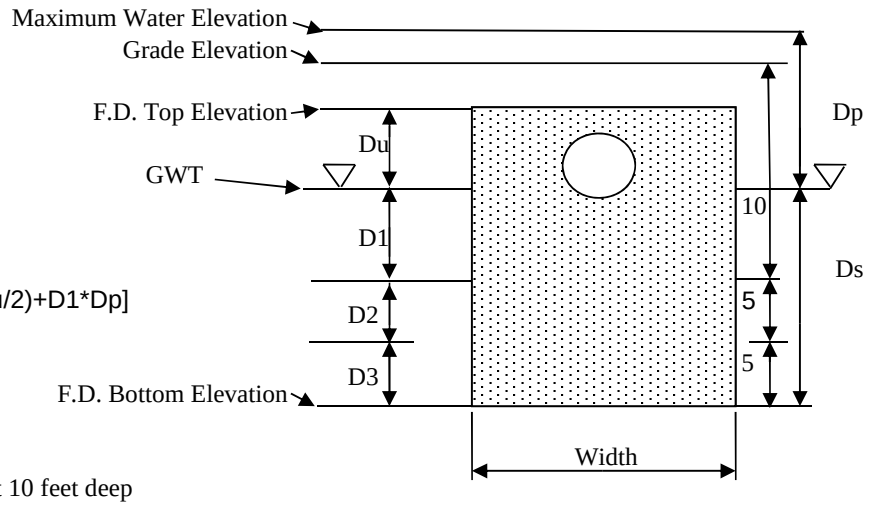
Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-18



Maximum Water Elevation =	**5.45**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**4.45**	ft.NAVD	
F.D.Top Elevation =	**3.45**	ft.NAVD	
Ground Water Table =	**1.95**	ft.NAVD	
F.D. Bottom Elevation =	**-10.06**	ft.NAVD	
Width =	**5.00**	feet.	
Pipe Diameter =	**30**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**1.15E-03**	cfs/ft^2-ft head	(Ave. P-2A,P-3A)
Hydraulic Conductivity K15 =	**1.15E-03**	cfs/ft^2-ft head	(Ave. P-2A,P-3A)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____

Checked by: _____ _____

Determination of Rating Curve

Existing Exfiltration Trench: E_OPT-18

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.95	***2.45***
(ft)	(cfs/ft)	(cfs/ft)
1.95	0.000	0.000
2.45	0.013	0.000
3.45	0.044	0.030
5.45	0.106	0.092

Rating Curve (Q)

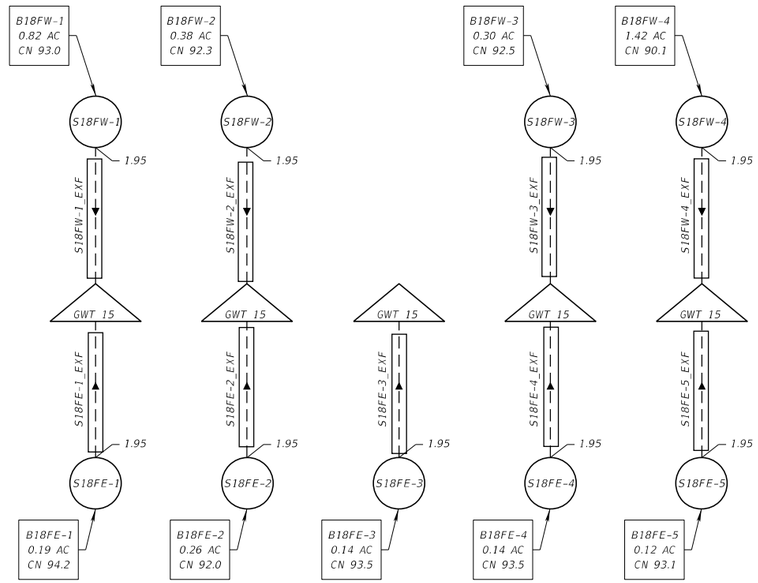
Headwater	***Water Table Elev. (ft)***	
	1.95	***2.45***
(ft)	(cfs)	(cfs)
1.95	0.00	0.00
2.45	0.01	0.00
3.45	0.04	0.03
5.45	0.11	0.09

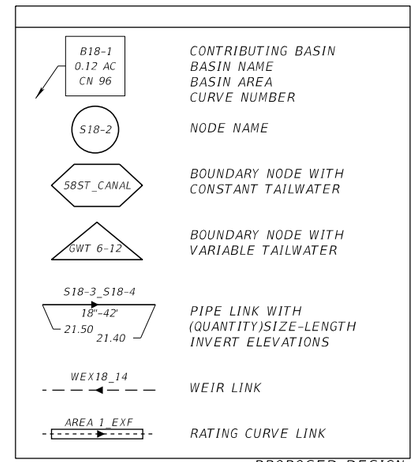
Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

Rating Curve Adjusted (Q)

Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.95	1.95	0.00
1.95	2.45	0.01
1.95	3.45	0.04
1.95	5.45	0.10
2.45	2.45	0.00
2.45	3.45	0.03
2.45	5.45	0.09

POST-DEVELOPMENT CONDITIONS





PROPOSED DESIGN

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01 441830-1-52-01 441831-1-52-01

NODAL DIAGRAM
BASIN 18

SHEET NO.

SR-826 / PALMETTO EXPRESSWAY IMPROVEMENTS - BASIN 18 - FRONTAGE ROAD
POST-DEVELOPMENT CONDITIONS
NODE MAX REPORT

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
GWT_18	Basin 18	100YR-1HR	0.00	1.95	99.00	0.0000	0	0.67	25.74	0.00	0.00
S18FE-1	Basin 18	100YR-1HR	0.71	5.05	6.55	0.0041	113	0.65	1.38	0.71	1.32
S18FE-2	Basin 18	100YR-1HR	0.70	5.05	6.10	0.0043	113	0.65	1.81	0.70	1.76
S18FE-3	Basin 18	100YR-1HR	0.71	4.25	6.18	0.0031	113	0.65	1.01	0.71	0.96
S18FE-4	Basin 18	100YR-1HR	0.71	4.25	6.27	0.0031	113	0.65	1.01	0.71	0.96
S18FE-5	Basin 18	100YR-1HR	0.71	3.93	6.21	0.0028	113	0.65	0.86	0.71	0.81
S18FW-1	Basin 18	100YR-1HR	0.66	4.27	6.56	0.0050	113	0.65	5.83	0.66	5.82
S18FW-2	Basin 18	100YR-1HR	0.68	5.04	6.56	0.0045	113	0.65	2.67	0.68	2.63
S18FW-3	Basin 18	100YR-1HR	0.68	4.43	6.40	0.0037	113	0.65	2.11	0.68	2.08
S18FW-4	Basin 18	100YR-1HR	0.67	5.13	6.67	0.0050	113	0.65	9.49	0.67	9.48
GWT_18	Basin 18	100YR-24HR	23.01	2.45	99.00	0.0008	0	11.99	5.02	0.00	0.00
S18FE-1	Basin 18	100YR-24HR	12.03	2.86	6.55	0.0036	113	11.99	0.26	12.01	0.25
S18FE-2	Basin 18	100YR-24HR	12.03	2.87	6.10	0.0039	113	11.99	0.35	12.01	0.35
S18FE-3	Basin 18	100YR-24HR	12.03	2.71	6.18	0.0032	113	11.99	0.19	12.01	0.19
S18FE-4	Basin 18	100YR-24HR	12.03	2.71	6.27	0.0032	113	11.99	0.19	12.01	0.19
S18FE-5	Basin 18	100YR-24HR	12.03	2.65	6.21	0.0028	113	11.99	0.16	12.01	0.16
S18FW-1	Basin 18	100YR-24HR	12.01	2.70	6.56	0.0043	113	11.99	1.10	11.99	1.10
S18FW-2	Basin 18	100YR-24HR	12.01	2.86	6.56	0.0042	113	11.99	0.51	11.99	0.51
S18FW-3	Basin 18	100YR-24HR	12.01	2.74	6.40	0.0041	113	11.99	0.40	11.99	0.40
S18FW-4	Basin 18	100YR-24HR	11.99	2.89	6.67	0.0050	113	11.99	1.88	11.99	1.88
GWT_18	Basin 18	100YR-8HR	7.99	2.45	99.00	0.0022	0	4.00	14.94	0.00	0.00
S18FE-1	Basin 18	100YR-8HR	4.02	4.03	6.55	0.0050	113	3.99	0.76	4.02	0.76
S18FE-2	Basin 18	100YR-8HR	4.02	4.07	6.10	-0.0040	113	3.99	1.04	4.01	1.03
S18FE-3	Basin 18	100YR-8HR	4.03	3.59	6.18	0.0034	113	3.99	0.56	4.02	0.56
S18FE-4	Basin 18	100YR-8HR	4.03	3.59	6.27	0.0034	113	3.99	0.56	4.02	0.56
S18FE-5	Basin 18	100YR-8HR	4.03	3.41	6.21	0.0028	113	3.99	0.48	4.02	0.47
S18FW-1	Basin 18	100YR-8HR	4.00	3.56	6.56	0.0049	113	3.99	3.28	4.00	3.28
S18FW-2	Basin 18	100YR-8HR	4.01	4.03	6.56	0.0045	113	3.99	1.52	4.01	1.51
S18FW-3	Basin 18	100YR-8HR	4.01	3.68	6.40	0.0037	113	3.99	1.20	4.01	1.19
S18FW-4	Basin 18	100YR-8HR	4.00	4.13	6.67	-0.0050	113	3.99	5.60	4.00	5.59
GWT_18	Basin 18	10YR-1HR	0.00	1.95	99.00	0.0000	0	0.68	16.79	0.00	0.00
S18FE-1	Basin 18	10YR-1HR	0.72	4.07	6.55	0.0042	113	0.65	0.93	0.72	0.88
S18FE-2	Basin 18	10YR-1HR	0.71	4.03	6.10	0.0043	113	0.67	1.19	0.71	1.15
S18FE-3	Basin 18	10YR-1HR	0.72	3.53	6.18	0.0032	113	0.65	0.67	0.72	0.63
S18FE-4	Basin 18	10YR-1HR	0.72	3.53	6.27	0.0032	113	0.65	0.67	0.72	0.63
S18FE-5	Basin 18	10YR-1HR	0.72	3.31	6.21	0.0029	113	0.65	0.57	0.72	0.54
S18FW-1	Basin 18	10YR-1HR	0.67	3.54	6.56	0.0050	113	0.65	3.85	0.67	3.85
S18FW-2	Basin 18	10YR-1HR	0.69	4.03	6.56	-0.0046	113	0.67	1.75	0.69	1.72
S18FW-3	Basin 18	10YR-1HR	0.69	3.64	6.40	0.0038	113	0.65	1.39	0.69	1.37
S18FW-4	Basin 18	10YR-1HR	0.67	4.05	6.67	-0.0050	113	0.67	6.10	0.67	6.09
GWT_18	Basin 18	10YR-24HR	23.01	2.45	99.00	0.0008	0	12.00	3.26	0.00	0.00
S18FE-1	Basin 18	10YR-24HR	12.04	2.67	6.55	-0.0036	113	11.99	0.17	12.02	0.17
S18FE-2	Basin 18	10YR-24HR	12.04	2.67	6.10	-0.0040	113	11.99	0.23	12.00	0.22
S18FE-3	Basin 18	10YR-24HR	12.04	2.55	6.18	-0.0030	113	11.99	0.12	12.02	0.12
S18FE-4	Basin 18	10YR-24HR	12.04	2.55	6.27	-0.0030	113	11.99	0.12	12.02	0.12
S18FE-5	Basin 18	10YR-24HR	12.05	2.50	6.21	-0.0024	113	11.99	0.11	12.02	0.10
S18FW-1	Basin 18	10YR-24HR	12.02	2.55	6.56	-0.0041	113	11.99	0.72	11.99	0.72
S18FW-2	Basin 18	10YR-24HR	12.02	2.66	6.56	-0.0043	113	11.99	0.33	12.00	0.33
S18FW-3	Basin 18	10YR-24HR	12.02	2.58	6.40	-0.0040	113	11.99	0.26	12.00	0.26
S18FW-4	Basin 18	10YR-24HR	12.00	2.68	6.67	-0.0050	113	11.99	1.22	11.99	1.22
GWT_18	Basin 18	10YR-8HR	7.99	2.45	99.00	0.0023	0	4.01	9.73	0.00	0.00

SR-826 / PALMETTO EXPRESSWAY IMPROVEMENTS - BASIN 18 - FRONTAGE ROAD
POST-DEVELOPMENT CONDITIONS
NODE MAX REPORT

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S18FE-1	Basin 18	10YR-8HR	4.03	3.46	6.55	0.0049	113	4.00	0.50	4.02	0.50
S18FE-2	Basin 18	10YR-8HR	4.02	3.47	6.10	0.0043	113	4.00	0.68	4.02	0.67
S18FE-3	Basin 18	10YR-8HR	4.03	3.16	6.18	0.0036	113	4.00	0.37	4.03	0.36
S18FE-4	Basin 18	10YR-8HR	4.03	3.16	6.27	0.0036	113	4.00	0.37	4.03	0.36
S18FE-5	Basin 18	10YR-8HR	4.04	3.04	6.21	0.0031	113	4.00	0.32	4.03	0.31
S18FW-1	Basin 18	10YR-8HR	4.01	3.15	6.56	0.0045	113	4.00	2.15	4.00	2.15
S18FW-2	Basin 18	10YR-8HR	4.02	3.45	6.56	0.0044	113	4.00	0.99	4.01	0.99
S18FW-3	Basin 18	10YR-8HR	4.02	3.22	6.40	0.0037	113	4.00	0.78	4.01	0.78
S18FW-4	Basin 18	10YR-8HR	4.00	3.50	6.67	0.0050	113	4.00	3.62	4.00	3.62

==========
==== Basins ====
==========

Name: B18FE-1 Node: S18FE-1 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.190 Time Shift(hrs): 0.00
Curve Number: 94.20 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B18FE-2 Node: S18FE-2 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.260 Time Shift(hrs): 0.00
Curve Number: 92.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B18FE-3 Node: S18FE-3 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.140 Time Shift(hrs): 0.00
Curve Number: 93.50 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B18FE-4 Node: S18FE-4 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.140 Time Shift(hrs): 0.00
Curve Number: 93.50 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B18FE-5 Node: S18FE-5 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.120 Time Shift(hrs): 0.00
Curve Number: 93.10 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B18FW-1 Node: S18FW-1 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00

Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.820 Time Shift(hrs): 0.00
Curve Number: 93.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B18FW-2 Node: S18FW-2 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.380 Time Shift(hrs): 0.00
Curve Number: 92.30 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B18FW-3 Node: S18FW-3 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.300 Time Shift(hrs): 0.00
Curve Number: 92.50 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B18FW-4 Node: S18FW-4 Status: Onsite
Group: Basin 18 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 1.420 Time Shift(hrs): 0.00
Curve Number: 90.10 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

==========
==== Nodes ==========
==========

Name: GWT_18 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	1.950
108.00	1.950

Name: S18FE-1 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 6.550
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
6.550	0.0004

Name: S18FE-2 Base Flow(cfs): 0.000 Init Stage(ft): 1.950

Group: Basin 18 Warn Stage(ft): 6.100
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
6.100	0.0004

Name: S18FE-3 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 6.180
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
6.180	0.0004

Name: S18FE-4 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 6.270
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
6.270	0.0004

Name: S18FE-5 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 6.210
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
6.210	0.0004

Name: S18FW-1 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 6.560
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
6.560	0.0004

Name: S18FW-2 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 6.560
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
6.560	0.0004

Name: S18FW-3 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 6.400
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
6.400	0.0004

Name: S18FW-4 Base Flow(cfs): 0.000 Init Stage(ft): 1.950
Group: Basin 18 Warn Stage(ft): 6.670
Type: Stage/Area

Stage(ft)	Area(ac)
1.950	0.0004
6.670	0.0004

==========
==== Operating Tables ==========
==========

Name: E_OPT_18 Group: Basin 18
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.950	1.95	0.00
1.950	2.45	0.01
1.950	3.45	0.04
1.950	5.45	0.10
2.450	2.45	0.00
2.450	3.45	0.03
2.450	5.45	0.09

==========
==== Rating Curves ==========
==========

Name: S18FE-1_EXF From Node: S18FE-1 Count: 15
Group: Basin 18 To Node: GWT_18 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_18	1.950	1.950
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S18FE-2_EXF From Node: S18FE-2 Count: 20
Group: Basin 18 To Node: GWT_18 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_18	1.950	1.950
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S18FE-3_EXF From Node: S18FE-3 Count: 15
Group: Basin 18 To Node: GWT_18 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_18	1.950	1.950
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S18FE-4_EXF From Node: S18FE-4 Count: 15
Group: Basin 18 To Node: GWT_18 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_18	1.950	1.950
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S18FE-5_EXF From Node: S18FE-5 Count: 15
Group: Basin 18 To Node: GWT_18 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_18	1.950	1.950
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S18FW-1_EXF From Node: S18FW-1 Count: 90
Group: Basin 18 To Node: GWT_18 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_18	1.950	1.950
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S18FW-2_EXF From Node: S18FW-2 Count: 30
Group: Basin 18 To Node: GWT_18 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_18	1.950	1.950
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S18FW-3_EXF From Node: S18FW-3 Count: 30
Group: Basin 18 To Node: GWT_18 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_18	1.950	1.950
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: S18FW-4_EXF From Node: S18FW-4 Count: 105
Group: Basin 18 To Node: GWT_18 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT_18	1.950	1.950
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

```
================================================================================
==== Hydrology Simulations =====================================================
================================================================================

         Name: 100YR-1HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 1.00
          Rainfall File: Fdot-1
    Rainfall Amount(in): 5.00

Time(hrs)       Print Inc(min)
--------------- ---------------
1.000           1.00
1.330           1.00

--------------------------------------------------------------------------------------------------------
         Name: 100YR-24HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Fdot-24
    Rainfall Amount(in): 13.44

Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.00
16.000          1.00
24.000          5.00
24.330          5.00

--------------------------------------------------------------------------------------------------------
         Name: 100YR-8HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 8.00
          Rainfall File: Fdot-8
    Rainfall Amount(in): 9.60

Time(hrs)       Print Inc(min)
--------------- ---------------
2.000           5.00
6.000           1.00
8.000           5.00
8.330           5.00

--------------------------------------------------------------------------------------------------------
         Name: 10YR-1HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 1.00
          Rainfall File: Fdot-1
    Rainfall Amount(in): 3.50

Time(hrs)       Print Inc(min)
--------------- ---------------
1.000           1.00
1.330           1.00

--------------------------------------------------------------------------------------------------------
         Name: 10YR-24HR
     Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

      Override Defaults: Yes
    Storm Duration(hrs): 24.00
          Rainfall File: Fdot-24
    Rainfall Amount(in): 8.88

Time(hrs)       Print Inc(min)
--------------- ---------------
8.000           5.00
```

16.000 1.00
24.000 5.00
24.330 5.00

Name: 10YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 6.40

Time(hrs)	Print Inc(min)
2.000	5.00
6.000	1.00
8.000	5.00
8.330	5.00

Name: 25YR-72HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Sfwmd72
Rainfall Amount(in): 14.00

Time(hrs)	Print Inc(min)
48.000	15.00
56.000	5.00
64.000	1.00
72.000	5.00
72.330	5.00

==========
==== Routing Simulations ==========
==========

Name: 100YR-1HR Hydrology Sim: 100YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 25.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
1.000	1.000
25.000	15.000

Group	Run
Basin 18	Yes

Name: 100YR-24HR Hydrology Sim: 100YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 48.00

Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 24HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
48.000	15.000

Group	Run
Basin 18	Yes

Name: 100YR-8HR Hydrology Sim: 100YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 36.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 8HR Boundary Flows:

Time(hrs)	Print Inc(min)
2.000	5.000
6.000	1.000
8.000	5.000
36.000	15.000

Group	Run
Basin 18	Yes

Name: 10YR-1HR Hydrology Sim: 10YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 25.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
1.000	1.000
25.000	15.000

Group	Run
Basin 18	Yes

Name: 10YR-24HR Hydrology Sim: 10YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 48.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 24HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
48.000	15.000

Group	Run
Basin 18	Yes

Name: 10YR-8HR Hydrology Sim: 10YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 36.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 8HR Boundary Flows:

Time(hrs)	Print Inc(min)
2.000	5.000
6.000	1.000
8.000	5.000
36.000	15.000

Group	Run
Basin 18	Yes

Name: 25YR-72HR Hydrology Sim: 25YR-72HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: No Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 96.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 72HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
96.000	15.000

Group	Run
Basin 18	Yes

==========
==== Boundary Conditions ==========
==========

Name: 8HR Node: GWT_18 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.950
1.000	1.960
2.000	2.020
3.000	2.090
4.000	2.300
5.000	2.380
6.000	2.410
7.000	2.440
8.000	2.450
12.000	1.950
36.000	1.950

Name: 24HR Node: GWT_18 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.950
1.000	1.960
2.000	1.970
3.000	1.980
4.000	2.000
5.000	2.010
6.000	2.030
7.000	2.050
8.000	2.070
9.000	2.100
10.000	2.130
11.000	2.170
12.000	2.220
13.000	2.260
14.000	2.290
15.000	2.320
16.000	2.340
17.000	2.360
18.000	2.380
19.000	2.400
20.000	2.420
21.000	2.430
22.000	2.440
23.000	2.450
24.000	2.450
36.000	1.950
48.000	1.950

Name: 72HR Node: GWT_18 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.950
24.000	2.000
36.000	2.040
48.000	2.080
49.000	2.090
50.000	2.090
51.000	2.090
52.000	2.100
53.000	2.100
54.000	2.110
55.000	2.120
56.000	2.130
57.000	2.150
57.500	2.150
58.000	2.160
58.500	2.170
59.000	2.180

59.500	2.200
60.000	2.320
60.500	2.350
61.000	2.360
61.500	2.370
62.000	2.380
62.500	2.390
63.000	2.390
64.000	2.410
65.000	2.410
66.000	2.420
68.000	2.430
70.000	2.440
72.000	2.450
96.000	1.950

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	0.00	0.0	0.0	0.0	0.0	0.00
100YR-24HR	0.08	0.0	-0.4	0.4	-0.0	-0.00
100YR-24HR	0.18	0.0	-1.2	1.2	0.0	0.00
100YR-24HR	0.26	0.0	-2.0	2.0	0.0	0.00
100YR-24HR	0.34	0.0	-2.8	2.8	0.0	0.00
100YR-24HR	0.42	0.0	-3.5	3.5	0.0	0.00
100YR-24HR	0.50	0.0	-4.4	4.4	0.0	0.00
100YR-24HR	0.60	0.0	-5.4	5.4	0.0	0.00
100YR-24HR	0.68	0.0	-6.2	6.2	0.0	0.00
100YR-24HR	0.77	0.0	-7.1	7.1	0.0	0.00
100YR-24HR	0.85	0.0	-7.9	7.9	0.0	0.00
100YR-24HR	0.93	0.0	-8.8	8.8	0.0	0.00
100YR-24HR	1.02	0.0	-9.6	9.6	0.0	0.00
100YR-24HR	1.10	0.2	-10.4	10.6	0.0	0.00
100YR-24HR	1.18	1.3	-10.8	12.1	0.0	0.00
100YR-24HR	1.27	5.1	-9.5	14.6	0.0	0.00
100YR-24HR	1.35	13.6	-4.7	18.4	0.0	0.00
100YR-24HR	1.43	28.6	5.4	23.1	0.0	0.00
100YR-24HR	1.52	51.5	22.8	28.7	0.0	0.00
100YR-24HR	1.60	83.6	49.0	34.6	0.0	0.00
100YR-24HR	1.68	125.7	84.9	40.8	0.0	0.00
100YR-24HR	1.77	177.9	131.0	46.9	0.0	0.00
100YR-24HR	1.85	240.2	187.3	53.0	0.0	0.00
100YR-24HR	1.93	312.6	253.7	58.9	0.0	0.00
100YR-24HR	2.02	394.8	330.0	64.8	0.0	0.00
100YR-24HR	2.10	492.1	419.0	73.1	0.0	0.00
100YR-24HR	2.18	613.1	528.0	85.1	0.0	0.00
100YR-24HR	2.27	758.1	660.7	97.4	-0.0	-0.00
100YR-24HR	2.35	923.9	815.2	108.7	-0.0	-0.00
100YR-24HR	2.43	1107.8	989.0	118.8	-0.0	-0.00
100YR-24HR	2.52	1308.1	1180.2	127.9	0.0	0.00
100YR-24HR	2.60	1523.5	1387.3	136.2	0.0	0.00
100YR-24HR	2.68	1752.7	1608.9	143.8	0.0	0.00
100YR-24HR	2.77	1994.8	1843.9	150.8	0.0	0.00
100YR-24HR	2.85	2248.3	2091.1	157.2	0.0	0.00
100YR-24HR	2.93	2512.3	2349.3	163.0	-0.0	-0.00
100YR-24HR	3.02	2785.8	2617.5	168.3	0.0	0.00
100YR-24HR	3.10	3067.9	2894.4	173.6	0.0	0.00
100YR-24HR	3.18	3358.1	3179.3	178.7	0.0	0.00
100YR-24HR	3.27	3655.7	3472.0	183.7	0.0	0.00
100YR-24HR	3.35	3960.3	3771.9	188.4	0.0	0.00
100YR-24HR	3.43	4271.4	4078.5	192.9	0.0	0.00
100YR-24HR	3.52	4588.7	4391.5	197.2	0.0	0.00
100YR-24HR	3.60	4911.7	4710.4	201.3	0.0	0.00
100YR-24HR	3.68	5240.0	5034.8	205.2	0.0	0.00
100YR-24HR	3.77	5573.5	5364.5	209.0	0.0	0.00
100YR-24HR	3.85	5911.8	5699.2	212.6	0.0	0.00
100YR-24HR	3.93	6254.6	6038.4	216.1	0.0	0.00
100YR-24HR	4.02	6601.6	6382.1	219.5	0.0	0.00
100YR-24HR	4.10	6952.8	6730.4	222.4	-0.0	-0.00
100YR-24HR	4.18	7308.0	7083.0	225.0	0.0	0.00
100YR-24HR	4.27	7667.0	7439.6	227.4	0.0	0.00
100YR-24HR	4.35	8029.6	7799.8	229.8	0.0	0.00
100YR-24HR	4.43	8395.5	8163.6	232.0	-0.0	-0.00
100YR-24HR	4.52	8764.6	8530.5	234.1	0.0	0.00
100YR-24HR	4.60	9136.7	8900.6	236.1	0.0	0.00
100YR-24HR	4.68	9511.7	9273.6	238.1	0.0	0.00
100YR-24HR	4.77	9889.3	9649.3	240.0	0.0	0.00
100YR-24HR	4.85	10269.6	10027.7	241.9	0.0	0.00
100YR-24HR	4.93	10652.3	10408.6	243.7	0.0	0.00
100YR-24HR	5.02	11037.7	10791.9	245.7	0.0	0.00
100YR-24HR	5.10	11438.2	11184.5	253.7	0.0	0.00
100YR-24HR	5.18	11871.0	11602.3	268.7	0.0	0.00
100YR-24HR	5.27	12333.7	12050.7	283.0	0.0	0.00
100YR-24HR	5.35	12817.4	12522.8	294.6	0.0	0.00
100YR-24HR	5.43	13316.1	13012.5	303.7	0.0	0.00
100YR-24HR	5.52	13826.2	13515.3	310.9	0.0	0.00
100YR-24HR	5.60	14345.7	14028.7	317.0	0.0	0.00
100YR-24HR	5.68	14873.0	14550.8	322.2	0.0	0.00
100YR-24HR	5.77	15406.7	15080.0	326.7	0.0	0.00
100YR-24HR	5.85	15945.1	15614.7	330.4	0.0	0.00
100YR-24HR	5.93	16487.4	16153.8	333.6	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	6.02	17032.6	16696.2	336.4	0.0	0.00
100YR-24HR	6.10	17580.0	17241.2	338.8	0.0	0.00
100YR-24HR	6.18	18129.5	17788.4	341.1	0.0	0.00
100YR-24HR	6.27	18680.9	18337.6	343.3	0.0	0.00
100YR-24HR	6.35	19234.2	18888.7	345.5	0.0	0.00
100YR-24HR	6.43	19789.3	19441.7	347.6	-0.0	-0.00
100YR-24HR	6.52	20346.1	19996.4	349.7	-0.0	-0.00
100YR-24HR	6.60	20904.5	20552.8	351.7	-0.0	-0.00
100YR-24HR	6.68	21464.4	21110.7	353.7	-0.0	-0.00
100YR-24HR	6.77	22025.9	21670.2	355.7	-0.0	-0.00
100YR-24HR	6.85	22588.7	22231.1	357.7	-0.0	-0.00
100YR-24HR	6.93	23153.0	22793.4	359.6	-0.0	-0.00
100YR-24HR	7.02	23718.5	23357.0	361.5	-0.0	-0.00
100YR-24HR	7.10	24285.5	23922.0	363.5	-0.0	-0.00
100YR-24HR	7.18	24853.9	24488.5	365.5	0.0	0.00
100YR-24HR	7.27	25423.8	25056.4	367.4	-0.0	-0.00
100YR-24HR	7.35	25995.1	25625.7	369.3	-0.0	-0.00
100YR-24HR	7.43	26567.5	26196.3	371.2	-0.0	-0.00
100YR-24HR	7.52	27141.0	26768.0	373.0	-0.0	-0.00
100YR-24HR	7.60	27715.7	27340.8	374.9	-0.0	-0.00
100YR-24HR	7.68	28291.3	27914.6	376.6	0.0	0.00
100YR-24HR	7.77	28867.9	28489.5	378.4	0.0	0.00
100YR-24HR	7.85	29445.4	29065.3	380.1	0.0	0.00
100YR-24HR	7.93	30023.8	29641.9	381.9	0.0	0.00
100YR-24HR	8.02	30603.4	30219.5	383.9	0.0	0.00
100YR-24HR	8.08	31091.1	30697.9	393.2	0.0	0.00
100YR-24HR	8.10	31220.4	30822.3	398.1	0.0	0.00
100YR-24HR	8.12	31353.3	30949.5	403.8	0.0	0.00
100YR-24HR	8.14	31489.7	31079.7	409.9	0.0	0.00
100YR-24HR	8.15	31629.4	31213.0	416.4	0.0	0.00
100YR-24HR	8.17	31772.1	31349.3	422.8	0.0	0.00
100YR-24HR	8.19	31917.7	31488.5	429.2	0.0	0.00
100YR-24HR	8.20	32065.8	31630.5	435.4	0.0	0.00
100YR-24HR	8.22	32216.3	31775.0	441.2	0.0	0.00
100YR-24HR	8.24	32368.7	31921.9	446.8	0.0	0.00
100YR-24HR	8.25	32523.1	32071.0	452.1	0.0	0.00
100YR-24HR	8.27	32679.3	32222.1	457.1	0.0	0.00
100YR-24HR	8.29	32837.1	32375.2	461.9	0.0	0.00
100YR-24HR	8.31	32996.4	32530.0	466.4	-0.0	-0.00
100YR-24HR	8.32	33157.1	32686.5	470.6	-0.0	-0.00
100YR-24HR	8.34	33319.2	32844.6	474.6	-0.0	-0.00
100YR-24HR	8.36	33482.5	33004.1	478.4	-0.0	-0.00
100YR-24HR	8.37	33646.9	33165.0	481.9	-0.0	-0.00
100YR-24HR	8.39	33812.3	33327.1	485.2	-0.0	-0.00
100YR-24HR	8.41	33978.8	33490.4	488.4	-0.0	-0.00
100YR-24HR	8.42	34062.4	33572.5	489.9	-0.0	-0.00
100YR-24HR	8.44	34251.2	33758.1	493.1	-0.0	-0.00
100YR-24HR	8.46	34462.1	33965.7	496.4	-0.0	-0.00
100YR-24HR	8.47	34568.1	34070.1	498.0	-0.0	-0.00
100YR-24HR	8.49	34780.8	34279.8	501.0	-0.0	-0.00
100YR-24HR	8.50	34887.6	34385.1	502.5	-0.0	-0.00
100YR-24HR	8.52	35102.1	34596.8	505.3	-0.0	-0.00
100YR-24HR	8.54	35317.5	34809.6	507.9	-0.0	-0.00
100YR-24HR	8.56	35452.7	34943.2	509.5	-0.0	-0.00
100YR-24HR	8.57	35588.2	35077.1	511.1	-0.0	-0.00
100YR-24HR	8.60	35860.4	35346.3	514.0	-0.0	-0.00
100YR-24HR	8.61	35997.0	35481.5	515.5	-0.0	-0.00
100YR-24HR	8.62	36133.9	35617.1	516.8	-0.0	-0.00
100YR-24HR	8.64	36271.1	35753.0	518.1	-0.0	-0.00
100YR-24HR	8.66	36546.3	36025.8	520.5	-0.0	-0.00
100YR-24HR	8.68	36684.4	36162.7	521.7	-0.0	-0.00
100YR-24HR	8.69	36822.6	36299.8	522.8	-0.0	-0.00
100YR-24HR	8.71	36995.8	36471.7	524.2	-0.0	-0.00
100YR-24HR	8.72	37169.4	36643.9	525.5	-0.0	-0.00
100YR-24HR	8.74	37343.2	36816.5	526.7	-0.0	-0.00
100YR-24HR	8.76	37517.4	36989.5	527.9	-0.0	-0.00
100YR-24HR	8.77	37691.8	37162.8	529.0	-0.0	-0.00
100YR-24HR	8.79	37866.5	37336.5	530.0	-0.0	-0.00
100YR-24HR	8.81	38041.4	37510.3	531.0	-0.0	-0.00
100YR-24HR	8.82	38216.5	37684.5	532.0	-0.0	-0.00
100YR-24HR	8.84	38391.8	37858.9	532.9	-0.0	-0.00
100YR-24HR	8.86	38567.2	38033.5	533.8	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	8.87	38742.9	38208.3	534.6	-0.0	-0.00
100YR-24HR	8.89	38918.7	38383.3	535.4	-0.0	-0.00
100YR-24HR	8.91	39094.6	38558.5	536.1	-0.0	-0.00
100YR-24HR	8.92	39270.6	38733.8	536.8	-0.0	-0.00
100YR-24HR	8.94	39446.8	38909.3	537.5	-0.0	-0.00
100YR-24HR	8.96	39623.1	39084.9	538.2	-0.0	-0.00
100YR-24HR	8.97	39799.4	39260.6	538.8	-0.0	-0.00
100YR-24HR	8.99	39975.8	39436.4	539.4	-0.0	-0.00
100YR-24HR	9.01	40152.3	39612.4	539.9	-0.0	-0.00
100YR-24HR	9.02	40328.8	39788.3	540.4	-0.0	-0.00
100YR-24HR	9.04	40505.3	39964.4	540.9	-0.0	-0.00
100YR-24HR	9.06	40681.9	40140.5	541.4	-0.0	-0.00
100YR-24HR	9.07	40858.5	40316.6	541.9	-0.0	-0.00
100YR-24HR	9.09	41035.2	40492.8	542.4	-0.0	-0.00
100YR-24HR	9.11	41211.9	40669.1	542.8	-0.0	-0.00
100YR-24HR	9.12	41388.6	40845.4	543.3	-0.0	-0.00
100YR-24HR	9.14	41565.4	41021.7	543.7	-0.0	-0.00
100YR-24HR	9.16	41742.3	41198.1	544.2	-0.0	-0.00
100YR-24HR	9.17	41919.1	41374.5	544.6	-0.0	-0.00
100YR-24HR	9.19	42096.0	41551.0	545.1	-0.0	-0.00
100YR-24HR	9.21	42273.0	41727.5	545.5	-0.0	-0.00
100YR-24HR	9.22	42450.0	41904.0	545.9	-0.0	-0.00
100YR-24HR	9.24	42627.0	42080.6	546.4	-0.0	-0.00
100YR-24HR	9.26	42804.1	42257.3	546.8	-0.0	-0.00
100YR-24HR	9.27	42981.2	42433.9	547.2	-0.0	-0.00
100YR-24HR	9.29	43158.3	42610.6	547.7	-0.0	-0.00
100YR-24HR	9.31	43335.5	42787.4	548.1	-0.0	-0.00
100YR-24HR	9.32	43512.7	42964.2	548.5	-0.0	-0.00
100YR-24HR	9.34	43689.9	43141.0	548.9	-0.0	-0.00
100YR-24HR	9.36	43867.2	43317.8	549.4	-0.0	-0.00
100YR-24HR	9.37	44044.5	43494.7	549.8	-0.0	-0.00
100YR-24HR	9.39	44221.9	43671.6	550.2	-0.0	-0.00
100YR-24HR	9.41	44399.3	43848.6	550.7	-0.0	-0.00
100YR-24HR	9.42	44576.7	44025.6	551.1	-0.0	-0.00
100YR-24HR	9.44	44754.1	44202.6	551.5	-0.0	-0.00
100YR-24HR	9.46	44931.6	44379.7	551.9	-0.0	-0.00
100YR-24HR	9.47	45109.1	44556.8	552.3	-0.0	-0.00
100YR-24HR	9.49	45286.7	44733.9	552.8	-0.0	-0.00
100YR-24HR	9.51	45464.3	44911.1	553.2	-0.0	-0.00
100YR-24HR	9.52	45641.9	45088.3	553.6	-0.0	-0.00
100YR-24HR	9.54	45819.6	45265.6	554.0	-0.0	-0.00
100YR-24HR	9.56	45997.3	45442.8	554.4	-0.0	-0.00
100YR-24HR	9.57	46175.0	45620.1	554.9	-0.0	-0.00
100YR-24HR	9.59	46352.7	45797.5	555.3	-0.0	-0.00
100YR-24HR	9.61	46530.5	45974.8	555.7	-0.0	-0.00
100YR-24HR	9.62	46708.3	46152.2	556.1	-0.0	-0.00
100YR-24HR	9.64	46886.2	46329.7	556.5	-0.0	-0.00
100YR-24HR	9.66	47064.1	46507.1	556.9	-0.0	-0.00
100YR-24HR	9.67	47242.0	46684.6	557.4	-0.0	-0.00
100YR-24HR	9.69	47419.9	46862.1	557.8	-0.0	-0.00
100YR-24HR	9.71	47597.9	47039.7	558.2	-0.0	-0.00
100YR-24HR	9.72	47775.9	47217.3	558.6	-0.0	-0.00
100YR-24HR	9.74	47953.9	47394.9	559.0	-0.0	-0.00
100YR-24HR	9.76	48132.0	47572.5	559.4	-0.0	-0.00
100YR-24HR	9.77	48310.1	47750.2	559.9	-0.0	-0.00
100YR-24HR	9.79	48488.2	47927.9	560.3	-0.0	-0.00
100YR-24HR	9.81	48666.3	48105.7	560.7	-0.0	-0.00
100YR-24HR	9.82	48844.5	48283.4	561.1	-0.0	-0.00
100YR-24HR	9.84	49022.7	48461.2	561.5	-0.0	-0.00
100YR-24HR	9.86	49201.0	48639.0	561.9	-0.0	-0.00
100YR-24HR	9.87	49379.2	48816.9	562.3	-0.0	-0.00
100YR-24HR	9.89	49557.5	48994.8	562.7	-0.0	-0.00
100YR-24HR	9.91	49735.8	49172.7	563.1	-0.0	-0.00
100YR-24HR	9.92	49914.2	49350.6	563.6	-0.0	-0.00
100YR-24HR	9.94	50092.5	49528.6	564.0	-0.0	-0.00
100YR-24HR	9.96	50270.9	49706.6	564.4	-0.0	-0.00
100YR-24HR	9.97	50449.4	49884.6	564.8	-0.0	-0.00
100YR-24HR	9.99	50627.8	50062.6	565.2	-0.0	-0.00
100YR-24HR	10.01	50806.4	50240.7	565.7	-0.0	-0.00
100YR-24HR	10.02	50985.4	50418.9	566.5	-0.0	-0.00
100YR-24HR	10.04	51165.4	50597.5	567.9	-0.0	-0.00
100YR-24HR	10.06	51346.8	50777.0	569.8	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	10.07	51493.4	50921.4	571.9	-0.0	-0.00
100YR-24HR	10.09	51762.1	51184.6	577.4	-0.0	-0.00
100YR-24HR	10.10	51883.8	51303.3	580.5	-0.0	-0.00
100YR-24HR	10.13	52131.6	51544.3	587.3	-0.0	-0.00
100YR-24HR	10.14	52257.6	51666.8	590.9	-0.0	-0.00
100YR-24HR	10.16	52513.7	51915.4	598.2	-0.0	-0.00
100YR-24HR	10.17	52643.5	52041.6	601.9	-0.0	-0.00
100YR-24HR	10.19	52906.7	52297.6	609.1	-0.0	-0.00
100YR-24HR	10.20	53039.9	52427.3	612.6	-0.0	-0.00
100YR-24HR	10.22	53309.0	52689.8	619.2	-0.0	-0.00
100YR-24HR	10.24	53581.5	52956.1	625.3	-0.0	-0.00
100YR-24HR	10.25	53718.8	53090.6	628.2	-0.0	-0.00
100YR-24HR	10.27	53995.8	53362.0	633.8	-0.0	-0.00
100YR-24HR	10.29	54135.2	53498.8	636.4	-0.0	-0.00
100YR-24HR	10.31	54416.0	53774.6	641.3	-0.0	-0.00
100YR-24HR	10.32	54557.2	53913.6	643.7	-0.0	-0.00
100YR-24HR	10.34	54841.3	54193.2	648.1	-0.0	-0.00
100YR-24HR	10.36	55127.4	54475.2	652.2	-0.0	-0.00
100YR-24HR	10.37	55271.2	54617.0	654.2	-0.0	-0.00
100YR-24HR	10.39	55559.9	54902.1	657.8	-0.0	-0.00
100YR-24HR	10.40	55704.9	55045.3	659.6	-0.0	-0.00
100YR-24HR	10.42	55995.9	55333.1	662.9	-0.0	-0.00
100YR-24HR	10.43	56142.0	55477.6	664.4	-0.0	-0.00
100YR-24HR	10.46	56508.4	55840.4	668.1	-0.0	-0.00
100YR-24HR	10.47	56692.4	56022.6	669.8	-0.0	-0.00
100YR-24HR	10.49	56876.8	56205.4	671.4	-0.0	-0.00
100YR-24HR	10.50	57061.7	56388.7	673.0	-0.0	-0.00
100YR-24HR	10.53	57432.7	56756.7	676.0	-0.0	-0.00
100YR-24HR	10.54	57618.8	56941.4	677.5	-0.0	-0.00
100YR-24HR	10.55	57805.3	57126.5	678.9	-0.0	-0.00
100YR-24HR	10.57	57992.2	57312.0	680.2	-0.0	-0.00
100YR-24HR	10.60	58414.1	57730.9	683.2	-0.0	-0.00
100YR-24HR	10.61	58649.1	57964.4	684.7	-0.0	-0.00
100YR-24HR	10.63	58884.7	58198.5	686.2	-0.0	-0.00
100YR-24HR	10.65	59120.8	58433.1	687.7	-0.0	-0.00
100YR-24HR	10.66	59357.2	58668.2	689.1	-0.0	-0.00
100YR-24HR	10.68	59594.1	58903.7	690.4	-0.0	-0.00
100YR-24HR	10.70	59831.4	59139.8	691.7	-0.0	-0.00
100YR-24HR	10.71	60069.1	59376.2	692.9	-0.0	-0.00
100YR-24HR	10.73	60307.0	59613.0	694.1	-0.0	-0.00
100YR-24HR	10.75	60545.3	59850.1	695.2	-0.0	-0.00
100YR-24HR	10.76	60783.9	60087.6	696.3	-0.0	-0.00
100YR-24HR	10.78	61022.7	60325.4	697.3	-0.0	-0.00
100YR-24HR	10.80	61261.7	60563.4	698.3	-0.0	-0.00
100YR-24HR	10.81	61501.0	60801.7	699.2	-0.0	-0.00
100YR-24HR	10.83	61740.4	61040.3	700.1	-0.0	-0.00
100YR-24HR	10.85	61980.0	61279.0	701.0	-0.0	-0.00
100YR-24HR	10.86	62219.7	61517.9	701.8	-0.0	-0.00
100YR-24HR	10.88	62459.7	61757.0	702.6	-0.0	-0.00
100YR-24HR	10.90	62699.7	61996.3	703.4	-0.0	-0.00
100YR-24HR	10.91	62939.9	62235.7	704.1	-0.0	-0.00
100YR-24HR	10.93	63180.1	62475.3	704.8	-0.0	-0.00
100YR-24HR	10.95	63420.5	62715.0	705.5	-0.0	-0.00
100YR-24HR	10.96	63661.0	62954.8	706.2	-0.0	-0.00
100YR-24HR	10.98	63901.5	63194.6	706.8	-0.0	-0.00
100YR-24HR	11.00	64142.0	63434.6	707.4	-0.0	-0.00
100YR-24HR	11.01	64382.9	63674.6	708.2	-0.0	-0.00
100YR-24HR	11.03	64624.5	63915.0	709.5	-0.0	-0.00
100YR-24HR	11.05	64867.3	64156.0	711.3	-0.0	-0.00
100YR-24HR	11.06	65111.9	64398.1	713.8	-0.0	-0.00
100YR-24HR	11.08	65309.4	64593.0	716.4	-0.0	-0.00
100YR-24HR	11.09	65469.0	64750.0	719.0	-0.0	-0.00
100YR-24HR	11.11	65792.4	65067.4	725.0	-0.0	-0.00
100YR-24HR	11.12	65956.2	65227.9	728.3	-0.0	-0.00
100YR-24HR	11.14	66288.1	65553.0	735.1	-0.0	-0.00
100YR-24HR	11.15	66456.0	65717.4	738.5	-0.0	-0.00
100YR-24HR	11.17	66795.3	66050.0	745.3	-0.0	-0.00
100YR-24HR	11.18	66966.7	66218.1	748.6	-0.0	-0.00
100YR-24HR	11.21	67312.5	66557.5	755.0	0.0	0.00
100YR-24HR	11.22	67486.8	66728.8	758.0	-0.0	-0.00
100YR-24HR	11.24	67837.8	67074.1	763.7	0.0	0.00
100YR-24HR	11.26	68191.8	67422.9	768.9	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	11.27	68369.9	67598.5	771.4	-0.0	-0.00
100YR-24HR	11.29	68728.0	67951.9	776.1	0.0	0.00
100YR-24HR	11.30	68908.0	68129.6	778.4	-0.0	-0.00
100YR-24HR	11.32	69269.6	68487.0	782.6	-0.0	-0.00
100YR-24HR	11.33	69451.2	68666.6	784.6	-0.0	-0.00
100YR-24HR	11.36	69815.8	69027.4	788.4	-0.0	-0.00
100YR-24HR	11.38	70182.3	69390.4	791.9	-0.0	-0.00
100YR-24HR	11.39	70366.2	69572.6	793.6	-0.0	-0.00
100YR-24HR	11.41	70735.1	69938.3	796.8	-0.0	-0.00
100YR-24HR	11.42	70920.1	70121.8	798.3	-0.0	-0.00
100YR-24HR	11.44	71337.5	70536.0	801.4	-0.0	-0.00
100YR-24HR	11.46	71570.0	70766.9	803.1	-0.0	-0.00
100YR-24HR	11.47	71803.1	70998.4	804.7	-0.0	-0.00
100YR-24HR	11.48	72036.6	71230.3	806.3	-0.0	-0.00
100YR-24HR	11.51	72504.9	71695.7	809.2	-0.0	-0.00
100YR-24HR	11.52	72739.7	71929.1	810.7	-0.0	-0.00
100YR-24HR	11.54	72975.0	72162.9	812.1	-0.0	-0.00
100YR-24HR	11.55	73210.6	72397.2	813.4	-0.0	-0.00
100YR-24HR	11.58	73682.9	72866.9	816.0	-0.0	-0.00
100YR-24HR	11.59	73978.8	73161.2	817.6	-0.0	-0.00
100YR-24HR	11.61	74275.2	73456.1	819.1	-0.0	-0.00
100YR-24HR	11.63	74572.1	73751.5	820.5	-0.0	-0.00
100YR-24HR	11.64	74869.5	74047.5	822.0	-0.0	-0.00
100YR-24HR	11.66	75167.3	74344.0	823.3	-0.0	-0.00
100YR-24HR	11.68	75465.5	74640.9	824.6	-0.0	-0.00
100YR-24HR	11.69	75764.1	74938.2	825.9	-0.0	-0.00
100YR-24HR	11.71	76063.1	75235.9	827.2	-0.0	-0.00
100YR-24HR	11.73	76362.4	75534.0	828.3	0.0	0.00
100YR-24HR	11.74	76662.0	75832.5	829.5	0.0	0.00
100YR-24HR	11.76	76961.8	76131.3	830.6	0.0	0.00
100YR-24HR	11.78	77262.0	76430.3	831.6	0.0	0.00
100YR-24HR	11.79	77562.3	76729.7	832.6	0.0	0.00
100YR-24HR	11.81	77862.9	77029.3	833.6	0.0	0.00
100YR-24HR	11.83	78163.6	77329.1	834.6	0.0	0.00
100YR-24HR	11.84	78464.5	77629.1	835.5	0.0	0.00
100YR-24HR	11.86	78765.6	77929.3	836.3	0.0	0.00
100YR-24HR	11.88	79066.8	78229.6	837.2	0.0	0.00
100YR-24HR	11.89	79368.2	78530.1	838.0	0.0	0.00
100YR-24HR	11.91	79669.6	78830.8	838.8	0.0	0.00
100YR-24HR	11.93	79971.2	79131.6	839.6	0.0	0.00
100YR-24HR	11.94	80272.9	79432.5	840.4	0.0	0.00
100YR-24HR	11.96	80574.6	79733.5	841.1	0.0	0.00
100YR-24HR	11.98	80876.5	80034.6	841.8	0.0	0.00
100YR-24HR	11.99	81178.3	80335.8	842.5	0.0	0.00
100YR-24HR	12.01	81479.9	80637.0	842.9	0.0	0.00
100YR-24HR	12.03	81780.8	80938.0	842.8	0.0	0.00
100YR-24HR	12.04	82080.0	81238.2	841.9	0.0	0.00
100YR-24HR	12.06	82376.9	81537.0	840.0	0.0	0.00
100YR-24HR	12.07	82565.3	81727.0	838.3	0.0	0.00
100YR-24HR	12.09	82899.4	82065.9	833.5	0.0	0.00
100YR-24HR	12.11	83161.8	82333.2	828.6	0.0	0.00
100YR-24HR	12.12	83391.3	82567.7	823.7	0.0	0.00
100YR-24HR	12.14	83729.0	82913.4	815.6	0.0	0.00
100YR-24HR	12.15	83950.1	83139.9	810.2	0.0	0.00
100YR-24HR	12.17	84168.2	83363.4	804.8	0.0	0.00
100YR-24HR	12.19	84490.1	83693.1	796.9	0.0	0.00
100YR-24HR	12.20	84701.5	83909.6	791.9	0.0	0.00
100YR-24HR	12.22	85014.3	84229.4	784.9	0.0	0.00
100YR-24HR	12.24	85220.4	84439.8	780.6	0.0	0.00
100YR-24HR	12.26	85526.0	84751.4	774.5	0.0	0.00
100YR-24HR	12.27	85727.5	84956.7	770.8	0.0	0.00
100YR-24HR	12.29	86026.8	85261.3	765.5	0.0	0.00
100YR-24HR	12.30	86224.5	85462.2	762.3	0.0	0.00
100YR-24HR	12.32	86420.8	85661.6	759.2	0.0	0.00
100YR-24HR	12.33	86664.4	85908.8	755.7	0.0	0.00
100YR-24HR	12.35	86906.1	86153.7	752.4	0.0	0.00
100YR-24HR	12.37	87146.1	86396.7	749.4	0.0	0.00
100YR-24HR	12.39	87384.4	86637.8	746.6	0.0	0.00
100YR-24HR	12.40	87621.3	86877.3	744.0	0.0	0.00
100YR-24HR	12.42	87886.1	87144.8	741.4	0.0	0.00
100YR-24HR	12.44	88178.6	87439.9	738.7	0.0	0.00
100YR-24HR	12.45	88324.1	87586.6	737.5	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	12.47	88613.9	87878.7	735.2	0.0	0.00
100YR-24HR	12.49	88758.2	88024.0	734.2	0.0	0.00
100YR-24HR	12.51	89045.5	88313.3	732.1	0.0	0.00
100YR-24HR	12.52	89188.6	88457.4	731.2	0.0	0.00
100YR-24HR	12.54	89509.1	88779.9	729.2	0.0	0.00
100YR-24HR	12.55	89686.4	88958.3	728.1	0.0	0.00
100YR-24HR	12.57	89863.2	89136.1	727.1	0.0	0.00
100YR-24HR	12.59	90215.2	89490.0	725.3	0.0	0.00
100YR-24HR	12.61	90390.5	89666.1	724.4	0.0	0.00
100YR-24HR	12.62	90565.4	89841.8	723.6	0.0	0.00
100YR-24HR	12.63	90739.8	90017.0	722.9	0.0	0.00
100YR-24HR	12.66	91087.5	90366.0	721.5	0.0	0.00
100YR-24HR	12.67	91260.8	90539.9	720.9	0.0	0.00
100YR-24HR	12.69	91476.9	90756.7	720.2	0.0	0.00
100YR-24HR	12.71	91692.6	90972.9	719.6	0.0	0.00
100YR-24HR	12.72	91907.8	91188.7	719.1	0.0	0.00
100YR-24HR	12.74	92122.5	91403.9	718.6	0.0	0.00
100YR-24HR	12.76	92336.9	91618.6	718.3	0.0	0.00
100YR-24HR	12.77	92550.9	91833.0	718.0	0.0	0.00
100YR-24HR	12.79	92764.7	92047.0	717.7	0.0	0.00
100YR-24HR	12.81	92978.2	92260.6	717.5	0.0	0.00
100YR-24HR	12.82	93191.5	92474.0	717.4	0.0	0.00
100YR-24HR	12.84	93404.5	92687.1	717.4	0.0	0.00
100YR-24HR	12.86	93617.3	92900.0	717.4	0.0	0.00
100YR-24HR	12.87	93830.0	93112.6	717.4	0.0	0.00
100YR-24HR	12.89	94042.5	93325.0	717.5	0.0	0.00
100YR-24HR	12.91	94254.9	93537.3	717.6	0.0	0.00
100YR-24HR	12.92	94467.1	93749.4	717.8	0.0	0.00
100YR-24HR	12.94	94679.3	93961.3	718.0	0.0	0.00
100YR-24HR	12.96	94891.4	94173.2	718.2	0.0	0.00
100YR-24HR	12.97	95103.4	94384.9	718.5	0.0	0.00
100YR-24HR	12.99	95315.4	94596.6	718.8	-0.0	-0.00
100YR-24HR	13.01	95527.4	94808.3	719.1	-0.0	-0.00
100YR-24HR	13.02	95739.1	95019.8	719.3	-0.0	-0.00
100YR-24HR	13.04	95950.3	95231.2	719.1	-0.0	-0.00
100YR-24HR	13.06	96160.8	95442.1	718.7	-0.0	-0.00
100YR-24HR	13.07	96370.2	95652.3	717.9	-0.0	-0.00
100YR-24HR	13.09	96578.1	95861.6	716.5	-0.0	-0.00
100YR-24HR	13.11	96784.3	96069.5	714.8	-0.0	-0.00
100YR-24HR	13.12	96988.8	96276.0	712.8	-0.0	-0.00
100YR-24HR	13.14	97191.6	96480.9	710.7	-0.0	-0.00
100YR-24HR	13.16	97392.9	96684.3	708.6	-0.0	-0.00
100YR-24HR	13.17	97592.7	96886.2	706.5	-0.0	-0.00
100YR-24HR	13.19	97791.1	97086.7	704.4	-0.0	-0.00
100YR-24HR	13.21	97988.4	97285.9	702.5	-0.0	-0.00
100YR-24HR	13.22	98184.5	97483.8	700.7	-0.0	-0.00
100YR-24HR	13.24	98379.7	97680.6	699.1	-0.0	-0.00
100YR-24HR	13.26	98574.0	97876.5	697.6	-0.0	-0.00
100YR-24HR	13.27	98767.5	98071.3	696.2	-0.0	-0.00
100YR-24HR	13.29	98960.2	98265.3	694.9	-0.0	-0.00
100YR-24HR	13.31	99152.2	98458.4	693.8	-0.0	-0.00
100YR-24HR	13.32	99343.5	98650.8	692.7	-0.0	-0.00
100YR-24HR	13.34	99534.2	98842.4	691.8	-0.0	-0.00
100YR-24HR	13.36	99724.3	99033.4	690.9	-0.0	-0.00
100YR-24HR	13.37	99913.9	99223.8	690.1	-0.0	-0.00
100YR-24HR	13.39	100103.0	99413.6	689.4	-0.0	-0.00
100YR-24HR	13.41	100291.7	99602.9	688.8	-0.0	-0.00
100YR-24HR	13.42	100479.9	99791.7	688.2	-0.0	-0.00
100YR-24HR	13.44	100667.8	99980.0	687.7	-0.0	-0.00
100YR-24HR	13.46	100855.3	100168.0	687.3	-0.0	-0.00
100YR-24HR	13.47	101042.4	100355.5	686.9	-0.0	-0.00
100YR-24HR	13.49	101229.2	100542.6	686.6	-0.0	-0.00
100YR-24HR	13.51	101415.7	100729.4	686.3	-0.0	-0.00
100YR-24HR	13.52	101601.9	100915.9	686.0	-0.0	-0.00
100YR-24HR	13.54	101787.8	101102.0	685.8	-0.0	-0.00
100YR-24HR	13.56	101973.4	101287.8	685.6	-0.0	-0.00
100YR-24HR	13.57	102158.7	101473.3	685.4	-0.0	-0.00
100YR-24HR	13.59	102343.8	101658.6	685.2	-0.0	-0.00
100YR-24HR	13.61	102528.6	101843.5	685.1	-0.0	-0.00
100YR-24HR	13.62	102713.2	102028.2	685.0	-0.0	-0.00
100YR-24HR	13.64	102897.6	102212.7	684.9	-0.0	-0.00
100YR-24HR	13.66	103081.8	102396.9	684.8	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	13.67	103265.8	102581.0	684.8	-0.0	-0.00
100YR-24HR	13.69	103449.6	102764.8	684.8	-0.0	-0.00
100YR-24HR	13.71	103633.3	102948.5	684.8	-0.0	-0.00
100YR-24HR	13.72	103816.8	103131.9	684.9	-0.0	-0.00
100YR-24HR	13.74	104000.2	103315.2	684.9	-0.0	-0.00
100YR-24HR	13.76	104183.4	103498.4	685.0	-0.0	-0.00
100YR-24HR	13.77	104366.6	103681.4	685.1	-0.0	-0.00
100YR-24HR	13.79	104549.6	103864.3	685.3	-0.0	-0.00
100YR-24HR	13.81	104732.6	104047.1	685.4	-0.0	-0.00
100YR-24HR	13.82	104915.5	104229.9	685.6	-0.0	-0.00
100YR-24HR	13.84	105098.3	104412.5	685.8	-0.0	-0.00
100YR-24HR	13.86	105281.1	104595.0	686.0	-0.0	-0.00
100YR-24HR	13.87	105463.8	104777.5	686.3	-0.0	-0.00
100YR-24HR	13.89	105646.4	104959.9	686.5	-0.0	-0.00
100YR-24HR	13.91	105829.0	105142.3	686.8	-0.0	-0.00
100YR-24HR	13.92	106011.6	105324.6	687.0	-0.0	-0.00
100YR-24HR	13.94	106194.1	105506.8	687.3	-0.0	-0.00
100YR-24HR	13.96	106376.7	105689.1	687.6	-0.0	-0.00
100YR-24HR	13.97	106559.2	105871.3	687.9	-0.0	-0.00
100YR-24HR	13.99	106741.6	106053.4	688.2	-0.0	-0.00
100YR-24HR	14.01	106924.1	106235.6	688.6	-0.0	-0.00
100YR-24HR	14.02	107106.6	106417.7	688.9	-0.0	-0.00
100YR-24HR	14.04	107289.1	106599.9	689.2	-0.0	-0.00
100YR-24HR	14.06	107471.6	106782.0	689.6	-0.0	-0.00
100YR-24HR	14.07	107654.1	106964.2	689.9	-0.0	-0.00
100YR-24HR	14.09	107836.5	107146.3	690.3	-0.0	-0.00
100YR-24HR	14.11	108019.0	107328.4	690.6	-0.0	-0.00
100YR-24HR	14.12	108201.4	107510.5	690.9	-0.0	-0.00
100YR-24HR	14.14	108383.8	107692.6	691.2	-0.0	-0.00
100YR-24HR	14.16	108566.2	107874.6	691.6	-0.0	-0.00
100YR-24HR	14.17	108748.5	108056.6	691.9	-0.0	-0.00
100YR-24HR	14.19	108930.9	108238.6	692.2	-0.0	-0.00
100YR-24HR	14.21	109113.2	108420.6	692.6	-0.0	-0.00
100YR-24HR	14.22	109295.5	108602.6	692.9	-0.0	-0.00
100YR-24HR	14.24	109477.8	108784.6	693.3	-0.0	-0.00
100YR-24HR	14.26	109660.1	108966.5	693.6	-0.0	-0.00
100YR-24HR	14.27	109842.4	109148.5	693.9	-0.0	-0.00
100YR-24HR	14.29	110024.7	109330.4	694.3	-0.0	-0.00
100YR-24HR	14.31	110207.0	109512.4	694.6	-0.0	-0.00
100YR-24HR	14.32	110389.3	109694.3	695.0	-0.0	-0.00
100YR-24HR	14.34	110571.5	109876.2	695.3	-0.0	-0.00
100YR-24HR	14.36	110753.8	110058.1	695.7	-0.0	-0.00
100YR-24HR	14.37	110936.1	110240.0	696.0	-0.0	-0.00
100YR-24HR	14.39	111118.3	110421.9	696.4	-0.0	-0.00
100YR-24HR	14.41	111300.6	110603.8	696.7	-0.0	-0.00
100YR-24HR	14.42	111482.9	110785.7	697.1	-0.0	-0.00
100YR-24HR	14.44	111665.1	110967.6	697.5	-0.0	-0.00
100YR-24HR	14.46	111847.4	111149.5	697.8	-0.0	-0.00
100YR-24HR	14.47	112029.6	111331.4	698.2	-0.0	-0.00
100YR-24HR	14.49	112211.9	111513.3	698.5	-0.0	-0.00
100YR-24HR	14.51	112394.1	111695.2	698.9	-0.0	-0.00
100YR-24HR	14.52	112576.4	111877.1	699.3	-0.0	-0.00
100YR-24HR	14.54	112758.6	112059.0	699.6	-0.0	-0.00
100YR-24HR	14.56	112940.9	112240.9	700.0	-0.0	-0.00
100YR-24HR	14.57	113123.1	112422.8	700.3	-0.0	-0.00
100YR-24HR	14.59	113305.4	112604.7	700.7	-0.0	-0.00
100YR-24HR	14.61	113487.6	112786.5	701.1	-0.0	-0.00
100YR-24HR	14.62	113669.9	112968.4	701.4	-0.0	-0.00
100YR-24HR	14.64	113852.1	113150.3	701.8	-0.0	-0.00
100YR-24HR	14.66	114034.4	113332.2	702.2	-0.0	-0.00
100YR-24HR	14.67	114216.6	113514.1	702.5	-0.0	-0.00
100YR-24HR	14.69	114398.9	113696.0	702.9	-0.0	-0.00
100YR-24HR	14.71	114581.1	113877.9	703.2	-0.0	-0.00
100YR-24HR	14.72	114763.4	114059.8	703.6	-0.0	-0.00
100YR-24HR	14.74	114945.7	114241.7	704.0	-0.0	-0.00
100YR-24HR	14.76	115127.9	114423.6	704.3	0.0	0.00
100YR-24HR	14.77	115310.2	114605.5	704.7	0.0	0.00
100YR-24HR	14.79	115492.4	114787.4	705.1	0.0	0.00
100YR-24HR	14.81	115674.7	114969.3	705.4	0.0	0.00
100YR-24HR	14.82	115857.0	115151.2	705.8	0.0	0.00
100YR-24HR	14.84	116039.3	115333.1	706.2	0.0	0.00
100YR-24HR	14.86	116221.5	115515.0	706.5	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	14.87	116403.8	115696.9	706.9	0.0	0.00
100YR-24HR	14.89	116586.1	115878.8	707.3	0.0	0.00
100YR-24HR	14.91	116768.4	116060.8	707.6	0.0	0.00
100YR-24HR	14.92	116950.7	116242.7	708.0	0.0	0.00
100YR-24HR	14.94	117133.0	116424.6	708.4	0.0	0.00
100YR-24HR	14.96	117315.3	116606.5	708.7	0.0	0.00
100YR-24HR	14.97	117497.6	116788.5	709.1	0.0	0.00
100YR-24HR	14.99	117679.9	116970.4	709.5	0.0	0.00
100YR-24HR	15.01	117862.1	117152.3	709.8	0.0	0.00
100YR-24HR	15.02	118044.1	117334.2	709.9	0.0	0.00
100YR-24HR	15.04	118225.6	117515.9	709.7	0.0	0.00
100YR-24HR	15.06	118406.3	117697.1	709.2	0.0	0.00
100YR-24HR	15.07	118585.9	117877.7	708.3	0.0	0.00
100YR-24HR	15.09	118763.9	118057.1	706.8	0.0	0.00
100YR-24HR	15.11	118940.2	118235.3	704.9	0.0	0.00
100YR-24HR	15.12	119114.8	118411.9	702.8	0.0	0.00
100YR-24HR	15.14	119287.6	118587.0	700.6	0.0	0.00
100YR-24HR	15.16	119458.8	118760.5	698.3	0.0	0.00
100YR-24HR	15.17	119628.6	118932.5	696.0	0.0	0.00
100YR-24HR	15.19	119797.0	119103.1	693.8	0.0	0.00
100YR-24HR	15.21	119964.2	119272.4	691.7	0.0	0.00
100YR-24HR	15.22	120130.3	119440.5	689.8	0.0	0.00
100YR-24HR	15.24	120295.4	119607.4	687.9	0.0	0.00
100YR-24HR	15.26	120459.5	119773.3	686.2	0.0	0.00
100YR-24HR	15.27	120622.9	119938.2	684.6	0.0	0.00
100YR-24HR	15.29	120785.4	120102.2	683.2	0.0	0.00
100YR-24HR	15.31	120947.2	120265.4	681.8	0.0	0.00
100YR-24HR	15.32	121108.4	120427.8	680.6	0.0	0.00
100YR-24HR	15.34	121268.9	120589.4	679.4	0.0	0.00
100YR-24HR	15.36	121428.8	120750.4	678.4	0.0	0.00
100YR-24HR	15.37	121588.2	120910.7	677.4	0.0	0.00
100YR-24HR	15.39	121747.1	121070.5	676.6	0.0	0.00
100YR-24HR	15.41	121905.5	121229.7	675.8	0.0	0.00
100YR-24HR	15.42	122063.5	121388.4	675.1	0.0	0.00
100YR-24HR	15.44	122221.1	121546.7	674.4	0.0	0.00
100YR-24HR	15.46	122378.3	121704.5	673.8	0.0	0.00
100YR-24HR	15.47	122535.2	121861.9	673.3	0.0	0.00
100YR-24HR	15.49	122691.7	122018.9	672.8	0.0	0.00
100YR-24HR	15.51	122847.9	122175.6	672.3	0.0	0.00
100YR-24HR	15.52	123003.8	122331.9	671.9	0.0	0.00
100YR-24HR	15.54	123159.4	122487.8	671.5	0.0	0.00
100YR-24HR	15.56	123314.7	122643.5	671.2	0.0	0.00
100YR-24HR	15.57	123469.7	122798.8	670.9	0.0	0.00
100YR-24HR	15.59	123624.5	122953.9	670.6	0.0	0.00
100YR-24HR	15.61	123779.0	123108.7	670.3	0.0	0.00
100YR-24HR	15.62	123933.2	123263.2	670.1	0.0	0.00
100YR-24HR	15.64	124087.3	123417.4	669.9	0.0	0.00
100YR-24HR	15.66	124241.1	123571.5	669.7	0.0	0.00
100YR-24HR	15.67	124394.8	123725.3	669.5	0.0	0.00
100YR-24HR	15.69	124548.2	123878.9	669.4	0.0	0.00
100YR-24HR	15.71	124701.5	124032.3	669.3	0.0	0.00
100YR-24HR	15.72	124854.7	124185.5	669.2	0.0	0.00
100YR-24HR	15.74	125007.7	124338.6	669.1	0.0	0.00
100YR-24HR	15.76	125160.6	124491.5	669.1	0.0	0.00
100YR-24HR	15.77	125313.3	124644.3	669.1	0.0	0.00
100YR-24HR	15.79	125466.0	124796.9	669.1	0.0	0.00
100YR-24HR	15.81	125618.6	124949.4	669.1	0.0	0.00
100YR-24HR	15.82	125771.1	125101.9	669.2	0.0	0.00
100YR-24HR	15.84	125923.5	125254.2	669.3	0.0	0.00
100YR-24HR	15.86	126075.8	125406.5	669.4	0.0	0.00
100YR-24HR	15.87	126228.1	125558.7	669.5	0.0	0.00
100YR-24HR	15.89	126380.4	125710.8	669.6	0.0	0.00
100YR-24HR	15.91	126532.6	125862.8	669.7	0.0	0.00
100YR-24HR	15.92	126684.7	126014.9	669.9	0.0	0.00
100YR-24HR	15.94	126836.9	126166.8	670.0	0.0	0.00
100YR-24HR	15.96	126989.0	126318.7	670.2	0.0	0.00
100YR-24HR	15.97	127141.0	126470.6	670.4	0.0	0.00
100YR-24HR	15.99	127293.1	126622.5	670.6	0.0	0.00
100YR-24HR	16.01	127445.0	126774.3	670.6	0.0	0.00
100YR-24HR	16.09	128192.6	127525.8	666.8	0.0	0.00
100YR-24HR	16.17	128907.6	128250.9	656.7	0.0	0.00
100YR-24HR	16.26	129589.4	128942.2	647.2	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	16.34	130249.0	129608.5	640.5	0.0	0.00
100YR-24HR	16.42	130893.8	130257.5	636.3	0.0	0.00
100YR-24HR	16.51	131528.2	130894.5	633.7	0.0	0.00
100YR-24HR	16.59	132154.7	131522.6	632.1	0.0	0.00
100YR-24HR	16.67	132775.0	132143.9	631.2	0.0	0.00
100YR-24HR	16.76	133390.8	132760.0	630.9	0.0	0.00
100YR-24HR	16.84	134003.7	133372.6	631.1	0.0	0.00
100YR-24HR	16.92	134614.8	133983.0	631.8	0.0	0.00
100YR-24HR	17.01	135225.2	134592.3	632.9	0.0	0.00
100YR-24HR	17.09	135835.2	135201.1	634.1	0.0	0.00
100YR-24HR	17.17	136444.9	135809.6	635.3	0.0	0.00
100YR-24HR	17.26	137054.4	136417.8	636.6	0.0	0.00
100YR-24HR	17.34	137663.6	137025.7	637.9	0.0	0.00
100YR-24HR	17.42	138272.8	137633.5	639.2	0.0	0.00
100YR-24HR	17.51	138881.8	138241.3	640.6	0.0	0.00
100YR-24HR	17.59	139490.8	138848.9	641.9	0.0	0.00
100YR-24HR	17.67	140099.8	139456.5	643.3	0.0	0.00
100YR-24HR	17.76	140708.8	140064.2	644.6	0.0	0.00
100YR-24HR	17.84	141317.7	140671.7	646.0	0.0	0.00
100YR-24HR	17.92	141926.7	141279.3	647.3	0.0	0.00
100YR-24HR	18.01	142535.7	141887.0	648.7	0.0	0.00
100YR-24HR	18.09	143144.7	142494.6	650.1	0.0	0.00
100YR-24HR	18.17	143753.7	143102.3	651.5	0.0	0.00
100YR-24HR	18.26	144362.8	143709.9	652.8	0.0	0.00
100YR-24HR	18.34	144971.9	144317.7	654.2	0.0	0.00
100YR-24HR	18.42	145581.0	144925.4	655.6	0.0	0.00
100YR-24HR	18.51	146190.1	145533.1	657.0	0.0	0.00
100YR-24HR	18.59	146799.2	146140.9	658.3	0.0	0.00
100YR-24HR	18.67	147408.4	146748.7	659.7	0.0	0.00
100YR-24HR	18.76	148017.6	147356.6	661.1	0.0	0.00
100YR-24HR	18.84	148626.8	147964.4	662.4	0.0	0.00
100YR-24HR	18.92	149236.1	148572.3	663.8	0.0	0.00
100YR-24HR	19.01	149845.1	149180.2	665.0	0.0	0.00
100YR-24HR	19.09	150441.7	149780.2	661.5	0.0	0.00
100YR-24HR	19.17	151005.3	150353.5	651.8	0.0	0.00
100YR-24HR	19.26	151535.6	150892.7	642.9	0.0	0.00
100YR-24HR	19.34	152043.7	151406.9	636.8	0.0	0.00
100YR-24HR	19.42	152536.9	151903.8	633.1	0.0	0.00
100YR-24HR	19.51	153019.6	152388.8	630.8	0.0	0.00
100YR-24HR	19.59	153494.3	152864.9	629.4	0.0	0.00
100YR-24HR	19.67	153962.9	153334.1	628.7	0.0	0.00
100YR-24HR	19.76	154426.8	153798.2	628.6	0.0	0.00
100YR-24HR	19.84	154887.8	154258.8	629.0	0.0	0.00
100YR-24HR	19.92	155347.0	154717.2	629.9	0.0	0.00
100YR-24HR	20.01	155805.5	155174.4	631.0	0.0	0.00
100YR-24HR	20.09	156263.6	155631.7	631.9	0.0	0.00
100YR-24HR	20.17	156721.5	156088.9	632.6	0.0	0.00
100YR-24HR	20.26	157179.1	156545.9	633.2	0.0	0.00
100YR-24HR	20.34	157636.6	157002.7	633.9	0.0	0.00
100YR-24HR	20.42	158094.0	157459.5	634.6	0.0	0.00
100YR-24HR	20.51	158551.4	157916.1	635.3	0.0	0.00
100YR-24HR	20.59	159008.7	158372.7	636.0	0.0	0.00
100YR-24HR	20.67	159466.0	158829.3	636.7	0.0	0.00
100YR-24HR	20.76	159923.2	159285.8	637.4	0.0	0.00
100YR-24HR	20.84	160380.4	159742.3	638.1	0.0	0.00
100YR-24HR	20.92	160837.7	160198.8	638.9	0.0	0.00
100YR-24HR	21.01	161294.7	160655.3	639.4	0.0	0.00
100YR-24HR	21.09	161738.9	161103.7	635.2	0.0	0.00
100YR-24HR	21.17	162149.8	161524.7	625.0	0.0	0.00
100YR-24HR	21.26	162527.1	161911.4	615.7	0.0	0.00
100YR-24HR	21.34	162882.1	162273.0	609.1	0.0	0.00
100YR-24HR	21.42	163222.1	162617.4	604.8	0.0	0.00
100YR-24HR	21.51	163551.7	162949.7	602.0	0.0	0.00
100YR-24HR	21.59	163873.2	163273.2	600.0	0.0	0.00
100YR-24HR	21.67	164188.5	163589.8	598.6	0.0	0.00
100YR-24HR	21.76	164499.1	163901.2	597.9	0.0	0.00
100YR-24HR	21.84	164806.8	164209.2	597.7	0.0	0.00
100YR-24HR	21.92	165112.8	164514.9	597.8	0.0	0.00
100YR-24HR	22.01	165417.6	164819.5	598.1	0.0	0.00
100YR-24HR	22.09	165709.7	165115.7	594.0	0.0	0.00
100YR-24HR	22.17	165968.7	165384.7	583.9	0.0	0.00
100YR-24HR	22.26	166194.1	165619.4	574.7	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	22.34	166397.2	165828.9	568.3	0.0	0.00
100YR-24HR	22.42	166585.2	166021.2	564.1	0.0	0.00
100YR-24HR	22.51	166762.7	166201.4	561.3	0.0	0.00
100YR-24HR	22.59	166932.3	166372.9	559.4	0.0	0.00
100YR-24HR	22.67	167095.5	166537.4	558.1	0.0	0.00
100YR-24HR	22.76	167254.1	166696.7	557.4	0.0	0.00
100YR-24HR	22.84	167409.8	166852.6	557.2	0.0	0.00
100YR-24HR	22.92	167563.7	167006.2	557.4	0.0	0.00
100YR-24HR	23.01	167716.7	167158.7	558.0	0.0	0.00
100YR-24HR	23.09	167869.5	167311.3	558.2	0.0	0.00
100YR-24HR	23.17	168022.2	167464.0	558.2	0.0	0.00
100YR-24HR	23.26	168174.8	167616.7	558.2	0.0	0.00
100YR-24HR	23.34	168327.4	167769.3	558.2	-0.0	-0.00
100YR-24HR	23.42	168480.0	167921.8	558.1	-0.0	-0.00
100YR-24HR	23.51	168632.5	168074.4	558.1	-0.0	-0.00
100YR-24HR	23.59	168785.0	168226.9	558.1	-0.0	-0.00
100YR-24HR	23.67	168937.5	168379.4	558.1	-0.0	-0.00
100YR-24HR	23.76	169090.0	168531.9	558.1	-0.0	-0.00
100YR-24HR	23.84	169242.5	168684.3	558.1	-0.0	-0.00
100YR-24HR	23.92	169394.9	168836.8	558.1	-0.0	-0.00
100YR-24HR	24.01	169547.2	168989.3	557.9	-0.0	-0.00
100YR-24HR	24.26	169864.5	169341.0	523.6	-0.0	-0.00
100YR-24HR	24.50	169907.5	169417.6	489.9	-0.0	-0.00
100YR-24HR	24.76	169907.5	169429.1	478.4	-0.0	-0.00
100YR-24HR	25.00	169907.5	169439.3	468.2	-0.0	-0.00
100YR-24HR	25.25	169907.5	169449.9	457.6	0.0	0.00
100YR-24HR	25.50	169907.5	169460.4	447.0	-0.0	-0.00
100YR-24HR	25.75	169907.5	169471.0	436.5	-0.0	-0.00
100YR-24HR	26.00	169907.5	169481.6	425.9	-0.0	-0.00
100YR-24HR	26.25	169907.5	169492.2	415.3	0.0	0.00
100YR-24HR	26.50	169907.5	169502.7	404.7	0.0	0.00
100YR-24HR	26.75	169907.5	169513.3	394.2	0.0	0.00
100YR-24HR	27.00	169907.5	169523.9	383.6	0.0	0.00
100YR-24HR	27.25	169907.5	169534.4	373.0	0.0	0.00
100YR-24HR	27.50	169907.5	169545.0	362.4	0.0	0.00
100YR-24HR	27.75	169907.5	169555.6	351.9	0.0	0.00
100YR-24HR	28.00	169907.5	169566.2	341.3	0.0	0.00
100YR-24HR	28.25	169907.5	169576.7	330.7	0.0	0.00
100YR-24HR	28.50	169907.5	169587.3	320.2	0.0	0.00
100YR-24HR	28.75	169907.5	169597.9	309.6	0.0	0.00
100YR-24HR	29.00	169907.5	169608.5	299.0	0.0	0.00
100YR-24HR	29.25	169907.5	169619.0	288.4	0.0	0.00
100YR-24HR	29.50	169907.5	169629.6	277.9	0.0	0.00
100YR-24HR	29.75	169907.5	169640.2	267.3	0.0	0.00
100YR-24HR	30.00	169907.5	169650.8	256.7	0.0	0.00
100YR-24HR	30.25	169907.5	169661.3	246.1	0.0	0.00
100YR-24HR	30.50	169907.5	169671.9	235.6	0.0	0.00
100YR-24HR	30.75	169907.5	169682.5	225.0	0.0	0.00
100YR-24HR	31.00	169907.5	169693.0	214.4	0.0	0.00
100YR-24HR	31.25	169907.5	169703.6	203.9	0.0	0.00
100YR-24HR	31.50	169907.5	169714.2	193.3	0.0	0.00
100YR-24HR	31.75	169907.5	169724.8	182.7	0.0	0.00
100YR-24HR	32.00	169907.5	169735.3	172.1	0.0	0.00
100YR-24HR	32.25	169907.5	169745.9	161.6	0.0	0.00
100YR-24HR	32.50	169907.5	169756.5	151.0	0.0	0.00
100YR-24HR	32.75	169907.5	169767.1	140.4	0.0	0.00
100YR-24HR	33.00	169907.5	169777.6	129.8	0.0	0.00
100YR-24HR	33.25	169907.5	169788.2	119.3	0.0	0.00
100YR-24HR	33.50	169907.5	169798.8	108.7	0.0	0.00
100YR-24HR	33.75	169907.5	169809.3	98.1	0.0	0.00
100YR-24HR	34.00	169907.5	169819.9	87.5	0.0	0.00
100YR-24HR	34.25	169907.5	169830.5	77.0	0.0	0.00
100YR-24HR	34.50	169907.5	169841.1	66.4	0.0	0.00
100YR-24HR	34.75	169907.5	169851.6	55.8	0.0	0.00
100YR-24HR	35.00	169907.5	169862.2	45.3	0.0	0.00
100YR-24HR	35.25	169907.5	169872.8	34.7	0.0	0.00
100YR-24HR	35.50	169907.5	169883.4	24.1	0.0	0.00
100YR-24HR	35.75	169907.5	169893.9	13.5	0.0	0.00
100YR-24HR	36.00	169907.5	169904.5	3.0	0.0	0.00
100YR-24HR	36.25	169907.5	169907.3	0.2	0.0	0.00
100YR-24HR	36.50	169907.5	169907.5	0.0	0.0	0.00
100YR-24HR	36.75	169907.5	169907.5	0.0	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	37.00	169907.5	169907.5	0.0	0.0	0.02
100YR-24HR	37.25	169907.5	169907.5	0.0	0.0	0.24
100YR-24HR	37.50	169907.5	169907.5	0.0	0.0	2.80
100YR-24HR	37.75	169907.5	169907.5	0.0	0.0	25.62
100YR-24HR	38.00	169907.5	169907.5	0.0	0.0	80.59
100YR-24HR	38.25	169907.5	169907.5	0.0	0.0	98.00
100YR-24HR	38.50	169907.5	169907.5	0.0	0.0	99.81
100YR-24HR	38.75	169907.5	169907.5	0.0	0.0	99.96
100YR-24HR	39.00	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	39.25	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	39.50	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	39.75	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	40.00	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	40.25	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	40.50	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	40.75	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	41.00	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	41.25	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	41.50	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	41.75	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	42.00	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	42.25	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	42.50	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	42.75	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	43.00	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	43.25	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	43.50	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	43.75	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	44.00	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	44.25	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	44.50	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	44.75	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	45.00	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	45.25	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	45.50	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	45.75	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	46.00	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	46.25	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	46.50	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	46.75	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	47.00	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	47.25	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	47.50	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	47.75	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	48.00	169907.5	169907.5	0.0	0.0	99.97
100YR-24HR	48.01	169907.5	169907.5	0.0	0.0	99.97
100YR-8HR	0.00	0.0	0.0	0.0	0.0	0.00
100YR-8HR	0.08	0.0	-0.4	0.4	-0.0	-0.00
100YR-8HR	0.18	0.0	-1.2	1.2	0.0	0.00
100YR-8HR	0.26	0.0	-2.0	2.0	0.0	0.00
100YR-8HR	0.34	0.0	-2.8	2.8	0.0	0.00
100YR-8HR	0.42	0.0	-3.5	3.5	0.0	0.00
100YR-8HR	0.50	0.0	-4.4	4.4	0.0	0.00
100YR-8HR	0.60	0.0	-5.4	5.4	0.0	0.00
100YR-8HR	0.68	0.0	-6.2	6.2	0.0	0.00
100YR-8HR	0.77	0.0	-7.1	7.1	0.0	0.00
100YR-8HR	0.85	0.3	-7.8	8.2	0.0	0.00
100YR-8HR	0.93	1.4	-8.1	9.6	0.0	0.00
100YR-8HR	1.02	4.5	-7.4	11.9	0.0	0.00
100YR-8HR	1.10	20.5	-2.1	22.6	0.0	0.00
100YR-8HR	1.17	76.2	27.7	48.4	0.0	0.00
100YR-8HR	1.25	210.9	119.7	91.2	0.0	0.00
100YR-8HR	1.33	441.1	298.9	142.2	0.0	0.00
100YR-8HR	1.42	792.5	594.3	198.1	-0.0	-0.00
100YR-8HR	1.50	1215.8	967.6	248.2	-0.0	-0.00
100YR-8HR	1.58	1722.7	1428.2	294.5	-0.0	-0.00
100YR-8HR	1.67	2305.7	1969.0	336.7	-0.0	-0.00
100YR-8HR	1.75	3002.8	2625.8	377.1	-0.0	-0.00
100YR-8HR	1.84	3718.5	3308.1	410.4	-0.0	-0.00
100YR-8HR	1.92	4473.1	4034.0	439.1	-0.0	-0.00
100YR-8HR	2.01	5354.8	4888.4	466.4	0.0	0.00
100YR-8HR	2.09	6243.4	5744.7	498.8	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-8HR	2.11	6431.4	5923.6	507.8	0.0	0.00
100YR-8HR	2.12	6624.7	6107.4	517.3	0.0	0.00
100YR-8HR	2.14	6823.2	6296.2	527.0	0.0	0.00
100YR-8HR	2.15	7026.7	6489.8	536.8	0.0	0.00
100YR-8HR	2.17	7234.8	6688.3	546.6	0.0	0.00
100YR-8HR	2.19	7447.4	6891.3	556.1	0.0	0.00
100YR-8HR	2.20	7664.1	7098.7	565.4	0.0	0.00
100YR-8HR	2.22	7884.6	7310.3	574.4	0.0	0.00
100YR-8HR	2.24	8108.7	7525.8	582.9	0.0	0.00
100YR-8HR	2.25	8336.1	7745.0	591.1	0.0	0.00
100YR-8HR	2.27	8566.8	7967.8	599.0	0.0	0.00
100YR-8HR	2.29	8800.4	8194.1	606.4	0.0	0.00
100YR-8HR	2.30	9037.0	8423.6	613.4	0.0	0.00
100YR-8HR	2.32	9276.3	8656.3	620.0	0.0	0.00
100YR-8HR	2.33	9518.2	8891.9	626.3	0.0	0.00
100YR-8HR	2.35	9762.6	9130.4	632.3	0.0	0.00
100YR-8HR	2.37	10030.1	9391.7	638.4	0.0	0.00
100YR-8HR	2.39	10342.0	9696.9	645.1	0.0	0.00
100YR-8HR	2.40	10551.8	9902.5	649.3	0.0	0.00
100YR-8HR	2.42	10869.1	10213.9	655.3	0.0	0.00
100YR-8HR	2.44	11082.3	10423.3	659.0	0.0	0.00
100YR-8HR	2.45	11323.7	10660.5	663.2	0.0	0.00
100YR-8HR	2.47	11593.8	10926.2	667.6	0.0	0.00
100YR-8HR	2.49	11865.8	11194.0	671.8	0.0	0.00
100YR-8HR	2.50	12139.6	11463.7	675.9	0.0	0.00
100YR-8HR	2.52	12415.2	11735.3	679.9	0.0	0.00
100YR-8HR	2.54	12692.5	12008.8	683.7	0.0	0.00
100YR-8HR	2.55	12971.5	12284.1	687.4	0.0	0.00
100YR-8HR	2.58	13322.6	12630.6	691.9	0.0	0.00
100YR-8HR	2.59	13499.0	12804.9	694.1	0.0	0.00
100YR-8HR	2.61	13853.6	13155.2	698.4	0.0	0.00
100YR-8HR	2.62	14031.8	13331.3	700.5	0.0	0.00
100YR-8HR	2.64	14389.8	13685.3	704.5	0.0	0.00
100YR-8HR	2.65	14569.6	13863.1	706.5	0.0	0.00
100YR-8HR	2.67	14930.7	14220.4	710.3	0.0	0.00
100YR-8HR	2.69	15293.8	14579.8	714.0	0.0	0.00
100YR-8HR	2.70	15476.0	14760.3	715.7	0.0	0.00
100YR-8HR	2.73	15841.8	15122.7	719.2	0.0	0.00
100YR-8HR	2.74	16071.4	15350.1	721.3	0.0	0.00
100YR-8HR	2.75	16301.5	15578.2	723.3	0.0	0.00
100YR-8HR	2.78	16763.6	16036.5	727.1	0.0	0.00
100YR-8HR	2.79	16995.6	16266.6	729.0	0.0	0.00
100YR-8HR	2.81	17228.1	16497.3	730.8	0.0	0.00
100YR-8HR	2.82	17461.1	16728.5	732.6	0.0	0.00
100YR-8HR	2.85	17928.7	17192.7	735.9	0.0	0.00
100YR-8HR	2.86	18163.2	17425.6	737.6	0.0	0.00
100YR-8HR	2.87	18398.2	17659.0	739.2	0.0	0.00
100YR-8HR	2.89	18633.6	17892.9	740.8	0.0	0.00
100YR-8HR	2.90	18928.5	18185.9	742.7	0.0	0.00
100YR-8HR	2.92	19224.1	18479.6	744.6	0.0	0.00
100YR-8HR	2.94	19520.3	18774.0	746.4	0.0	0.00
100YR-8HR	2.95	19817.2	19069.0	748.2	0.0	0.00
100YR-8HR	2.97	20114.5	19364.7	749.9	0.0	0.00
100YR-8HR	2.99	20412.5	19660.9	751.5	0.0	0.00
100YR-8HR	3.00	20711.2	19957.7	753.5	0.0	0.00
100YR-8HR	3.02	21028.0	20270.3	757.7	0.0	0.00
100YR-8HR	3.04	21337.0	20570.8	766.2	0.0	0.00
100YR-8HR	3.05	21620.4	20842.5	777.8	0.0	0.00
100YR-8HR	3.07	21947.0	21150.7	796.2	0.0	0.00
100YR-8HR	3.08	22325.4	21499.7	825.7	0.0	0.00
100YR-8HR	3.10	22706.4	21845.4	861.0	0.0	0.00
100YR-8HR	3.12	23148.4	22243.9	904.5	0.0	0.00
100YR-8HR	3.13	23592.3	22643.8	948.5	0.0	0.00
100YR-8HR	3.15	24099.8	23102.8	997.0	0.0	0.00
100YR-8HR	3.17	24601.0	23558.9	1042.1	0.0	0.00
100YR-8HR	3.18	25165.3	24075.9	1089.4	0.0	0.00
100YR-8HR	3.20	25755.9	24620.8	1135.1	0.0	0.00
100YR-8HR	3.22	26328.1	25152.8	1175.3	0.0	0.00
100YR-8HR	3.23	26961.4	25745.6	1215.8	0.0	0.00
100YR-8HR	3.25	27570.1	26318.7	1251.3	0.0	0.00
100YR-8HR	3.27	28240.0	26952.6	1287.4	0.0	0.00
100YR-8HR	3.28	28880.7	27561.6	1319.1	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-8HR	3.30	29582.4	28231.4	1350.9	0.0	0.00
100YR-8HR	3.32	30250.6	28871.7	1379.0	0.0	0.00
100YR-8HR	3.33	30967.8	29560.9	1406.9	0.0	0.00
100YR-8HR	3.35	31709.9	30276.4	1433.5	0.0	0.00
100YR-8HR	3.37	32464.0	31005.6	1458.4	0.0	0.00
100YR-8HR	3.38	33165.2	31685.1	1480.0	0.0	0.00
100YR-8HR	3.40	33972.7	32469.5	1503.2	0.0	0.00
100YR-8HR	3.42	34708.4	33185.8	1522.6	0.0	0.00
100YR-8HR	3.43	35452.0	33911.1	1540.9	0.0	0.00
100YR-8HR	3.45	36245.0	34685.9	1559.1	0.0	0.00
100YR-8HR	3.47	37088.3	35511.0	1577.3	0.0	0.00
100YR-8HR	3.48	37833.3	36240.7	1592.6	0.0	0.00
100YR-8HR	3.50	38584.5	36977.3	1607.2	0.0	0.00
100YR-8HR	3.52	39450.4	37827.2	1623.2	0.0	0.00
100YR-8HR	3.53	40269.2	38631.4	1637.7	0.0	0.00
100YR-8HR	3.55	41094.4	39442.7	1651.7	0.0	0.00
100YR-8HR	3.57	41925.7	40260.6	1665.1	0.0	0.00
100YR-8HR	3.59	42762.8	41084.9	1678.0	0.0	0.00
100YR-8HR	3.60	43605.6	41915.2	1690.4	0.0	0.00
100YR-8HR	3.62	44382.9	42681.5	1701.4	0.0	0.00
100YR-8HR	3.63	45271.3	43557.9	1713.4	0.0	0.00
100YR-8HR	3.65	46164.9	44440.0	1724.9	-0.0	-0.00
100YR-8HR	3.67	47063.5	45327.5	1735.9	0.0	0.00
100YR-8HR	3.68	47785.6	46041.2	1744.4	0.0	0.00
100YR-8HR	3.70	48692.2	46937.7	1754.5	0.0	0.00
100YR-8HR	3.72	49511.6	47748.3	1763.2	0.0	0.00
100YR-8HR	3.73	50425.6	48653.1	1772.5	0.0	0.00
100YR-8HR	3.75	51343.1	49561.9	1781.2	0.0	0.00
100YR-8HR	3.77	52263.7	50474.3	1789.4	0.0	0.00
100YR-8HR	3.79	53187.2	51390.0	1797.2	0.0	0.00
100YR-8HR	3.80	53939.5	52136.3	1803.2	0.0	0.00
100YR-8HR	3.82	54809.4	52999.6	1809.8	0.0	0.00
100YR-8HR	3.83	55681.3	53865.3	1816.0	0.0	0.00
100YR-8HR	3.85	56555.1	54733.1	1822.0	0.0	0.00
100YR-8HR	3.87	57722.8	55893.3	1829.5	0.0	0.00
100YR-8HR	3.89	58454.0	56620.0	1834.0	0.0	0.00
100YR-8HR	3.91	59552.6	57712.2	1840.4	0.0	0.00
100YR-8HR	3.92	60286.1	58441.6	1844.4	0.0	0.00
100YR-8HR	3.93	61020.4	59172.1	1848.3	0.0	0.00
100YR-8HR	3.95	62123.2	60269.3	1853.9	0.0	0.00
100YR-8HR	3.97	62951.2	61093.4	1857.8	0.0	0.00
100YR-8HR	3.99	63871.9	62010.0	1861.9	0.0	0.00
100YR-8HR	4.00	64792.9	62927.5	1865.4	0.0	0.00
100YR-8HR	4.02	65710.7	63845.0	1865.7	0.0	0.00
100YR-8HR	4.04	66599.3	64737.4	1861.9	0.0	0.00
100YR-8HR	4.05	67299.4	65444.4	1855.0	0.0	0.00
100YR-8HR	4.07	68168.2	66327.8	1840.4	-0.0	-0.00
100YR-8HR	4.08	69013.5	67197.1	1816.3	-0.0	-0.00
100YR-8HR	4.10	69830.0	68046.5	1783.5	-0.0	-0.00
100YR-8HR	4.12	70574.2	68827.2	1747.0	-0.0	-0.00
100YR-8HR	4.13	71338.5	69634.1	1704.4	-0.0	-0.00
100YR-8HR	4.15	72022.8	70359.4	1663.4	0.0	0.00
100YR-8HR	4.17	72727.2	71107.4	1619.8	0.0	0.00
100YR-8HR	4.18	73404.3	71827.0	1577.3	0.0	0.00
100YR-8HR	4.20	74013.5	72474.3	1539.1	0.0	0.00
100YR-8HR	4.22	74644.6	73143.7	1500.9	0.0	0.00
100YR-8HR	4.23	75215.7	73748.0	1467.7	0.0	0.00
100YR-8HR	4.25	75809.9	74375.3	1434.6	0.0	0.00
100YR-8HR	4.27	76348.9	74943.3	1405.7	0.0	0.00
100YR-8HR	4.28	76892.5	75514.8	1377.7	0.0	0.00
100YR-8HR	4.30	77440.5	76089.7	1350.9	0.0	0.00
100YR-8HR	4.32	77974.9	76649.0	1325.9	0.0	0.00
100YR-8HR	4.33	78453.6	77148.9	1304.7	0.0	0.00
100YR-8HR	4.35	78985.6	77703.3	1282.3	0.0	0.00
100YR-8HR	4.37	79454.4	78190.8	1263.6	0.0	0.00
100YR-8HR	4.38	79914.2	78668.0	1246.2	0.0	0.00
100YR-8HR	4.40	80378.2	79148.6	1229.7	0.0	0.00
100YR-8HR	4.42	80870.9	79657.7	1213.2	0.0	0.00
100YR-8HR	4.43	81295.1	80095.1	1200.0	0.0	0.00
100YR-8HR	4.45	81772.3	80586.3	1186.1	0.0	0.00
100YR-8HR	4.47	82212.7	81038.9	1173.8	0.0	0.00
100YR-8HR	4.49	82646.7	81484.4	1162.3	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-8HR	4.50	83074.4	81922.9	1151.5	0.0	0.00
100YR-8HR	4.52	83461.2	82319.2	1142.0	0.0	0.00
100YR-8HR	4.53	83894.9	82763.1	1131.8	0.0	0.00
100YR-8HR	4.55	84322.6	83200.4	1122.2	0.0	0.00
100YR-8HR	4.57	84744.7	83631.6	1113.1	0.0	0.00
100YR-8HR	4.58	85099.2	83993.4	1105.8	0.0	0.00
100YR-8HR	4.60	85511.5	84413.9	1097.6	0.0	0.00
100YR-8HR	4.62	85918.9	84829.0	1089.9	0.0	0.00
100YR-8HR	4.64	86321.8	85239.1	1082.7	0.0	0.00
100YR-8HR	4.65	86621.1	85543.5	1077.6	0.0	0.00
100YR-8HR	4.67	87065.8	85995.4	1070.4	0.0	0.00
100YR-8HR	4.69	87432.8	86367.9	1064.9	0.0	0.00
100YR-8HR	4.70	87796.7	86736.9	1059.8	0.0	0.00
100YR-8HR	4.72	88157.8	87102.7	1055.0	-0.0	-0.00
100YR-8HR	4.74	88546.0	87495.6	1050.3	-0.0	-0.00
100YR-8HR	4.75	88842.7	87795.7	1047.1	-0.0	-0.00
100YR-8HR	4.77	89285.1	88242.5	1042.7	-0.0	-0.00
100YR-8HR	4.78	89578.5	88538.3	1040.1	-0.0	-0.00
100YR-8HR	4.81	90016.3	88979.6	1036.7	-0.0	-0.00
100YR-8HR	4.82	90379.4	89345.1	1034.3	-0.0	-0.00
100YR-8HR	4.84	90741.1	89708.9	1032.2	-0.0	-0.00
100YR-8HR	4.86	91101.4	90071.0	1030.3	-0.0	-0.00
100YR-8HR	4.87	91460.5	90431.8	1028.8	-0.0	-0.00
100YR-8HR	4.89	91818.6	90791.1	1027.5	-0.0	-0.00
100YR-8HR	4.91	92220.4	91194.1	1026.2	-0.0	-0.00
100YR-8HR	4.92	92443.1	91417.4	1025.7	-0.0	-0.00
100YR-8HR	4.94	92887.8	91863.0	1024.9	-0.0	-0.00
100YR-8HR	4.95	93109.9	92085.3	1024.6	-0.0	-0.00
100YR-8HR	4.97	93553.5	92529.2	1024.4	-0.0	-0.00
100YR-8HR	4.98	93775.2	92750.8	1024.4	-0.0	-0.00
100YR-8HR	5.01	94218.2	93193.7	1024.5	-0.0	-0.00
100YR-8HR	5.03	94713.6	93690.9	1022.7	-0.0	-0.00
100YR-8HR	5.04	94931.3	93910.6	1020.7	-0.0	-0.00
100YR-8HR	5.06	95241.2	94224.6	1016.7	-0.0	-0.00
100YR-8HR	5.07	95543.4	94533.1	1010.4	-0.0	-0.00
100YR-8HR	5.09	95828.3	94827.1	1001.1	-0.0	-0.00
100YR-8HR	5.10	96125.5	95137.0	988.5	-0.0	-0.00
100YR-8HR	5.12	96423.1	95449.8	973.3	-0.0	-0.00
100YR-8HR	5.14	96708.0	95751.1	956.9	-0.0	-0.00
100YR-8HR	5.15	96981.1	96041.0	940.1	-0.0	-0.00
100YR-8HR	5.17	97243.2	96319.8	923.4	-0.0	-0.00
100YR-8HR	5.19	97495.2	96588.0	907.3	-0.0	-0.00
100YR-8HR	5.20	97738.0	96846.2	891.8	-0.0	-0.00
100YR-8HR	5.22	97972.6	97095.4	877.3	-0.0	-0.00
100YR-8HR	5.24	98199.9	97336.1	863.8	-0.0	-0.00
100YR-8HR	5.25	98384.2	97530.9	853.2	-0.0	-0.00
100YR-8HR	5.27	98599.4	97758.0	841.3	-0.0	-0.00
100YR-8HR	5.28	98808.6	97978.4	830.2	-0.0	-0.00
100YR-8HR	5.30	99020.8	98201.5	819.4	-0.0	-0.00
100YR-8HR	5.32	99227.6	98418.3	809.3	-0.0	-0.00
100YR-8HR	5.34	99429.2	98629.2	800.0	-0.0	-0.00
100YR-8HR	5.35	99587.1	98794.1	793.0	-0.0	-0.00
100YR-8HR	5.37	99780.6	98995.7	784.9	-0.0	-0.00
100YR-8HR	5.38	99970.0	99192.6	777.3	0.0	0.00
100YR-8HR	5.40	100155.5	99385.2	770.4	0.0	0.00
100YR-8HR	5.42	100349.0	99585.4	763.6	0.0	0.00
100YR-8HR	5.44	100516.8	99758.6	758.1	0.0	0.00
100YR-8HR	5.45	100681.9	99928.9	753.0	0.0	0.00
100YR-8HR	5.47	100844.6	100096.4	748.2	0.0	0.00
100YR-8HR	5.49	101031.3	100288.4	742.9	0.0	0.00
100YR-8HR	5.50	101162.8	100423.5	739.3	0.0	0.00
100YR-8HR	5.52	101357.1	100622.9	734.2	0.0	0.00
100YR-8HR	5.54	101484.8	100753.9	731.0	0.0	0.00
100YR-8HR	5.55	101611.1	100883.2	727.9	0.0	0.00
100YR-8HR	5.57	101767.1	101042.9	724.2	0.0	0.00
100YR-8HR	5.58	101921.1	101200.3	720.7	0.0	0.00
100YR-8HR	5.60	102073.1	101355.7	717.4	0.0	0.00
100YR-8HR	5.62	102223.3	101509.0	714.4	0.0	0.00
100YR-8HR	5.64	102371.9	101660.4	711.5	0.0	0.00
100YR-8HR	5.66	102537.1	101828.6	708.4	0.0	0.00
100YR-8HR	5.68	102718.4	102013.1	705.3	0.0	0.00
100YR-8HR	5.69	102808.3	102104.4	703.9	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-8HR	5.71	102986.5	102285.3	701.2	0.0	0.00
100YR-8HR	5.72	103074.9	102375.0	700.0	0.0	0.00
100YR-8HR	5.74	103250.5	102552.8	697.7	0.0	0.00
100YR-8HR	5.75	103337.7	102641.1	696.7	0.0	0.00
100YR-8HR	5.78	103532.7	102838.1	694.6	0.0	0.00
100YR-8HR	5.79	103640.4	102946.8	693.6	0.0	0.00
100YR-8HR	5.80	103747.7	103054.9	692.7	0.0	0.00
100YR-8HR	5.83	103961.0	103269.8	691.2	0.0	0.00
100YR-8HR	5.84	104067.2	103376.6	690.6	0.0	0.00
100YR-8HR	5.86	104173.0	103483.0	690.0	0.0	0.00
100YR-8HR	5.87	104278.6	103589.0	689.5	0.0	0.00
100YR-8HR	5.90	104488.9	103800.2	688.7	0.0	0.00
100YR-8HR	5.91	104593.8	103905.4	688.4	0.0	0.00
100YR-8HR	5.93	104724.6	104036.5	688.1	0.0	0.00
100YR-8HR	5.94	104855.1	104167.3	687.9	0.0	0.00
100YR-8HR	5.96	104985.5	104297.7	687.8	0.0	0.00
100YR-8HR	5.98	105115.7	104428.0	687.7	0.0	0.00
100YR-8HR	5.99	105245.8	104558.1	687.8	0.0	0.00
100YR-8HR	6.01	105375.8	104688.0	687.8	0.0	0.00
100YR-8HR	6.03	105505.3	104817.7	687.6	0.0	0.00
100YR-8HR	6.11	106143.0	105458.1	684.8	0.0	0.00
100YR-8HR	6.19	106755.0	106076.5	678.6	0.0	0.00
100YR-8HR	6.28	107345.1	106671.4	673.7	0.0	0.00
100YR-8HR	6.36	107920.6	107249.8	670.8	0.0	0.00
100YR-8HR	6.44	108486.3	107816.8	669.5	0.0	0.00
100YR-8HR	6.53	109045.0	108375.9	669.2	0.0	0.00
100YR-8HR	6.61	109598.3	108928.9	669.4	0.0	0.00
100YR-8HR	6.69	110147.5	109477.4	670.1	0.0	0.00
100YR-8HR	6.78	110693.6	110022.4	671.2	0.0	0.00
100YR-8HR	6.86	111237.9	110565.2	672.6	0.0	0.00
100YR-8HR	6.94	111781.1	111106.7	674.4	0.0	0.00
100YR-8HR	7.03	112322.2	111647.1	675.1	0.0	0.00
100YR-8HR	7.11	112838.9	112171.5	667.4	0.0	0.00
100YR-8HR	7.19	113304.3	112652.2	652.1	0.0	0.00
100YR-8HR	7.28	113725.6	113086.2	639.4	0.0	0.00
100YR-8HR	7.36	114117.7	113487.1	630.6	0.0	0.00
100YR-8HR	7.44	114490.1	113865.3	624.7	0.0	0.00
100YR-8HR	7.53	114848.4	114227.7	620.7	0.0	0.00
100YR-8HR	7.61	115195.8	114578.0	617.8	0.0	0.00
100YR-8HR	7.69	115534.8	114919.0	615.8	0.0	0.00
100YR-8HR	7.78	115867.7	115253.2	614.6	0.0	0.00
100YR-8HR	7.86	116196.9	115582.8	614.1	0.0	0.00
100YR-8HR	7.94	116523.8	115909.7	614.1	0.0	0.00
100YR-8HR	8.03	116847.3	116235.3	612.1	0.0	0.00
100YR-8HR	8.27	117477.1	116945.9	531.2	0.0	0.00
100YR-8HR	8.52	117555.6	117105.6	449.9	0.0	0.00
100YR-8HR	8.77	117555.6	117138.0	417.6	0.0	0.00
100YR-8HR	9.03	117555.6	117170.8	384.8	0.0	0.00
100YR-8HR	9.28	117555.6	117202.4	353.2	0.0	0.00
100YR-8HR	9.53	117555.6	117234.0	321.6	0.0	0.00
100YR-8HR	9.78	117555.6	117265.6	290.0	0.0	0.00
100YR-8HR	10.03	117555.6	117297.2	258.4	0.0	0.00
100YR-8HR	10.28	117555.6	117328.8	226.8	0.0	0.00
100YR-8HR	10.53	117555.6	117360.4	195.2	0.0	0.00
100YR-8HR	10.78	117555.6	117392.0	163.6	0.0	0.00
100YR-8HR	11.03	117555.6	117423.6	132.0	0.0	0.00
100YR-8HR	11.28	117555.6	117455.2	100.4	0.0	0.00
100YR-8HR	11.53	117555.6	117486.8	68.8	0.0	0.00
100YR-8HR	11.78	117555.6	117518.4	37.2	0.0	0.00
100YR-8HR	12.03	117555.6	117549.4	6.2	0.0	0.00
100YR-8HR	12.28	117555.6	117555.2	0.4	0.0	0.00
100YR-8HR	12.53	117555.6	117555.5	0.0	0.0	0.00
100YR-8HR	12.78	117555.6	117555.6	0.0	0.0	0.00
100YR-8HR	13.03	117555.6	117555.6	0.0	0.0	0.00
100YR-8HR	13.28	117555.6	117555.6	0.0	0.0	0.00
100YR-8HR	13.53	117555.6	117555.6	0.0	0.0	0.03
100YR-8HR	13.78	117555.6	117555.6	0.0	0.0	0.45
100YR-8HR	14.03	117555.6	117555.6	0.0	0.0	5.13
100YR-8HR	14.28	117555.6	117555.6	0.0	0.0	37.59
100YR-8HR	14.53	117555.6	117555.6	0.0	0.0	89.53
100YR-8HR	14.78	117555.6	117555.6	0.0	0.0	99.47
100YR-8HR	15.03	117555.6	117555.6	-0.0	0.0	100.30

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-8HR	15.28	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	15.53	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	15.78	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	16.03	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	16.28	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	16.53	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	16.78	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	17.03	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	17.28	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	17.53	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	17.78	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	18.03	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	18.28	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	18.53	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	18.78	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	19.03	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	19.28	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	19.53	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	19.78	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	20.03	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	20.28	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	20.53	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	20.78	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	21.03	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	21.28	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	21.53	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	21.78	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	22.03	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	22.28	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	22.53	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	22.78	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	23.03	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	23.28	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	23.53	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	23.78	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	24.03	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	24.28	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	24.53	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	24.78	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	25.03	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	25.28	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	25.53	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	25.78	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	26.03	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	26.28	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	26.53	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	26.78	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	27.03	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	27.28	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	27.53	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	27.78	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	28.03	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	28.28	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	28.53	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	28.78	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	29.03	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	29.28	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	29.53	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	29.78	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	30.03	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	30.28	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	30.53	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	30.78	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	31.03	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	31.28	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	31.53	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	31.78	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	32.03	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	32.28	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	32.53	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	32.78	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	33.03	117555.6	117555.6	-0.0	0.0	100.33

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-8HR	33.28	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	33.53	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	33.78	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	34.03	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	34.28	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	34.53	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	34.78	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	35.03	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	35.28	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	35.53	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	35.78	117555.6	117555.6	-0.0	0.0	100.33
100YR-8HR	36.00	117555.6	117555.6	-0.0	0.0	100.33

Basin 19_FRONTAGE

SUMMARY OF MAX STAGE - PROPOSED CONDITIONS - BASIN 19_FRONTAGE

NODE	STORM EVENT						WARNING STAGE (FT)
	100YR-1HR	100YR-24HR	100YR-8HR	10YR-1HR	10YR-24HR	10YR-8HR	
GWT_19	1.65	2.7	2.7	1.65	2.7	2.7	99
S19FE-1	3.06	2.77	3.44	2.63	2.72	3.15	6.32
S19FE-2	4.75	3.02	4.15	3.4	2.81	3.65	6.31
S19FE-3	3.22	2.82	3.67	2.66	2.75	3.29	4.9
S19FE-3A	3.22	2.83	3.67	2.67	2.76	3.29	5.23
S19FE-3B	3.22	2.83	3.67	2.66	2.76	3.29	5.23
S19FE-4	3.41	2.8	3.6	2.9	2.74	3.29	6.72
S19FE-5	2.66	2.73	3.18	2.6	2.7	2.93	6.24
S19FE-6	4.42	3.15	4.39	3.09	2.85	3.71	6.3
S19FW-1	4.17	2.94	3.98	3.16	2.79	3.53	6.47
S19FW-17	4.46	2.95	4	3.33	2.79	3.56	7.74
S19FW-2	4.16	2.94	3.98	3.16	2.79	3.53	6.47
S19FW-3	4.17	2.94	3.98	3.16	2.79	3.53	6.4
S19FW-4	4.16	2.94	3.98	3.16	2.79	3.53	6.08
S19FW-5	4.16	2.94	3.98	3.16	2.79	3.53	6.24
S19FW-5A	4.16	2.94	3.98	3.16	2.79	3.53	6.31
S19FW-6	4.17	2.94	3.98	3.16	2.79	3.53	6.27
S19FW-7	4.56	2.95	4.03	3.37	2.79	3.57	5.37
S19FW-8	4.16	2.93	3.97	3.16	2.78	3.52	6.21

CN CALCULATIONS -POST-DEVELOPMENT CONDITIONS - FRONTAGE ROAD - BASIN19

SUB-BASIN	TOTAL AREA (AC)	PERVIOUS AREA (AC)	PERVIOUS CN	IMPERVIOUS AREA (AC)	IMPERVIOUS CN	COMPOSITE CN
19FE-1	0.5	0.07	61	0.43	96	91.1
19FE-2	0.26	0.03	61	0.23	96	92.0
19FE-3A	0.16	0.08	61	0.08	96	78.5
19FE-3	0.19	0.07	61	0.12	96	83.1
19FE-3B	0.08	0	61	0.08	96	96.0
19FE-4	0.12	0	61	0.12	96	96.0
19FE-5	0.07	0.01	61	0.06	96	91.0
19FE-6	0.34	0.17	61	0.17	96	78.5
19FW-1	0.18	0.01	61	0.17	96	94.1
19FW-2	0.08	0.01	61	0.07	96	91.6
19FW-3	0.16	0.01	61	0.15	96	93.8
19FW-4	0.14	0.01	61	0.13	96	93.5
19FW-5	0.1	0.01	61	0.09	96	92.5
19FW-5A	0.06	0.01	61	0.05	96	90.2
19FW-6	0.2	0.02	61	0.18	96	92.5
19FW-7	0.46	0.02	61	0.44	96	94.5
19FW-8	1.15	0.25	61	0.9	96	88.4
TOTAL AREA	4.25	0.78		3.47		

Average Hydraulic Conductivity

Basin B-19		
Percolation Test	P-3A	P-4A
Average Flow to 10 ft. depth (gpm)	0.10	19.00
Depth to Water Table (ft)	8.00	6.00
Head Maintained (ft)	8.00	6.00
Borehole Diameter (ft)	0.500	0.500
Borehole Depth (ft)	10.00	10.00
Du (ft)	8.00	6.00
Average Flow (cfs)	0.0002	0.0423
Ds (ft)	2.00	4.00
Hydraulic Conductivity K (cfs/ft2-ft head)	2.89E-06	6.30E-04
Average Hydraulic Conductivity K	3.17E-04	

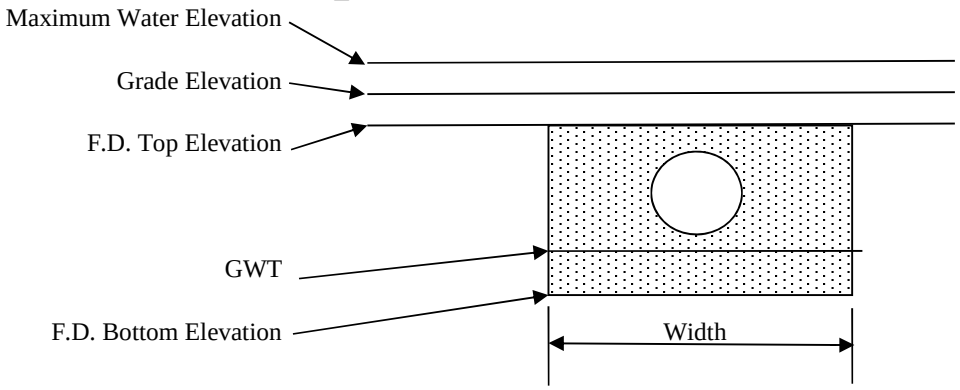
Basin B-19		
Percolation Test	P-3B	P-4B
Average Flow to 15 ft. depth (gpm)	38.00	40.00
Depth to Water Table (ft)	8.00	6.00
Head Maintained (ft)	8.00	6.00
Borehole Diameter (ft)	0.267	0.267
Borehole Depth (ft)	5.00	5.00
Du (ft)	8.00	6.00
Average Flow (cfs)	0.0847	0.0891
Ds (ft)	7.00	9.00
Hydraulic Conductivity K (cfs/ft2-ft head)	2.53E-03	3.55E-03
Average Hydraulic Conductivity K	3.04E-03	
Total Average Hydraulic Conductivity K	**1.22E-03**	

Made by: _____ _____

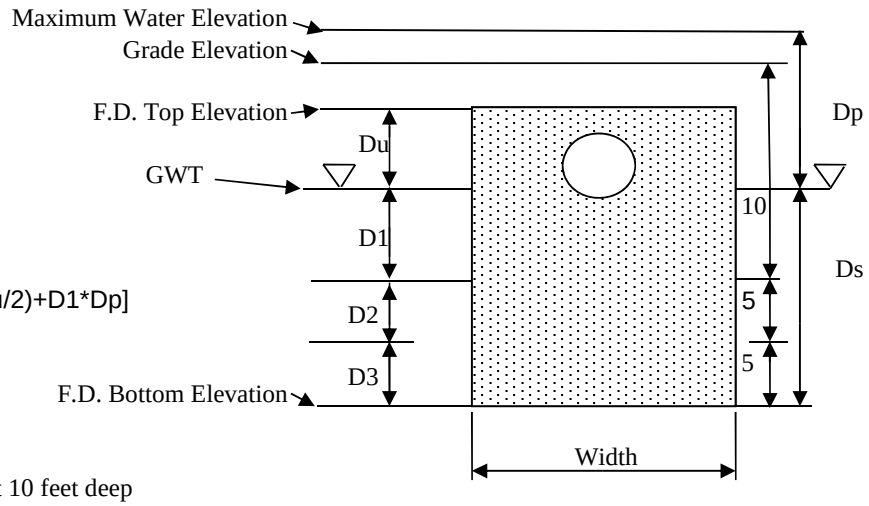
Checked by: _____ _____

Determination of Rating Curve

Proposed Exfiltration Trench: E_OPT-19



Maximum Water Elevation =	**5.45**	ft.NAVD	(recom. 1' above of grade elev.)
Lowest Proposed Grade Elevation =	**1.65**	ft.NAVD	
F.D.Top Elevation =	**0.50**	ft.NAVD	
Ground Water Table =	**1.65**	ft.NAVD	
F.D. Bottom Elevation =	**-13.35**	ft.NAVD	
Width =	**4.00**	feet.	
Pipe Diameter =	**24**	inches	
Length of Trench =	**1.00**	feet.	
Hydraulic Conductivity K10 =	**1.22E-03**	cfs/ft^2-ft head	(Ave. P-3A,P-4A)
Hydraulic Conductivity K15 =	**1.22E-03**	cfs/ft^2-ft head	(Ave. P-3A,P-4A)
Hydraulic Conductivity K20 =	**0.00E+00**	cfs/ft^2-ft head	



E10 = 2*K10[Du(Dp-Du/2)+D1*Dp]
E15 = 2*K15*D2*Dp
E20 = 2*K20*D3*Dp
Et = E10+E15+E20

E10 = Exfiltration Rate at 10 feet deep
E15 = Exfiltration Rate at 15 feet deep
E20 = Exfiltration Rate at 20 feet deep
Et = Total Exfiltration Rate

Made by: _____ _____

Checked by: _____ _____

Determination of Rating Curve

Proposed Exfiltration Trench: E_OPT-19

Exfiltration Rate (Et)

Headwater	***Water Table Elev. (ft)***	
	1.65	***2.65***
(ft)	(cfs/ft)	(cfs/ft)
1.65	0.000	0.000
2.65	0.032	0.000
3.45	0.059	0.021
5.45	0.127	0.089

Rating Curve (Q)

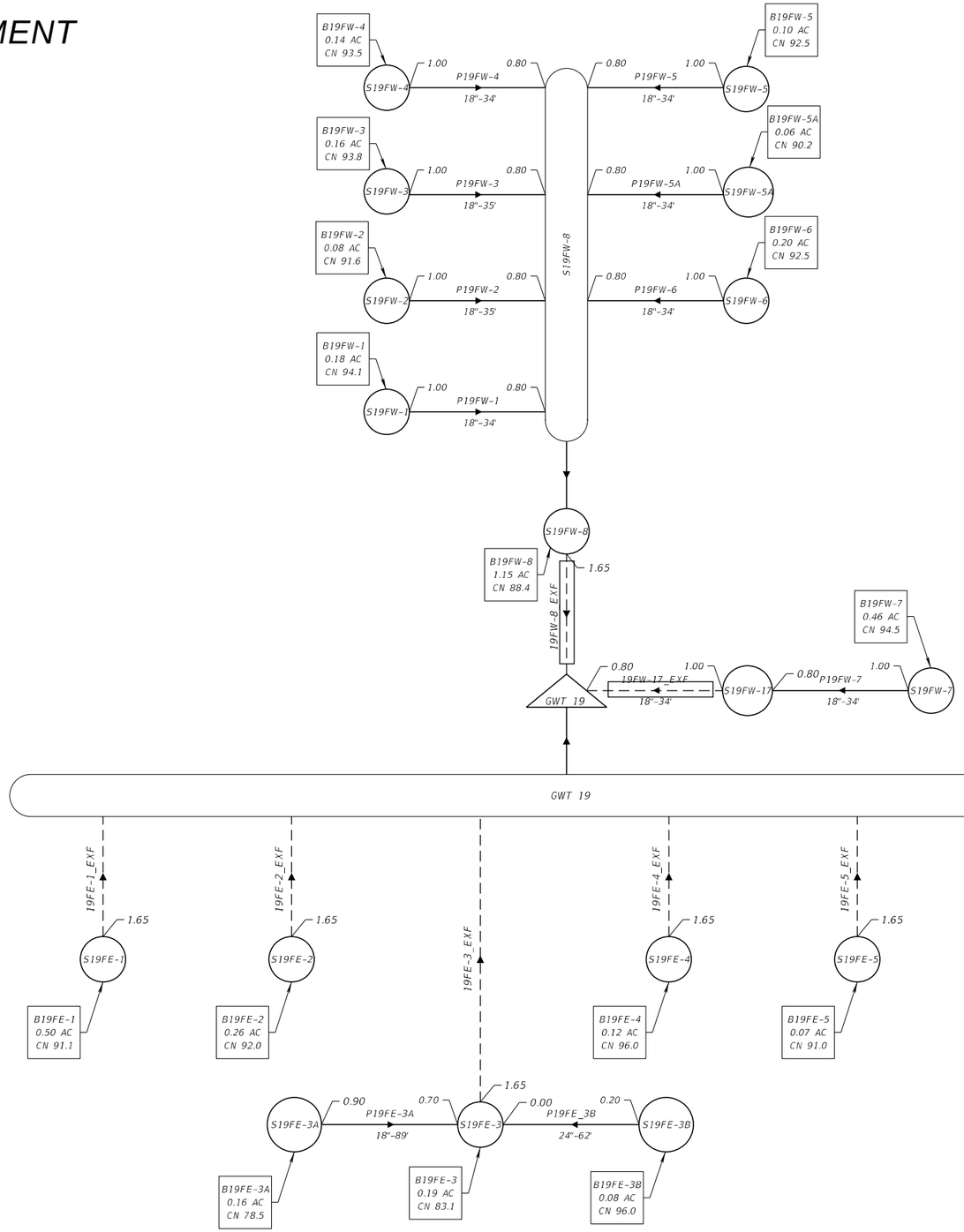
Headwater	***Water Table Elev. (ft)***	
	1.65	***2.65***
(ft)	(cfs)	(cfs)
1.65	0.00	0.00
2.65	0.03	0.00
3.45	0.06	0.02
5.45	0.13	0.09

Max. rate allowed by FDOT is 0.1 cfs/L.F. of French Drain

Rating Curve Adjusted (Q)

Tailwater (ft)	Headwater (ft)	Discharge (cfs)
1.65	1.65	0.00
1.65	2.65	0.03
1.65	3.45	0.06
1.65	5.45	0.10
2.65	2.65	0.00
2.65	3.45	0.02
2.65	5.45	0.09

POST-DEVELOPMENT CONDITIONS



LEGEND

B18-1 0.12 AC CN 96	CONTRIBUTING BASIN BASIN NAME BASIN AREA CURVE NUMBER
S18-2	NODE NAME
58ST_CANAL	BOUNDARY NODE WITH CONSTANT TAILWATER
GWT 6-12	BOUNDARY NODE WITH VARIABLE TAILWATER
S18-3_S18-4 18"-42' 21.50 21.40	PIPE LINK WITH (QUANTITY)SIZE-LENGTH INVERT ELEVATIONS
WEX18_14	WEIR LINK
AREA 1 EXF	RATING CURVE LINK

PROPOSED DESIGN

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 826	MIAMI-DADE	447165-1-52-01 441830-1-52-01 441831-1-52-01

NODAL DIAGRAM BASIN 19

SHEET NO.

AMATHURA 11/12/2020 6:03:12 PM PW:\5560\10001209\10220208\6.0_CAD_BIM\6.2_WIP\44716515201\drainage\DRDTRD111.dgn

SR-826 / PALMETTO EXPRESSWAY IMPROVEMENTS - BASIN 19 - FRONTAGE ROAD
POST-DEVELOPMENT CONDITIONS
NODE MAX REPORT

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
GWT_19	Basin 19	100YR-1HR	0.00	1.65	99.00	0.0000	0	0.71	26.83	0.00	0.00
S19FE-1	Basin 19	100YR-1HR	0.67	3.06	6.32	-0.0019	113	0.65	3.42	0.67	3.41
S19FE-2	Basin 19	100YR-1HR	0.72	4.75	6.31	-0.0024	113	0.65	1.81	0.72	1.72
S19FE-3	Basin 19	100YR-1HR	0.74	3.22	4.90	0.0046	119	0.98	2.44	0.74	2.36
S19FE-3A	Basin 19	100YR-1HR	0.73	3.22	5.23	0.0014	116	0.67	0.79	0.74	0.77
S19FE-3B	Basin 19	100YR-1HR	0.73	3.22	5.23	-0.0049	116	0.65	0.60	0.99	1.27
S19FE-4	Basin 19	100YR-1HR	0.69	3.41	6.72	0.0011	113	0.65	0.90	0.69	0.88
S19FE-5	Basin 19	100YR-1HR	0.72	2.66	6.24	-0.0040	113	0.65	0.48	0.72	0.45
S19FE-6	Basin 19	100YR-1HR	0.76	4.42	6.30	-0.0023	113	0.67	1.68	0.76	1.59
S19FW-1	Basin 19	100YR-1HR	0.71	4.17	6.47	-0.0019	114	0.65	1.31	0.66	1.35
S19FW-17	Basin 19	100YR-1HR	0.71	4.46	7.74	-0.0022	114	0.67	3.25	0.71	3.20
S19FW-2	Basin 19	100YR-1HR	0.71	4.16	6.47	0.0027	114	0.65	0.55	0.63	0.89
S19FW-3	Basin 19	100YR-1HR	0.71	4.17	6.40	-0.0019	114	0.65	1.16	0.66	1.22
S19FW-4	Basin 19	100YR-1HR	0.71	4.16	6.08	0.0019	114	0.65	1.01	0.66	1.10
S19FW-5	Basin 19	100YR-1HR	0.71	4.16	6.24	0.0021	114	0.65	0.70	0.63	0.90
S19FW-5A	Basin 19	100YR-1HR	0.71	4.16	6.31	0.0028	114	0.65	0.40	0.63	0.85
S19FW-6	Basin 19	100YR-1HR	0.71	4.17	6.27	-0.0019	114	0.65	1.41	0.66	1.44
S19FW-7	Basin 19	100YR-1HR	0.71	4.56	5.37	-0.0023	114	0.65	3.37	0.67	3.25
S19FW-8	Basin 19	100YR-1HR	0.71	4.16	6.21	0.0056	122	0.66	15.04	0.71	13.35
GWT_19	Basin 19	100YR-24HR	24.00	2.70	99.00	0.3000	0	12.02	5.52	0.00	0.00
S19FE-1	Basin 19	100YR-24HR	19.01	2.77	6.32	0.0042	113	12.00	0.67	12.01	0.66
S19FE-2	Basin 19	100YR-24HR	12.04	3.02	6.31	0.0016	113	12.00	0.35	12.02	0.34
S19FE-3	Basin 19	100YR-24HR	19.04	2.82	4.90	0.0018	119	34.91	1.54	12.03	0.54
S19FE-3A	Basin 19	100YR-24HR	19.04	2.83	5.23	0.0011	116	12.00	0.20	8.79	0.45
S19FE-3B	Basin 19	100YR-24HR	19.04	2.83	5.23	0.0016	116	11.98	0.11	0.03	1.16
S19FE-4	Basin 19	100YR-24HR	19.04	2.80	6.72	0.0013	113	11.98	0.16	12.03	0.16
S19FE-5	Basin 19	100YR-24HR	19.08	2.73	6.24	-0.0027	113	12.00	0.09	0.00	0.28
S19FE-6	Basin 19	100YR-24HR	12.04	3.15	6.30	0.0016	113	12.00	0.42	12.02	0.42
S19FW-1	Basin 19	100YR-24HR	12.04	2.94	6.47	0.0026	114	11.98	0.24	8.91	1.23
S19FW-17	Basin 19	100YR-24HR	12.04	2.95	7.74	0.0015	114	12.00	0.62	12.02	0.61
S19FW-2	Basin 19	100YR-24HR	12.04	2.94	6.47	0.0025	114	12.00	0.11	8.91	1.15
S19FW-3	Basin 19	100YR-24HR	12.04	2.94	6.40	0.0025	114	12.00	0.21	8.91	1.21
S19FW-4	Basin 19	100YR-24HR	12.04	2.94	6.08	0.0026	114	12.00	0.19	8.91	1.20
S19FW-5	Basin 19	100YR-24HR	12.04	2.94	6.24	0.0026	114	12.00	0.13	8.91	1.17
S19FW-5A	Basin 19	100YR-24HR	12.04	2.94	6.31	0.0026	114	12.00	0.08	8.91	1.14
S19FW-6	Basin 19	100YR-24HR	12.04	2.94	6.27	0.0026	114	12.00	0.27	8.91	1.24
S19FW-7	Basin 19	100YR-24HR	12.04	2.95	5.37	0.0014	114	11.98	0.62	12.00	0.62
S19FW-8	Basin 19	100YR-24HR	12.04	2.93	6.21	0.0047	122	8.91	9.23	12.02	2.70
GWT_19	Basin 19	100YR-8HR	8.00	2.70	99.00	0.3000	0	4.02	16.39	0.00	0.00
S19FE-1	Basin 19	100YR-8HR	4.02	3.44	6.32	0.0042	113	4.00	1.98	4.01	1.97
S19FE-2	Basin 19	100YR-8HR	4.03	4.15	6.31	0.0016	113	4.00	1.04	4.02	1.02
S19FE-3	Basin 19	100YR-8HR	4.05	3.67	4.90	0.0018	119	4.02	2.34	4.04	1.56
S19FE-3A	Basin 19	100YR-8HR	4.05	3.67	5.23	0.0011	116	4.00	0.57	4.03	0.64
S19FE-3B	Basin 19	100YR-8HR	4.05	3.67	5.23	-0.0016	116	4.00	0.32	0.03	1.16
S19FE-4	Basin 19	100YR-8HR	4.04	3.60	6.72	0.0013	113	4.00	0.49	4.03	0.48
S19FE-5	Basin 19	100YR-8HR	4.06	3.18	6.24	-0.0027	113	4.00	0.28	0.00	0.28
S19FE-6	Basin 19	100YR-8HR	4.04	4.39	6.30	0.0016	113	4.00	1.21	4.03	1.19
S19FW-1	Basin 19	100YR-8HR	4.03	3.98	6.47	0.0025	114	4.00	0.72	2.34	1.28
S19FW-17	Basin 19	100YR-8HR	4.03	4.00	7.74	0.0015	114	4.00	1.84	4.02	1.83
S19FW-2	Basin 19	100YR-8HR	4.03	3.98	6.47	0.0025	114	4.00	0.32	2.34	1.16
S19FW-3	Basin 19	100YR-8HR	4.03	3.98	6.40	0.0025	114	4.00	0.64	2.34	1.25

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S19FW-4	Basin 19	100YR-8HR	4.03	3.98	6.08	0.0025	114	4.00	0.56	2.34	1.23
S19FW-5	Basin 19	100YR-8HR	4.03	3.98	6.24	0.0025	114	4.00	0.40	2.34	1.19
S19FW-5A	Basin 19	100YR-8HR	4.03	3.98	6.31	0.0025	114	4.00	0.24	2.34	1.14
S19FW-6	Basin 19	100YR-8HR	4.03	3.98	6.27	0.0025	114	4.00	0.80	2.34	1.28
S19FW-7	Basin 19	100YR-8HR	4.03	4.03	5.37	0.0014	114	4.00	1.85	4.00	1.84
S19FW-8	Basin 19	100YR-8HR	4.03	3.97	6.21	0.0052	122	3.59	11.20	4.02	8.07
GWT_19	Basin 19	10YR-1HR	0.00	1.65	99.00	0.0000	0	0.70	17.53	0.00	0.00
S19FE-1	Basin 19	10YR-1HR	0.67	2.63	6.32	-0.0015	113	0.67	2.22	0.67	2.21
S19FE-2	Basin 19	10YR-1HR	0.70	3.40	6.31	0.0014	113	0.67	1.19	0.70	1.16
S19FE-3	Basin 19	10YR-1HR	0.76	2.66	4.90	-0.0038	119	0.61	2.30	0.76	1.40
S19FE-3A	Basin 19	10YR-1HR	0.76	2.67	5.23	0.0014	116	0.68	0.45	0.61	0.58
S19FE-3B	Basin 19	10YR-1HR	0.76	2.66	5.23	0.0043	116	0.65	0.41	0.11	1.66
S19FE-4	Basin 19	10YR-1HR	0.70	2.90	6.72	0.0010	113	0.65	0.61	0.70	0.59
S19FE-5	Basin 19	10YR-1HR	0.00	2.60	6.24	-0.0040	113	0.67	0.31	0.00	0.43
S19FE-6	Basin 19	10YR-1HR	0.75	3.09	6.30	-0.0011	113	0.68	0.95	0.75	0.93
S19FW-1	Basin 19	10YR-1HR	0.70	3.16	6.47	0.0014	114	0.65	0.87	0.70	0.85
S19FW-17	Basin 19	10YR-1HR	0.69	3.33	7.74	0.0014	114	0.67	2.23	0.69	2.21
S19FW-2	Basin 19	10YR-1HR	0.70	3.16	6.47	0.0021	114	0.67	0.36	0.73	0.37
S19FW-3	Basin 19	10YR-1HR	0.70	3.16	6.40	0.0013	114	0.65	0.77	0.71	0.75
S19FW-4	Basin 19	10YR-1HR	0.70	3.16	6.08	0.0015	114	0.65	0.67	0.71	0.65
S19FW-5	Basin 19	10YR-1HR	0.70	3.16	6.24	0.0020	114	0.65	0.46	0.73	0.47
S19FW-5A	Basin 19	10YR-1HR	0.70	3.16	6.31	0.0021	114	0.67	0.26	0.77	0.28
S19FW-6	Basin 19	10YR-1HR	0.70	3.16	6.27	0.0014	114	0.65	0.93	0.70	0.90
S19FW-7	Basin 19	10YR-1HR	0.69	3.37	5.37	0.0016	114	0.65	2.26	0.67	2.23
S19FW-8	Basin 19	10YR-1HR	0.70	3.16	6.21	-0.0039	122	0.69	8.81	0.70	8.83
GWT_19	Basin 19	10YR-24HR	24.00	2.70	99.00	0.3000	0	12.02	3.53	0.00	0.00
S19FE-1	Basin 19	10YR-24HR	19.02	2.72	6.32	0.0041	113	12.00	0.43	12.01	0.43
S19FE-2	Basin 19	10YR-24HR	19.03	2.81	6.31	0.0015	113	12.00	0.23	12.02	0.22
S19FE-3	Basin 19	10YR-24HR	19.06	2.75	4.90	0.0017	119	34.91	1.54	12.04	0.33
S19FE-3A	Basin 19	10YR-24HR	19.06	2.76	5.23	0.0010	116	12.00	0.12	10.22	0.43
S19FE-3B	Basin 19	10YR-24HR	19.06	2.76	5.23	0.0015	116	11.98	0.07	1.65	1.14
S19FE-4	Basin 19	10YR-24HR	19.06	2.74	6.72	0.0012	113	11.98	0.11	12.04	0.10
S19FE-5	Basin 19	10YR-24HR	24.00	2.70	6.24	-0.0026	113	12.00	0.06	0.00	0.28
S19FE-6	Basin 19	10YR-24HR	19.02	2.85	6.30	0.0015	113	12.00	0.25	12.03	0.25
S19FW-1	Basin 19	10YR-24HR	19.03	2.79	6.47	0.0023	114	12.00	0.16	10.34	1.21
S19FW-17	Basin 19	10YR-24HR	19.03	2.79	7.74	0.0014	114	12.00	0.40	12.02	0.40
S19FW-2	Basin 19	10YR-24HR	19.03	2.79	6.47	0.0023	114	12.00	0.07	10.34	1.14
S19FW-3	Basin 19	10YR-24HR	19.03	2.79	6.40	0.0023	114	12.00	0.14	10.34	1.19
S19FW-4	Basin 19	10YR-24HR	19.03	2.79	6.08	0.0023	114	12.00	0.12	10.34	1.19
S19FW-5	Basin 19	10YR-24HR	19.03	2.79	6.24	0.0023	114	12.00	0.09	10.34	1.16
S19FW-5A	Basin 19	10YR-24HR	19.03	2.79	6.31	0.0023	114	12.00	0.05	10.34	1.14
S19FW-6	Basin 19	10YR-24HR	19.03	2.79	6.27	0.0023	114	12.00	0.17	10.34	1.22
S19FW-7	Basin 19	10YR-24HR	19.03	2.79	5.37	0.0013	114	12.00	0.41	12.00	0.40
S19FW-8	Basin 19	10YR-24HR	19.03	2.78	6.21	-0.0045	122	10.34	8.94	12.02	1.73
GWT_19	Basin 19	10YR-8HR	8.00	2.70	99.00	0.3000	0	4.03	10.47	0.00	0.00
S19FE-1	Basin 19	10YR-8HR	4.02	3.15	6.32	0.0041	113	4.00	1.29	4.01	1.28
S19FE-2	Basin 19	10YR-8HR	4.04	3.65	6.31	0.0015	113	4.00	0.68	4.03	0.67
S19FE-3	Basin 19	10YR-8HR	4.06	3.29	4.90	0.0017	119	4.02	1.66	4.05	0.96
S19FE-3A	Basin 19	10YR-8HR	4.06	3.29	5.23	0.0010	116	4.00	0.34	3.10	0.43
S19FE-3B	Basin 19	10YR-8HR	4.06	3.29	5.23	0.0015	116	4.00	0.21	11.69	1.14
S19FE-4	Basin 19	10YR-8HR	4.05	3.29	6.72	0.0012	113	4.00	0.32	4.04	0.31

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
S19FE-5	Basin 19	10YR-8HR	4.07	2.93	6.24	-0.0026	113	4.00	0.18	0.00	0.28
S19FE-6	Basin 19	10YR-8HR	4.05	3.71	6.30	0.0015	113	4.00	0.72	4.04	0.71
S19FW-1	Basin 19	10YR-8HR	4.04	3.53	6.47	0.0023	114	4.00	0.48	3.05	1.24
S19FW-17	Basin 19	10YR-8HR	4.04	3.56	7.74	0.0014	114	4.00	1.21	4.03	1.20
S19FW-2	Basin 19	10YR-8HR	4.04	3.53	6.47	0.0023	114	4.00	0.21	3.05	1.14
S19FW-3	Basin 19	10YR-8HR	4.04	3.53	6.40	0.0023	114	4.00	0.42	3.05	1.21
S19FW-4	Basin 19	10YR-8HR	4.04	3.53	6.08	0.0023	114	4.00	0.37	3.05	1.20
S19FW-5	Basin 19	10YR-8HR	4.04	3.53	6.24	0.0023	114	4.00	0.26	3.05	1.17
S19FW-5A	Basin 19	10YR-8HR	4.04	3.53	6.31	0.0023	114	4.00	0.15	3.05	1.13
S19FW-6	Basin 19	10YR-8HR	4.04	3.53	6.27	0.0023	114	4.00	0.52	3.05	1.25
S19FW-7	Basin 19	10YR-8HR	4.04	3.57	5.37	0.0013	114	4.00	1.22	4.00	1.21
S19FW-8	Basin 19	10YR-8HR	4.04	3.52	6.21	-0.0045	122	4.00	9.57	4.03	5.18

==========
==== Basins ====
==========

Name: B19FE-1 Node: S19FE-1 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.500 Time Shift(hrs): 0.00
Curve Number: 91.10 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19FE-2 Node: S19FE-2 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.260 Time Shift(hrs): 0.00
Curve Number: 92.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19FE-3 Node: S19FE-3 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.190 Time Shift(hrs): 0.00
Curve Number: 83.10 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19FE-3A Node: S19FE-3A Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.160 Time Shift(hrs): 0.00
Curve Number: 78.50 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19FE-3B Node: S19FE-3B Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.080 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19FE-4 Node: S19FE-4 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00

Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.120 Time Shift(hrs): 0.00
Curve Number: 96.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19FE-5 Node: S19FE-5 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.070 Time Shift(hrs): 0.00
Curve Number: 91.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19FE-6 Node: S19FE-6 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.340 Time Shift(hrs): 0.00
Curve Number: 78.50 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19FW-1 Node: S19FW-1 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.180 Time Shift(hrs): 0.00
Curve Number: 94.10 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19FW-2 Node: S19FW-2 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.080 Time Shift(hrs): 0.00
Curve Number: 91.60 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19FW-3 Node: S19FW-3 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.160 Time Shift(hrs): 0.00
Curve Number: 93.80 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19FW-4 Node: S19FW-4 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.140 Time Shift(hrs): 0.00
Curve Number: 93.50 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19FW-5 Node: S19FW-5 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.100 Time Shift(hrs): 0.00
Curve Number: 92.50 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19FW-5A Node: S19FW-5A Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.060 Time Shift(hrs): 0.00
Curve Number: 90.20 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19FW-6 Node: S19FW-6 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.200 Time Shift(hrs): 0.00
Curve Number: 92.50 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19FW-7 Node: S19FW-7 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 0.460 Time Shift(hrs): 0.00
Curve Number: 94.50 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: B19FW-8 Node: S19FW-8 Status: Onsite
Group: Basin 19 Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh256 Peaking Factor: 256.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 1.150 Time Shift(hrs): 0.00
Curve Number: 88.40 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

==========
==== Nodes ==========
==========

Name: GWT_19 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 99.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	1.650
108.00	1.650

Name: S19FE-1 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 6.320
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
6.320	0.0004

Name: S19FE-2 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 6.310
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
6.310	0.0004

Name: S19FE-3 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 4.900
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
4.900	0.0004

Name: S19FE-3A Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 5.230
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
5.230	0.0004

Name: S19FE-3B Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 5.230
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
5.230	0.0004

Name: S19FE-4 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 6.720
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
6.720	0.0004

Name: S19FE-5 Base Flow(cfs): 0.000 Init Stage(ft): 2.600
Group: Basin 19 Warn Stage(ft): 6.240
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
6.240	0.0004

Name: S19FE-6 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 6.300
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
6.300	0.0004

Name: S19FW-1 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 6.470
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
6.470	0.0004

Name: S19FW-17 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 7.740
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
7.740	0.0004

Name: S19FW-2 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 6.470
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
6.470	0.0004

Name: S19FW-3 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 6.400

Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
6.400	0.0004

Name: S19FW-4 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 6.080
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
6.080	0.0004

Name: S19FW-5 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 6.240
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
6.240	0.0004

Name: S19FW-5A Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 6.310
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
6.310	0.0004

Name: S19FW-6 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 6.270
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
6.270	0.0004

Name: S19FW-7 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 5.370
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
5.370	0.0004

Name: S19FW-8 Base Flow(cfs): 0.000 Init Stage(ft): 1.650
Group: Basin 19 Warn Stage(ft): 6.210
Type: Stage/Area

Stage(ft)	Area(ac)
1.650	0.0004
6.210	0.0004

Operating Tables

Name: E_OPT-19 Group: Basin 19
Type: Rating Curve
Function: Family of Tailwater-Headwater-Discharge Relationships

Tailwater(ft)	Headwater(ft)	Discharge(cfs)
1.650	1.65	0.00
1.650	2.65	0.03
1.650	3.45	0.06
1.650	5.45	0.10
2.650	2.65	0.00
2.650	3.45	0.02
2.650	5.45	0.09

Pipes

Name: P19FE-3A From Node: S19FE-3A Length(ft): 89.00
Group: Basin 19 To Node: S19FE-3 Count: 1
Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.50
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dc
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	18.00	18.00
Rise(in):	18.00	18.00
Invert(ft):	0.900	0.700
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: P19FE-3B From Node: S19FE-3B Length(ft): 62.00
Group: Basin 19 To Node: S19FE-3 Count: 1
Friction Equation: Automatic
Solution Algorithm: Automatic
Flow: Both
Entrance Loss Coef: 0.50
Exit Loss Coef: 0.50
Bend Loss Coef: 0.00
Outlet Ctrl Spec: Use dc or tw
Inlet Ctrl Spec: Use dc
Stabilizer Option: None

	UPSTREAM	DOWNSTREAM
Geometry:	Circular	Circular
Span(in):	24.00	24.00
Rise(in):	24.00	24.00
Invert(ft):	0.200	0.000
Manning's N:	0.012000	0.012000
Top Clip(in):	0.000	0.000
Bot Clip(in):	0.000	0.000

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: P19FW-1	From Node: S19FW-1	Length(ft): 34.00	
Group: Basin 19	To Node: S19FW-8	Count: 1	
		Friction Equation: Automatic	
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.50
Invert(ft):	1.000	0.800	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: P19FW-2	From Node: S19FW-2	Length(ft): 35.00	
Group: Basin 19	To Node: S19FW-8	Count: 1	
		Friction Equation: Automatic	
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.50
Invert(ft):	1.000	0.800	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: P19FW-3	From Node: S19FW-3	Length(ft): 35.00	
Group: Basin 19	To Node: S19FW-8	Count: 1	
		Friction Equation: Automatic	
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both
Span(in):	18.00	18.00	Entrance Loss Coef: 0.50
Rise(in):	18.00	18.00	Exit Loss Coef: 0.50
Invert(ft):	1.000	0.800	Bend Loss Coef: 0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec: Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec: Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: P19FW-4	From Node: S19FW-4	Length(ft): 34.00	
Group: Basin 19	To Node: S19FW-8	Count: 1	
		Friction Equation: Automatic	
	UPSTREAM	DOWNSTREAM	Solution Algorithm: Automatic
Geometry:	Circular	Circular	Flow: Both

Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	0.50
Invert(ft):	1.000	0.800	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	P19FW-5	From Node: S19FW-5	Length(ft):	34.00
Group:	Basin 19	To Node: S19FW-8	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	0.50
Invert(ft):	1.000	0.800	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	P19FW-5A	From Node: S19FW-5A	Length(ft):	34.00
Group:	Basin 19	To Node: S19FW-8	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	0.50
Invert(ft):	1.000	0.800	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name:	P19FW-6	From Node: S19FW-6	Length(ft):	34.00
Group:	Basin 19	To Node: S19FW-8	Count:	1
			Friction Equation:	Automatic
	UPSTREAM	DOWNSTREAM	Solution Algorithm:	Automatic
Geometry:	Circular	Circular	Flow:	Both
Span(in):	18.00	18.00	Entrance Loss Coef:	0.50
Rise(in):	18.00	18.00	Exit Loss Coef:	0.50
Invert(ft):	1.000	0.800	Bend Loss Coef:	0.00
Manning's N:	0.012000	0.012000	Outlet Ctrl Spec:	Use dc or tw
Top Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dc
Bot Clip(in):	0.000	0.000	Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Name: P19FW-7 From Node: S19FW-7 Length(ft): 34.00
Group: Basin 19 To Node: S19FW-17 Count: 1
Friction Equation: Automatic

	UPSTREAM	DOWNSTREAM		
Geometry:	Circular	Circular	Solution Algorithm:	Automatic
Span(in):	18.00	18.00	Flow:	Both
Rise(in):	18.00	18.00	Entrance Loss Coef:	0.50
Invert(ft):	1.000	0.800	Exit Loss Coef:	0.50
Manning's N:	0.012000	0.012000	Bend Loss Coef:	0.00
Top Clip(in):	0.000	0.000	Outlet Ctrl Spec:	Use dc or tw
Bot Clip(in):	0.000	0.000	Inlet Ctrl Spec:	Use dc
			Stabilizer Option:	None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

==========
==== Rating Curves ====
==========

Name: 19FE-1_EXF From Node: S19FE-1 Count: 75
Group: Basin 19 To Node: GWT_19 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-19	1.650	1.650
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: 19FE-2_EXF From Node: S19FE-2 Count: 20
Group: Basin 19 To Node: GWT_19 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-19	1.650	1.650
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: 19FE-3_EXF From Node: S19FE-3 Count: 46
Group: Basin 19 To Node: GWT_19 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-19	1.650	1.650
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: 19FE-4_EXF From Node: S19FE-4 Count: 15

Group: Basin 19 To Node: GWT_19 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-19	1.650	1.650
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: 19FE-5_EXF From Node: S19FE-5 Count: 15
Group: Basin 19 To Node: GWT_19 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-19	1.650	1.650
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: 19FE-6_EXF From Node: S19FE-6 Count: 20
Group: Basin 19 To Node: GWT_19 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-19	1.650	1.650
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: 19FW-17_EXF From Node: S19FW-17 Count: 40
Group: Basin 19 To Node: GWT_19 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-19	1.650	1.650
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

Name: 19FW-8_EXF From Node: S19FW-8 Count: 180
Group: Basin 19 To Node: GWT_19 Flow: Both

	TABLE	ELEV ON(ft)	ELEV OFF(ft)
#1:	E_OPT-19	1.650	1.650
#2:		0.000	0.000
#3:		0.000	0.000
#4:		0.000	0.000

==========
==== Hydrology Simulations ==========
==========

Name: 100YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 5.00

Time(hrs)	Print Inc(min)
1.000	1.00
1.330	1.00

Name: 100YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 13.44

Time(hrs)	Print Inc(min)
8.000	5.00
16.000	1.00
24.000	5.00
24.330	5.00

Name: 100YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 9.60

Time(hrs)	Print Inc(min)
2.000	5.00
6.000	1.00
8.000	5.00
8.330	5.00

Name: 10YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: Fdot-1
Rainfall Amount(in): 3.50

Time(hrs)	Print Inc(min)
1.000	1.00
1.330	1.00

Name: 10YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: Fdot-24
Rainfall Amount(in): 8.88

Time(hrs)	Print Inc(min)
8.000	5.00
16.000	1.00
24.000	5.00
24.330	5.00

Name: 10YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: Fdot-8
Rainfall Amount(in): 6.40

Time(hrs)	Print Inc(min)
2.000	5.00
6.000	1.00

8.000 5.00
8.330 5.00

Name: 25YR-72HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: Sfwmd72
Rainfall Amount(in): 14.00

Time(hrs)	Print Inc(min)
48.000	15.00
56.000	5.00
64.000	1.00
72.000	5.00
72.330	5.00

==========
==== Routing Simulations ==========
==========

Name: 100YR-1HR Hydrology Sim: 100YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 25.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
1.000	1.000
25.000	15.000

Group	Run
Basin 19	Yes

Name: 100YR-24HR Hydrology Sim: 100YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 48.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 10.0000
Boundary Stages: 24HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
48.000	15.000

Group	Run
Basin 19	Yes

Name: 100YR-8HR Hydrology Sim: 100YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 36.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 10.0000
Boundary Stages: 8HR Boundary Flows:

Time(hrs)	Print Inc(min)
2.000	5.000
6.000	1.000
8.000	5.000
36.000	15.000

Group	Run
Basin 19	Yes

Name: 10YR-1HR Hydrology Sim: 10YR-1HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 25.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

Time(hrs)	Print Inc(min)
1.000	1.000
25.000	15.000

Group	Run
Basin 19	Yes

Name: 10YR-24HR Hydrology Sim: 10YR-24HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 48.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 24HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
48.000	15.000

Group	Run

Basin 19	Yes

Name: 10YR-8HR Hydrology Sim: 10YR-8HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 36.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 8HR Boundary Flows:

Time(hrs)	Print Inc(min)
2.000	5.000
6.000	1.000
8.000	5.000
36.000	15.000

Group	Run
Basin 19	Yes

Name: 25YR-72HR Hydrology Sim: 25YR-72HR
Filename: C:\Users\ISHAIKH\Desktop\Project_ShortCut\2020\8_Palmetto Expressway_PhaseII\3_Calculations\1_ICP

Execute: Yes Restart: No Patch: No
Alternative: No

Max Delta Z(ft): 1.00 Delta Z Factor: 0.00500
Time Step Optimizer: 10.000
Start Time(hrs): 0.000 End Time(hrs): 96.00
Min Calc Time(sec): 0.5000 Max Calc Time(sec): 60.0000
Boundary Stages: 72HR Boundary Flows:

Time(hrs)	Print Inc(min)
8.000	5.000
16.000	1.000
24.000	5.000
96.000	15.000

Group	Run
Basin 19	Yes

==========
==== Boundary Conditions ====
==========

Name: 8HR Node: GWT_19 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.950
1.000	1.970
1.950	1.950
2.000	2.050
3.000	2.160
4.000	2.480
5.000	2.600
6.000	2.640
7.000	2.680

8.000	2.700
12.000	1.950
36.000	1.950

Name: 24HR Node: GWT_19 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.950
1.000	1.960
2.000	1.970
3.000	2.000
4.000	2.020
5.000	2.040
6.000	2.070
7.000	2.100
8.000	2.130
9.000	2.180
10.000	2.220
11.000	2.280
12.000	2.360
13.000	2.410
14.000	2.450
15.000	2.500
16.000	2.540
17.000	2.570
18.000	2.600
19.000	2.630
20.000	2.650
21.000	2.670
22.000	2.690
23.000	2.690
24.000	2.700
36.000	1.950
48.000	1.950

Name: 72HR Node: GWT_19 Type: Stage

Time(hrs)	Stage(ft)
0.000	1.950
24.000	2.030
36.000	2.090
48.000	2.150
49.000	2.150
50.000	2.160
51.000	2.170
52.000	2.170
53.000	2.180
54.000	2.190
55.000	2.210
56.000	2.220
57.000	2.240
57.500	2.250
58.000	2.270
58.500	2.280
59.000	2.300
59.500	2.320
60.000	2.510
60.500	2.550
61.000	2.570
61.500	2.590
62.000	2.600
62.500	2.610
63.000	2.620
64.000	2.630
65.000	2.640
66.000	2.650
68.000	2.670
70.000	2.690
72.000	2.700
96.000	1.950

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	0.00	0.0	0.0	0.0	0.0	0.00
100YR-24HR	0.08	0.0	-477.6	477.6	0.0	0.00
100YR-24HR	0.17	0.0	-614.0	614.0	0.0	0.00
100YR-24HR	0.25	0.0	-661.0	661.0	0.0	0.00
100YR-24HR	0.33	0.0	-679.4	679.4	0.0	0.00
100YR-24HR	0.42	0.0	-687.7	687.7	0.0	0.00
100YR-24HR	0.50	0.0	-692.4	692.4	0.0	0.00
100YR-24HR	0.58	0.0	-695.6	695.6	0.0	0.00
100YR-24HR	0.67	0.0	-698.2	698.2	0.0	0.00
100YR-24HR	0.75	0.0	-700.5	700.6	0.0	0.00
100YR-24HR	0.83	0.2	-702.7	702.9	0.0	0.00
100YR-24HR	0.92	0.6	-704.7	705.3	0.0	0.00
100YR-24HR	1.00	1.3	-706.4	707.7	0.0	0.00
100YR-24HR	1.08	2.8	-707.7	710.5	0.0	0.00
100YR-24HR	1.17	6.5	-707.8	714.3	0.0	0.00
100YR-24HR	1.25	13.8	-705.4	719.1	0.0	0.00
100YR-24HR	1.33	25.8	-699.1	725.0	0.0	0.00
100YR-24HR	1.42	43.8	-687.8	731.6	0.0	0.00
100YR-24HR	1.50	68.4	-670.2	738.7	0.0	0.00
100YR-24HR	1.58	100.4	-645.6	746.1	0.0	0.00
100YR-24HR	1.67	140.4	-613.5	753.9	0.0	0.00
100YR-24HR	1.75	189.0	-573.2	762.1	0.0	0.00
100YR-24HR	1.83	246.3	-524.3	770.6	0.0	0.00
100YR-24HR	1.92	312.5	-466.6	779.1	0.0	0.00
100YR-24HR	2.00	387.4	-400.1	787.4	0.0	0.00
100YR-24HR	2.08	474.6	-325.4	800.0	0.0	0.00
100YR-24HR	2.17	581.9	-237.1	819.0	0.0	0.00
100YR-24HR	2.25	712.5	-128.3	840.8	0.0	0.00
100YR-24HR	2.33	862.8	0.9	861.9	0.0	0.00
100YR-24HR	2.42	1030.8	149.2	881.6	0.0	0.00
100YR-24HR	2.50	1215.2	315.0	900.2	0.0	0.00
100YR-24HR	2.58	1414.4	496.5	917.9	0.0	0.00
100YR-24HR	2.67	1627.9	692.9	935.0	-0.0	-0.00
100YR-24HR	2.75	1855.3	903.8	951.5	-0.0	-0.00
100YR-24HR	2.83	2095.0	1127.6	967.3	-0.0	-0.00
100YR-24HR	2.92	2346.1	1363.6	982.5	-0.0	-0.00
100YR-24HR	3.00	2607.9	1611.0	996.9	-0.0	-0.00
100YR-24HR	3.08	2879.8	1869.8	1009.9	-0.0	-0.00
100YR-24HR	3.17	3161.0	2139.4	1021.6	-0.0	-0.00
100YR-24HR	3.25	3450.9	2418.3	1032.6	-0.0	-0.00
100YR-24HR	3.33	3749.1	2706.0	1043.1	-0.0	-0.00
100YR-24HR	3.42	4054.5	3001.3	1053.2	-0.0	-0.00
100YR-24HR	3.50	4367.8	3304.8	1063.0	-0.0	-0.00
100YR-24HR	3.58	4688.0	3615.5	1072.5	-0.0	-0.00
100YR-24HR	3.67	5014.7	3933.0	1081.7	-0.0	-0.00
100YR-24HR	3.75	5347.1	4256.6	1090.6	-0.0	-0.00
100YR-24HR	3.83	5686.0	4586.7	1099.3	-0.0	-0.00
100YR-24HR	3.92	6030.5	4922.8	1107.7	-0.0	-0.00
100YR-24HR	4.00	6380.3	5264.3	1116.0	-0.0	-0.00
100YR-24HR	4.08	6734.7	5610.6	1124.0	-0.0	-0.00
100YR-24HR	4.17	7094.6	5962.6	1132.0	-0.0	-0.00
100YR-24HR	4.25	7459.4	6319.6	1139.8	0.0	0.00
100YR-24HR	4.33	7828.7	6681.3	1147.5	-0.0	-0.00
100YR-24HR	4.42	8202.2	7047.3	1154.9	0.0	0.00
100YR-24HR	4.50	8579.8	7417.6	1162.2	-0.0	-0.00
100YR-24HR	4.58	8961.3	7792.0	1169.3	0.0	0.00
100YR-24HR	4.67	9346.5	8170.2	1176.3	0.0	0.00
100YR-24HR	4.75	9735.3	8552.1	1183.2	0.0	0.00
100YR-24HR	4.83	10127.5	8937.6	1189.9	-0.0	-0.00
100YR-24HR	4.92	10523.0	9326.5	1196.5	-0.0	-0.00
100YR-24HR	5.00	10921.6	9718.6	1203.1	-0.0	-0.00
100YR-24HR	5.08	11333.0	10116.5	1216.6	-0.0	-0.00
100YR-24HR	5.17	11775.8	10533.7	1242.1	-0.0	-0.00
100YR-24HR	5.25	12253.0	10982.2	1270.8	-0.0	-0.00
100YR-24HR	5.33	12754.5	11459.1	1295.3	-0.0	-0.00
100YR-24HR	5.42	13273.5	11958.1	1315.4	-0.0	-0.00
100YR-24HR	5.50	13806.0	12473.7	1332.2	-0.0	-0.00
100YR-24HR	5.58	14349.4	13002.5	1347.0	-0.0	-0.00
100YR-24HR	5.67	14902.3	13542.1	1360.2	-0.0	-0.00
100YR-24HR	5.75	15463.1	14090.8	1372.2	-0.0	-0.00
100YR-24HR	5.83	16030.1	14647.0	1383.1	-0.0	-0.00
100YR-24HR	5.92	16602.1	15209.1	1393.0	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	6.00	17178.2	15776.1	1402.1	-0.0	-0.00
100YR-24HR	6.08	17757.6	16347.0	1410.7	-0.0	-0.00
100YR-24HR	6.17	18340.1	16921.2	1418.9	-0.0	-0.00
100YR-24HR	6.25	18925.4	17498.5	1426.9	-0.0	-0.00
100YR-24HR	6.33	19513.5	18078.7	1434.8	0.0	0.00
100YR-24HR	6.42	20104.2	18661.6	1442.6	0.0	0.00
100YR-24HR	6.50	20697.5	19247.1	1450.3	-0.0	-0.00
100YR-24HR	6.58	21293.2	19835.2	1458.0	0.0	0.00
100YR-24HR	6.67	21891.2	20425.7	1465.5	0.0	0.00
100YR-24HR	6.75	22491.6	21018.6	1472.9	0.0	0.00
100YR-24HR	6.83	23094.1	21613.8	1480.3	0.0	0.00
100YR-24HR	6.92	23698.7	22211.1	1487.6	-0.0	-0.00
100YR-24HR	7.00	24305.3	22810.5	1494.8	-0.0	-0.00
100YR-24HR	7.08	24914.0	23412.0	1502.0	-0.0	-0.00
100YR-24HR	7.17	25524.8	24015.5	1509.3	-0.0	-0.00
100YR-24HR	7.25	26137.8	24621.2	1516.6	-0.0	-0.00
100YR-24HR	7.33	26752.8	25229.0	1523.8	-0.0	-0.00
100YR-24HR	7.42	27369.6	25838.8	1530.9	-0.0	-0.00
100YR-24HR	7.50	27988.2	26450.3	1537.9	-0.0	-0.00
100YR-24HR	7.58	28608.5	27063.6	1544.9	-0.0	-0.00
100YR-24HR	7.67	29230.3	27678.5	1551.8	-0.0	-0.00
100YR-24HR	7.75	29853.7	28295.1	1558.6	-0.0	-0.00
100YR-24HR	7.83	30478.6	28913.1	1565.5	-0.0	-0.00
100YR-24HR	7.92	31104.8	29532.6	1572.2	-0.0	-0.00
100YR-24HR	8.00	31732.5	30153.5	1579.0	-0.0	-0.00
100YR-24HR	8.08	32376.9	30779.0	1597.9	0.0	0.00
100YR-24HR	8.10	32513.7	30907.4	1606.3	0.0	0.00
100YR-24HR	8.12	32654.2	31038.1	1616.1	0.0	0.00
100YR-24HR	8.13	32798.5	31171.5	1627.0	0.0	0.00
100YR-24HR	8.15	32946.2	31307.7	1638.5	0.0	0.00
100YR-24HR	8.17	33097.1	31446.8	1650.3	0.0	0.00
100YR-24HR	8.18	33251.0	31588.9	1662.1	0.0	0.00
100YR-24HR	8.20	33407.6	31733.9	1673.7	0.0	0.00
100YR-24HR	8.22	33566.7	31881.8	1684.9	0.0	0.00
100YR-24HR	8.23	33728.0	32032.3	1695.7	0.0	0.00
100YR-24HR	8.25	33891.3	32185.4	1705.9	0.0	0.00
100YR-24HR	8.27	34056.6	32340.8	1715.7	0.0	0.00
100YR-24HR	8.28	34223.6	32498.5	1725.0	0.0	0.00
100YR-24HR	8.30	34392.2	32658.3	1733.9	0.0	0.00
100YR-24HR	8.32	34562.4	32820.1	1742.3	0.0	0.00
100YR-24HR	8.33	34734.0	32983.7	1750.3	0.0	0.00
100YR-24HR	8.35	34906.9	33149.1	1757.8	0.0	0.00
100YR-24HR	8.37	35081.1	33316.1	1765.1	0.0	0.00
100YR-24HR	8.38	35256.5	33484.6	1771.9	0.0	0.00
100YR-24HR	8.40	35432.9	33654.4	1778.5	0.0	0.00
100YR-24HR	8.42	35610.3	33825.7	1784.7	0.0	0.00
100YR-24HR	8.43	35788.7	33998.1	1790.6	0.0	0.00
100YR-24HR	8.45	35967.9	34171.7	1796.2	0.0	0.00
100YR-24HR	8.47	36148.0	34346.3	1801.6	0.0	0.00
100YR-24HR	8.48	36328.8	34522.0	1806.8	0.0	0.00
100YR-24HR	8.50	36510.5	34698.6	1811.9	0.0	0.00
100YR-24HR	8.52	36692.9	34876.2	1816.8	0.0	0.00
100YR-24HR	8.53	36876.1	35054.6	1821.5	0.0	0.00
100YR-24HR	8.55	37059.9	35233.8	1826.1	0.0	0.00
100YR-24HR	8.57	37244.4	35413.8	1830.6	0.0	0.00
100YR-24HR	8.58	37429.6	35594.6	1834.9	0.0	0.00
100YR-24HR	8.60	37615.3	35776.2	1839.2	0.0	0.00
100YR-24HR	8.62	37801.7	35958.4	1843.3	0.0	0.00
100YR-24HR	8.63	37988.6	36141.3	1847.4	0.0	0.00
100YR-24HR	8.65	38176.1	36324.8	1851.3	0.0	0.00
100YR-24HR	8.67	38364.0	36508.9	1855.1	0.0	0.00
100YR-24HR	8.68	38552.5	36693.6	1858.8	0.0	0.00
100YR-24HR	8.70	38741.3	36878.9	1862.5	0.0	0.00
100YR-24HR	8.72	38930.6	37064.6	1866.0	0.0	0.00
100YR-24HR	8.73	39120.3	37250.9	1869.4	0.0	0.00
100YR-24HR	8.75	39310.3	37437.6	1872.7	0.0	0.00
100YR-24HR	8.77	39500.7	37624.7	1876.0	0.0	0.00
100YR-24HR	8.78	39691.4	37812.3	1879.1	0.0	0.00
100YR-24HR	8.80	39882.3	38000.2	1882.1	0.0	0.00
100YR-24HR	8.82	40073.5	38188.4	1885.1	0.0	0.00
100YR-24HR	8.83	40265.0	38377.0	1887.9	0.0	0.00
100YR-24HR	8.85	40456.6	38565.9	1890.7	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	8.87	40648.5	38755.0	1893.5	0.0	0.00
100YR-24HR	8.88	40840.6	38944.5	1896.1	0.0	0.00
100YR-24HR	8.90	41032.9	39134.1	1898.7	0.0	0.00
100YR-24HR	8.92	41225.3	39324.0	1901.3	0.0	0.00
100YR-24HR	8.93	41417.9	39514.0	1903.9	0.0	0.00
100YR-24HR	8.95	41610.6	39704.2	1906.5	0.0	0.00
100YR-24HR	8.97	41803.5	39894.5	1909.0	0.0	0.00
100YR-24HR	8.98	41996.4	40085.1	1911.4	0.0	0.00
100YR-24HR	9.00	42189.5	40275.8	1913.7	0.0	0.00
100YR-24HR	9.02	42382.6	40466.7	1915.9	0.0	0.00
100YR-24HR	9.03	42575.8	40657.8	1918.0	0.0	0.00
100YR-24HR	9.05	42769.1	40849.1	1920.0	0.0	0.00
100YR-24HR	9.07	42962.4	41040.5	1921.9	0.0	0.00
100YR-24HR	9.08	43155.8	41232.1	1923.8	0.0	0.00
100YR-24HR	9.10	43349.3	41423.7	1925.6	0.0	0.00
100YR-24HR	9.12	43542.8	41615.5	1927.4	0.0	0.00
100YR-24HR	9.13	43736.5	41807.4	1929.1	0.0	0.00
100YR-24HR	9.15	43930.2	41999.3	1930.9	0.0	0.00
100YR-24HR	9.17	44123.9	42191.3	1932.6	0.0	0.00
100YR-24HR	9.18	44317.7	42383.4	1934.3	0.0	0.00
100YR-24HR	9.20	44511.6	42575.6	1936.0	0.0	0.00
100YR-24HR	9.22	44705.6	42767.9	1937.7	0.0	0.00
100YR-24HR	9.23	44899.6	42960.2	1939.4	0.0	0.00
100YR-24HR	9.25	45093.7	43152.6	1941.1	0.0	0.00
100YR-24HR	9.27	45287.8	43345.1	1942.8	0.0	0.00
100YR-24HR	9.28	45482.1	43537.6	1944.4	0.0	0.00
100YR-24HR	9.30	45676.3	43730.2	1946.1	0.0	0.00
100YR-24HR	9.32	45870.7	43922.9	1947.8	0.0	0.00
100YR-24HR	9.33	46065.1	44115.7	1949.5	0.0	0.00
100YR-24HR	9.35	46259.6	44308.5	1951.1	0.0	0.00
100YR-24HR	9.37	46454.1	44501.3	1952.8	0.0	0.00
100YR-24HR	9.38	46648.7	44694.3	1954.4	0.0	0.00
100YR-24HR	9.40	46843.4	44887.3	1956.1	0.0	0.00
100YR-24HR	9.42	47038.1	45080.3	1957.8	0.0	0.00
100YR-24HR	9.43	47232.9	45273.4	1959.4	0.0	0.00
100YR-24HR	9.45	47427.7	45466.6	1961.1	0.0	0.00
100YR-24HR	9.47	47622.6	45659.9	1962.7	0.0	0.00
100YR-24HR	9.48	47817.6	45853.2	1964.4	0.0	0.00
100YR-24HR	9.50	48012.6	46046.5	1966.0	0.0	0.00
100YR-24HR	9.52	48207.6	46240.0	1967.7	0.0	0.00
100YR-24HR	9.53	48402.8	46433.4	1969.3	0.0	0.00
100YR-24HR	9.55	48598.0	46627.0	1971.0	0.0	0.00
100YR-24HR	9.57	48793.2	46820.6	1972.6	0.0	0.00
100YR-24HR	9.58	48988.5	47014.2	1974.3	0.0	0.00
100YR-24HR	9.60	49183.9	47208.0	1975.9	0.0	0.00
100YR-24HR	9.62	49379.3	47401.7	1977.6	0.0	0.00
100YR-24HR	9.63	49574.8	47595.6	1979.2	-0.0	-0.00
100YR-24HR	9.65	49770.3	47789.4	1980.8	0.0	0.00
100YR-24HR	9.67	49965.9	47983.4	1982.5	0.0	0.00
100YR-24HR	9.68	50161.5	48177.4	1984.1	0.0	0.00
100YR-24HR	9.70	50357.2	48371.4	1985.8	-0.0	-0.00
100YR-24HR	9.72	50552.9	48565.5	1987.4	0.0	0.00
100YR-24HR	9.73	50748.7	48759.7	1989.0	0.0	0.00
100YR-24HR	9.75	50944.6	48953.9	1990.7	0.0	0.00
100YR-24HR	9.77	51140.5	49148.2	1992.3	-0.0	-0.00
100YR-24HR	9.78	51336.4	49342.5	1993.9	0.0	0.00
100YR-24HR	9.80	51532.4	49536.9	1995.5	0.0	0.00
100YR-24HR	9.82	51728.5	49731.3	1997.2	0.0	0.00
100YR-24HR	9.83	51924.6	49925.8	1998.8	0.0	0.00
100YR-24HR	9.85	52120.7	50120.3	2000.4	-0.0	-0.00
100YR-24HR	9.87	52316.9	50314.9	2002.0	0.0	0.00
100YR-24HR	9.88	52513.2	50509.5	2003.7	0.0	0.00
100YR-24HR	9.90	52709.5	50704.2	2005.3	-0.0	-0.00
100YR-24HR	9.92	52905.9	50899.0	2006.9	-0.0	-0.00
100YR-24HR	9.93	53102.3	51093.7	2008.5	0.0	0.00
100YR-24HR	9.95	53298.7	51288.6	2010.1	0.0	0.00
100YR-24HR	9.97	53495.2	51483.5	2011.8	-0.0	-0.00
100YR-24HR	9.98	53691.8	51678.4	2013.4	0.0	0.00
100YR-24HR	10.00	53888.4	51873.4	2015.0	0.0	0.00
100YR-24HR	10.02	54085.3	52068.3	2017.0	0.0	0.00
100YR-24HR	10.03	54283.1	52263.4	2019.7	0.0	0.00
100YR-24HR	10.05	54482.2	52458.8	2023.4	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	10.07	54683.4	52655.0	2028.4	0.0	0.00
100YR-24HR	10.08	54887.6	52852.4	2035.2	0.0	0.00
100YR-24HR	10.10	55095.6	53051.7	2043.9	0.0	0.00
100YR-24HR	10.12	55307.5	53253.4	2054.1	0.0	0.00
100YR-24HR	10.13	55523.3	53457.9	2065.3	0.0	0.00
100YR-24HR	10.15	55742.8	53665.5	2077.3	0.0	0.00
100YR-24HR	10.17	55965.7	53876.2	2089.5	0.0	0.00
100YR-24HR	10.18	56191.8	54090.1	2101.7	0.0	0.00
100YR-24HR	10.20	56420.7	54307.1	2113.7	-0.0	-0.00
100YR-24HR	10.22	56652.3	54527.1	2125.3	0.0	0.00
100YR-24HR	10.23	56886.2	54749.9	2136.4	-0.0	-0.00
100YR-24HR	10.25	57122.3	54975.3	2146.9	-0.0	-0.00
100YR-24HR	10.27	57360.3	55203.3	2157.0	-0.0	-0.00
100YR-24HR	10.28	57600.2	55433.6	2166.7	0.0	0.00
100YR-24HR	10.30	57841.9	55666.1	2175.8	0.0	0.00
100YR-24HR	10.32	58085.1	55900.6	2184.5	0.0	0.00
100YR-24HR	10.33	58329.9	56137.1	2192.8	0.0	0.00
100YR-24HR	10.35	58576.0	56375.3	2200.7	0.0	0.00
100YR-24HR	10.37	58823.5	56615.3	2208.2	0.0	0.00
100YR-24HR	10.38	59072.1	56856.7	2215.4	0.0	0.00
100YR-24HR	10.40	59321.9	57099.7	2222.3	0.0	0.00
100YR-24HR	10.42	59572.7	57343.9	2228.8	0.0	0.00
100YR-24HR	10.43	59824.5	57589.5	2235.0	-0.0	-0.00
100YR-24HR	10.45	60077.2	57836.2	2241.0	-0.0	-0.00
100YR-24HR	10.47	60330.7	58084.0	2246.7	-0.0	-0.00
100YR-24HR	10.48	60585.1	58332.8	2252.2	-0.0	-0.00
100YR-24HR	10.50	60840.2	58582.6	2257.6	-0.0	-0.00
100YR-24HR	10.52	61096.2	58833.4	2262.8	-0.0	-0.00
100YR-24HR	10.53	61352.9	59085.0	2267.9	-0.0	-0.00
100YR-24HR	10.55	61610.3	59337.5	2272.8	-0.0	-0.00
100YR-24HR	10.57	61868.4	59590.7	2277.6	-0.0	-0.00
100YR-24HR	10.58	62127.1	59844.8	2282.3	-0.0	-0.00
100YR-24HR	10.60	62386.5	60099.6	2286.9	-0.0	-0.00
100YR-24HR	10.62	62646.5	60355.1	2291.4	-0.0	-0.00
100YR-24HR	10.63	62907.0	60611.2	2295.8	-0.0	-0.00
100YR-24HR	10.65	63168.1	60868.0	2300.1	0.0	0.00
100YR-24HR	10.67	63429.7	61125.4	2304.3	-0.0	-0.00
100YR-24HR	10.68	63691.7	61383.4	2308.3	-0.0	-0.00
100YR-24HR	10.70	63954.2	61641.9	2312.3	0.0	0.00
100YR-24HR	10.72	64217.2	61901.0	2316.2	0.0	0.00
100YR-24HR	10.73	64480.5	62160.5	2320.0	0.0	0.00
100YR-24HR	10.75	64744.1	62420.5	2323.7	0.0	0.00
100YR-24HR	10.77	65008.1	62680.9	2327.2	0.0	0.00
100YR-24HR	10.78	65272.4	62941.7	2330.7	0.0	0.00
100YR-24HR	10.80	65537.0	63202.8	2334.1	0.0	0.00
100YR-24HR	10.82	65801.8	63464.3	2337.4	0.0	0.00
100YR-24HR	10.83	66066.8	63726.1	2340.7	0.0	0.00
100YR-24HR	10.85	66332.0	63988.2	2343.8	0.0	0.00
100YR-24HR	10.87	66597.5	64250.6	2346.9	-0.0	-0.00
100YR-24HR	10.88	66863.1	64513.2	2349.9	-0.0	-0.00
100YR-24HR	10.90	67128.9	64776.0	2352.9	0.0	0.00
100YR-24HR	10.92	67394.9	65039.1	2355.8	0.0	0.00
100YR-24HR	10.93	67661.0	65302.3	2358.6	0.0	0.00
100YR-24HR	10.95	67927.2	65565.7	2361.4	0.0	0.00
100YR-24HR	10.97	68193.5	65829.3	2364.2	0.0	0.00
100YR-24HR	10.98	68459.9	66093.0	2366.9	0.0	0.00
100YR-24HR	11.00	68726.4	66356.9	2369.5	0.0	0.00
100YR-24HR	11.02	68993.3	66620.8	2372.5	0.0	0.00
100YR-24HR	11.03	69261.1	66884.8	2376.2	0.0	0.00
100YR-24HR	11.05	69530.2	67149.3	2380.9	0.0	0.00
100YR-24HR	11.07	69801.5	67414.6	2386.9	0.0	0.00
100YR-24HR	11.08	70075.9	67681.2	2394.7	0.0	0.00
100YR-24HR	11.10	70354.1	67949.7	2404.4	0.0	0.00
100YR-24HR	11.12	70636.2	68220.6	2415.6	0.0	0.00
100YR-24HR	11.13	70922.2	68494.4	2427.8	0.0	0.00
100YR-24HR	11.15	71211.8	68771.2	2440.6	0.0	0.00
100YR-24HR	11.17	71504.8	69051.1	2453.7	0.0	0.00
100YR-24HR	11.18	71801.0	69334.2	2466.8	0.0	0.00
100YR-24HR	11.20	72100.0	69620.3	2479.6	0.0	0.00
100YR-24HR	11.22	72401.5	69909.5	2492.1	0.0	0.00
100YR-24HR	11.23	72705.4	70201.4	2504.0	0.0	0.00
100YR-24HR	11.25	73011.3	70495.9	2515.4	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	11.27	73319.3	70792.9	2526.3	0.0	0.00
100YR-24HR	11.28	73629.0	71092.3	2536.8	0.0	0.00
100YR-24HR	11.30	73940.5	71393.8	2546.8	0.0	0.00
100YR-24HR	11.32	74253.6	71697.3	2556.3	0.0	0.00
100YR-24HR	11.33	74568.1	72002.7	2565.4	0.0	0.00
100YR-24HR	11.35	74884.1	72309.9	2574.1	0.0	0.00
100YR-24HR	11.37	75201.3	72618.8	2582.5	-0.0	-0.00
100YR-24HR	11.38	75519.7	72929.2	2590.5	-0.0	-0.00
100YR-24HR	11.40	75839.2	73241.1	2598.1	-0.0	-0.00
100YR-24HR	11.42	76159.7	73554.2	2605.5	0.0	0.00
100YR-24HR	11.43	76481.2	73868.7	2612.5	0.0	0.00
100YR-24HR	11.45	76803.6	74184.3	2619.3	0.0	0.00
100YR-24HR	11.47	77126.8	74501.0	2625.8	0.0	0.00
100YR-24HR	11.48	77450.8	74818.7	2632.2	-0.0	-0.00
100YR-24HR	11.50	77775.7	75137.3	2638.3	-0.0	-0.00
100YR-24HR	11.52	78101.3	75456.9	2644.3	-0.0	-0.00
100YR-24HR	11.53	78427.6	75777.4	2650.2	-0.0	-0.00
100YR-24HR	11.55	78754.7	76098.7	2656.0	-0.0	-0.00
100YR-24HR	11.57	79082.4	76420.8	2661.6	-0.0	-0.00
100YR-24HR	11.58	79410.8	76743.7	2667.1	-0.0	-0.00
100YR-24HR	11.60	79739.8	77067.3	2672.5	-0.0	-0.00
100YR-24HR	11.62	80069.3	77391.6	2677.8	-0.0	-0.00
100YR-24HR	11.63	80399.5	77716.6	2682.9	-0.0	-0.00
100YR-24HR	11.65	80730.1	78042.2	2688.0	0.0	0.00
100YR-24HR	11.67	81061.3	78368.4	2692.9	-0.0	-0.00
100YR-24HR	11.68	81392.9	78695.2	2697.7	-0.0	-0.00
100YR-24HR	11.70	81725.0	79022.5	2702.5	-0.0	-0.00
100YR-24HR	11.72	82057.5	79350.4	2707.1	-0.0	-0.00
100YR-24HR	11.73	82390.3	79678.7	2711.7	0.0	0.00
100YR-24HR	11.75	82723.5	80007.4	2716.1	0.0	0.00
100YR-24HR	11.77	83057.1	80336.6	2720.4	0.0	0.00
100YR-24HR	11.78	83390.9	80666.2	2724.7	0.0	0.00
100YR-24HR	11.80	83725.0	80996.1	2728.8	-0.0	-0.00
100YR-24HR	11.82	84059.3	81326.4	2732.9	-0.0	-0.00
100YR-24HR	11.83	84393.8	81656.9	2736.9	-0.0	-0.00
100YR-24HR	11.85	84728.6	81987.8	2740.8	-0.0	-0.00
100YR-24HR	11.87	85063.5	82318.9	2744.7	-0.0	-0.00
100YR-24HR	11.88	85398.6	82650.2	2748.4	-0.0	-0.00
100YR-24HR	11.90	85733.9	82981.8	2752.2	-0.0	-0.00
100YR-24HR	11.92	86069.4	83313.5	2755.8	-0.0	-0.00
100YR-24HR	11.93	86404.9	83645.5	2759.5	0.0	0.00
100YR-24HR	11.95	86740.6	83977.6	2763.0	0.0	0.00
100YR-24HR	11.97	87076.4	84309.9	2766.5	0.0	0.00
100YR-24HR	11.98	87412.3	84642.3	2770.0	0.0	0.00
100YR-24HR	12.00	87748.2	84974.8	2773.4	0.0	0.00
100YR-24HR	12.02	88083.8	85307.6	2776.2	0.0	0.00
100YR-24HR	12.03	88418.1	85640.4	2777.7	0.0	0.00
100YR-24HR	12.05	88750.4	85972.7	2777.7	0.0	0.00
100YR-24HR	12.07	89079.7	86304.1	2775.7	-0.0	-0.00
100YR-24HR	12.08	89404.5	86633.6	2770.9	0.0	0.00
100YR-24HR	12.10	89723.6	86960.4	2763.1	0.0	0.00
100YR-24HR	12.12	90036.8	87283.7	2753.1	0.0	0.00
100YR-24HR	12.13	90344.2	87602.8	2741.4	0.0	0.00
100YR-24HR	12.15	90646.1	87917.5	2728.7	-0.0	-0.00
100YR-24HR	12.17	90943.0	88227.5	2715.5	-0.0	-0.00
100YR-24HR	12.18	91235.2	88532.9	2702.3	-0.0	-0.00
100YR-24HR	12.20	91523.2	88833.8	2689.4	-0.0	-0.00
100YR-24HR	12.22	91807.3	89130.3	2677.0	-0.0	-0.00
100YR-24HR	12.23	92088.0	89422.6	2665.5	-0.0	-0.00
100YR-24HR	12.25	92365.7	89711.0	2654.7	-0.0	-0.00
100YR-24HR	12.27	92640.3	89995.7	2644.6	-0.0	-0.00
100YR-24HR	12.28	92912.3	90277.0	2635.3	-0.0	-0.00
100YR-24HR	12.30	93181.8	90555.1	2626.7	-0.0	-0.00
100YR-24HR	12.32	93449.0	90830.2	2618.8	-0.0	-0.00
100YR-24HR	12.33	93714.1	91102.5	2611.6	-0.0	-0.00
100YR-24HR	12.35	93977.1	91372.2	2604.9	-0.0	-0.00
100YR-24HR	12.37	94238.3	91639.5	2598.9	-0.0	-0.00
100YR-24HR	12.38	94497.8	91904.5	2593.4	-0.0	-0.00
100YR-24HR	12.40	94755.8	92167.4	2588.4	-0.0	-0.00
100YR-24HR	12.42	95012.2	92428.3	2583.9	-0.0	-0.00
100YR-24HR	12.43	95267.4	92687.5	2579.8	-0.0	-0.00
100YR-24HR	12.45	95521.2	92945.0	2576.2	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	12.47	95773.9	93201.0	2573.0	-0.0	-0.00
100YR-24HR	12.48	96025.5	93455.5	2570.0	-0.0	-0.00
100YR-24HR	12.50	96275.9	93708.6	2567.4	-0.0	-0.00
100YR-24HR	12.52	96525.3	93960.4	2564.9	-0.0	-0.00
100YR-24HR	12.53	96773.7	94211.0	2562.7	-0.0	-0.00
100YR-24HR	12.55	97021.1	94460.4	2560.7	-0.0	-0.00
100YR-24HR	12.57	97267.6	94708.7	2558.9	-0.0	-0.00
100YR-24HR	12.58	97513.2	94955.9	2557.2	-0.0	-0.00
100YR-24HR	12.60	97757.9	95202.2	2555.8	-0.0	-0.00
100YR-24HR	12.62	98001.9	95447.5	2554.5	-0.0	-0.00
100YR-24HR	12.63	98245.1	95691.8	2553.3	-0.0	-0.00
100YR-24HR	12.65	98487.7	95935.3	2552.3	-0.0	-0.00
100YR-24HR	12.67	98729.5	96178.0	2551.5	-0.0	-0.00
100YR-24HR	12.68	98970.8	96420.0	2550.8	-0.0	-0.00
100YR-24HR	12.70	99211.5	96661.2	2550.3	-0.0	-0.00
100YR-24HR	12.72	99451.7	96901.7	2550.0	-0.0	-0.00
100YR-24HR	12.73	99691.4	97141.6	2549.7	-0.0	-0.00
100YR-24HR	12.75	99930.6	97381.0	2549.7	-0.0	-0.00
100YR-24HR	12.77	100169.5	97619.7	2549.8	-0.0	-0.00
100YR-24HR	12.78	100408.0	97858.0	2550.0	-0.0	-0.00
100YR-24HR	12.80	100646.3	98095.9	2550.4	-0.0	-0.00
100YR-24HR	12.82	100884.3	98333.4	2550.9	-0.0	-0.00
100YR-24HR	12.83	101122.0	98570.4	2551.5	0.0	0.00
100YR-24HR	12.85	101359.5	98807.2	2552.3	0.0	0.00
100YR-24HR	12.87	101596.8	99043.6	2553.1	0.0	0.00
100YR-24HR	12.88	101833.9	99279.8	2554.1	0.0	0.00
100YR-24HR	12.90	102070.9	99515.8	2555.1	0.0	0.00
100YR-24HR	12.92	102307.7	99751.5	2556.3	0.0	0.00
100YR-24HR	12.93	102544.5	99987.0	2557.5	0.0	0.00
100YR-24HR	12.95	102781.1	100222.3	2558.8	0.0	0.00
100YR-24HR	12.97	103017.7	100457.5	2560.1	0.0	0.00
100YR-24HR	12.98	103254.2	100692.6	2561.6	0.0	0.00
100YR-24HR	13.00	103490.8	100927.6	2563.1	-0.0	-0.00
100YR-24HR	13.02	103727.2	101162.6	2564.6	-0.0	-0.00
100YR-24HR	13.03	103963.2	101397.5	2565.7	-0.0	-0.00
100YR-24HR	13.05	104198.6	101632.2	2566.4	0.0	0.00
100YR-24HR	13.07	104433.0	101866.5	2566.4	-0.0	-0.00
100YR-24HR	13.08	104665.9	102100.3	2565.6	0.0	0.00
100YR-24HR	13.10	104896.9	102333.1	2563.8	0.0	0.00
100YR-24HR	13.12	105126.1	102564.8	2561.3	0.0	0.00
100YR-24HR	13.13	105353.3	102795.1	2558.2	0.0	0.00
100YR-24HR	13.15	105578.7	103023.9	2554.8	0.0	0.00
100YR-24HR	13.17	105802.4	103251.2	2551.2	0.0	0.00
100YR-24HR	13.18	106024.6	103477.0	2547.6	0.0	0.00
100YR-24HR	13.20	106245.4	103701.3	2544.1	0.0	0.00
100YR-24HR	13.22	106464.9	103924.1	2540.8	0.0	0.00
100YR-24HR	13.23	106683.3	104145.5	2537.8	0.0	0.00
100YR-24HR	13.25	106900.7	104365.6	2535.1	0.0	0.00
100YR-24HR	13.27	107117.1	104584.5	2532.5	0.0	0.00
100YR-24HR	13.28	107332.6	104802.3	2530.3	0.0	0.00
100YR-24HR	13.30	107547.3	105019.0	2528.2	0.0	0.00
100YR-24HR	13.32	107761.2	105234.8	2526.4	0.0	0.00
100YR-24HR	13.33	107974.4	105449.5	2524.9	0.0	0.00
100YR-24HR	13.35	108187.0	105663.5	2523.5	0.0	0.00
100YR-24HR	13.37	108398.9	105876.6	2522.3	0.0	0.00
100YR-24HR	13.38	108610.3	106089.0	2521.3	0.0	0.00
100YR-24HR	13.40	108821.2	106300.7	2520.5	0.0	0.00
100YR-24HR	13.42	109031.5	106511.7	2519.8	0.0	0.00
100YR-24HR	13.43	109241.5	106722.2	2519.3	0.0	0.00
100YR-24HR	13.45	109451.0	106932.1	2519.0	0.0	0.00
100YR-24HR	13.47	109660.2	107141.5	2518.7	0.0	0.00
100YR-24HR	13.48	109869.0	107350.4	2518.6	0.0	0.00
100YR-24HR	13.50	110077.4	107558.8	2518.6	0.0	0.00
100YR-24HR	13.52	110285.4	107766.8	2518.6	0.0	0.00
100YR-24HR	13.53	110493.2	107974.5	2518.7	0.0	0.00
100YR-24HR	13.55	110700.6	108181.7	2518.9	0.0	0.00
100YR-24HR	13.57	110907.7	108388.6	2519.1	0.0	0.00
100YR-24HR	13.58	111114.5	108595.1	2519.4	0.0	0.00
100YR-24HR	13.60	111321.1	108801.3	2519.8	0.0	0.00
100YR-24HR	13.62	111527.4	109007.2	2520.2	0.0	0.00
100YR-24HR	13.63	111733.5	109212.8	2520.7	0.0	0.00
100YR-24HR	13.65	111939.3	109418.1	2521.2	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	13.67	112144.9	109623.1	2521.8	0.0	0.00
100YR-24HR	13.68	112350.3	109827.9	2522.4	0.0	0.00
100YR-24HR	13.70	112555.5	110032.4	2523.1	0.0	0.00
100YR-24HR	13.72	112760.6	110236.8	2523.9	0.0	0.00
100YR-24HR	13.73	112965.5	110440.9	2524.6	0.0	0.00
100YR-24HR	13.75	113170.3	110644.8	2525.5	0.0	0.00
100YR-24HR	13.77	113374.9	110848.6	2526.4	0.0	0.00
100YR-24HR	13.78	113579.5	111052.2	2527.3	0.0	0.00
100YR-24HR	13.80	113783.9	111255.7	2528.3	0.0	0.00
100YR-24HR	13.82	113988.3	111459.0	2529.3	0.0	0.00
100YR-24HR	13.83	114192.6	111662.2	2530.4	0.0	0.00
100YR-24HR	13.85	114396.8	111865.3	2531.5	0.0	0.00
100YR-24HR	13.87	114600.9	112068.3	2532.6	0.0	0.00
100YR-24HR	13.88	114805.0	112271.2	2533.8	0.0	0.00
100YR-24HR	13.90	115009.1	112474.1	2535.0	0.0	0.00
100YR-24HR	13.92	115213.1	112676.9	2536.2	0.0	0.00
100YR-24HR	13.93	115417.1	112879.6	2537.5	0.0	0.00
100YR-24HR	13.95	115621.0	113082.2	2538.8	0.0	0.00
100YR-24HR	13.97	115824.9	113284.9	2540.1	0.0	0.00
100YR-24HR	13.98	116028.9	113487.4	2541.4	0.0	0.00
100YR-24HR	14.00	116232.8	113690.0	2542.8	0.0	0.00
100YR-24HR	14.02	116436.7	113892.5	2544.3	0.0	0.00
100YR-24HR	14.03	116640.7	114094.9	2545.8	0.0	0.00
100YR-24HR	14.05	116844.6	114297.2	2547.4	0.0	0.00
100YR-24HR	14.07	117048.5	114499.5	2549.1	0.0	0.00
100YR-24HR	14.08	117252.5	114701.7	2550.7	0.0	0.00
100YR-24HR	14.10	117456.4	114903.9	2552.4	0.0	0.00
100YR-24HR	14.12	117660.2	115106.1	2554.1	0.0	0.00
100YR-24HR	14.13	117864.1	115308.2	2555.9	0.0	0.00
100YR-24HR	14.15	118067.9	115510.3	2557.6	0.0	0.00
100YR-24HR	14.17	118271.8	115712.4	2559.3	0.0	0.00
100YR-24HR	14.18	118475.6	115914.5	2561.1	0.0	0.00
100YR-24HR	14.20	118679.4	116116.5	2562.8	0.0	0.00
100YR-24HR	14.22	118883.2	116318.6	2564.6	0.0	0.00
100YR-24HR	14.23	119087.0	116520.6	2566.4	0.0	0.00
100YR-24HR	14.25	119290.8	116722.6	2568.2	0.0	0.00
100YR-24HR	14.27	119494.5	116924.6	2569.9	0.0	0.00
100YR-24HR	14.28	119698.3	117126.6	2571.7	0.0	0.00
100YR-24HR	14.30	119902.1	117328.5	2573.5	0.0	0.00
100YR-24HR	14.32	120105.8	117530.5	2575.3	0.0	0.00
100YR-24HR	14.33	120309.6	117732.5	2577.1	0.0	0.00
100YR-24HR	14.35	120513.4	117934.4	2578.9	0.0	0.00
100YR-24HR	14.37	120717.1	118136.4	2580.8	0.0	0.00
100YR-24HR	14.38	120920.9	118338.3	2582.6	0.0	0.00
100YR-24HR	14.40	121124.7	118540.3	2584.4	0.0	0.00
100YR-24HR	14.42	121328.4	118742.2	2586.2	0.0	0.00
100YR-24HR	14.43	121532.2	118944.2	2588.0	0.0	0.00
100YR-24HR	14.45	121736.0	119146.1	2589.8	0.0	0.00
100YR-24HR	14.47	121939.7	119348.1	2591.7	0.0	0.00
100YR-24HR	14.48	122143.5	119550.0	2593.5	0.0	0.00
100YR-24HR	14.50	122347.3	119752.0	2595.3	0.0	0.00
100YR-24HR	14.52	122551.1	119953.9	2597.2	0.0	0.00
100YR-24HR	14.53	122754.9	120155.9	2599.0	0.0	0.00
100YR-24HR	14.55	122958.7	120357.8	2600.8	0.0	0.00
100YR-24HR	14.57	123162.5	120559.8	2602.7	0.0	0.00
100YR-24HR	14.58	123366.3	120761.8	2604.5	0.0	0.00
100YR-24HR	14.60	123570.1	120963.7	2606.3	0.0	0.00
100YR-24HR	14.62	123773.9	121165.7	2608.2	0.0	0.00
100YR-24HR	14.63	123977.7	121367.7	2610.0	0.0	0.00
100YR-24HR	14.65	124181.5	121569.7	2611.8	0.0	0.00
100YR-24HR	14.67	124385.3	121771.7	2613.7	0.0	0.00
100YR-24HR	14.68	124589.2	121973.7	2615.5	0.0	0.00
100YR-24HR	14.70	124793.0	122175.6	2617.3	0.0	0.00
100YR-24HR	14.72	124996.8	122377.6	2619.2	0.0	0.00
100YR-24HR	14.73	125200.7	122579.7	2621.0	0.0	0.00
100YR-24HR	14.75	125404.5	122781.7	2622.9	0.0	0.00
100YR-24HR	14.77	125608.4	122983.7	2624.7	0.0	0.00
100YR-24HR	14.78	125812.2	123185.7	2626.5	0.0	0.00
100YR-24HR	14.80	126016.1	123387.7	2628.4	0.0	0.00
100YR-24HR	14.82	126220.0	123589.8	2630.2	0.0	0.00
100YR-24HR	14.83	126423.9	123791.8	2632.1	0.0	0.00
100YR-24HR	14.85	126627.8	123993.8	2633.9	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	14.87	126831.7	124195.9	2635.8	0.0	0.00
100YR-24HR	14.88	127035.6	124398.0	2637.6	0.0	0.00
100YR-24HR	14.90	127239.5	124600.0	2639.4	0.0	0.00
100YR-24HR	14.92	127443.4	124802.1	2641.3	0.0	0.00
100YR-24HR	14.93	127647.3	125004.2	2643.1	0.0	0.00
100YR-24HR	14.95	127851.2	125206.3	2645.0	0.0	0.00
100YR-24HR	14.97	128055.2	125408.4	2646.8	0.0	0.00
100YR-24HR	14.98	128259.1	125610.5	2648.7	0.0	0.00
100YR-24HR	15.00	128463.1	125812.6	2650.5	0.0	0.00
100YR-24HR	15.02	128666.9	126014.7	2652.2	0.0	0.00
100YR-24HR	15.03	128870.3	126216.8	2653.4	0.0	0.00
100YR-24HR	15.05	129073.0	126418.8	2654.2	0.0	0.00
100YR-24HR	15.07	129274.7	126620.4	2654.2	0.0	0.00
100YR-24HR	15.08	129474.8	126821.5	2653.4	0.0	0.00
100YR-24HR	15.10	129673.0	127021.6	2651.5	0.0	0.00
100YR-24HR	15.12	129869.3	127220.5	2648.8	0.0	0.00
100YR-24HR	15.13	130063.6	127418.0	2645.5	0.0	0.00
100YR-24HR	15.15	130256.0	127614.1	2641.9	-0.0	-0.00
100YR-24HR	15.17	130446.7	127808.5	2638.2	-0.0	-0.00
100YR-24HR	15.18	130635.9	128001.5	2634.4	-0.0	-0.00
100YR-24HR	15.20	130823.6	128192.8	2630.7	-0.0	-0.00
100YR-24HR	15.22	131010.0	128382.7	2627.3	-0.0	-0.00
100YR-24HR	15.23	131195.2	128571.2	2624.1	-0.0	-0.00
100YR-24HR	15.25	131379.5	128758.3	2621.1	-0.0	-0.00
100YR-24HR	15.27	131562.7	128944.3	2618.4	-0.0	-0.00
100YR-24HR	15.28	131745.0	129129.0	2616.0	-0.0	-0.00
100YR-24HR	15.30	131926.4	129312.7	2613.8	-0.0	-0.00
100YR-24HR	15.32	132107.1	129495.3	2611.8	-0.0	-0.00
100YR-24HR	15.33	132287.1	129677.0	2610.1	-0.0	-0.00
100YR-24HR	15.35	132466.4	129857.8	2608.6	-0.0	-0.00
100YR-24HR	15.37	132645.0	130037.7	2607.3	-0.0	-0.00
100YR-24HR	15.38	132823.1	130217.0	2606.2	-0.0	-0.00
100YR-24HR	15.40	133000.6	130395.4	2605.2	-0.0	-0.00
100YR-24HR	15.42	133177.7	130573.3	2604.4	-0.0	-0.00
100YR-24HR	15.43	133354.3	130750.5	2603.8	-0.0	-0.00
100YR-24HR	15.45	133530.5	130927.1	2603.4	-0.0	-0.00
100YR-24HR	15.47	133706.2	131103.2	2603.0	-0.0	-0.00
100YR-24HR	15.48	133881.6	131278.8	2602.8	-0.0	-0.00
100YR-24HR	15.50	134056.6	131454.0	2602.6	-0.0	-0.00
100YR-24HR	15.52	134231.3	131628.7	2602.6	0.0	0.00
100YR-24HR	15.53	134405.6	131803.0	2602.6	0.0	0.00
100YR-24HR	15.55	134579.6	131976.8	2602.7	0.0	0.00
100YR-24HR	15.57	134753.2	132150.3	2602.9	-0.0	-0.00
100YR-24HR	15.58	134926.6	132323.5	2603.1	-0.0	-0.00
100YR-24HR	15.60	135099.7	132496.3	2603.4	0.0	0.00
100YR-24HR	15.62	135272.5	132668.7	2603.7	0.0	0.00
100YR-24HR	15.63	135445.0	132840.9	2604.1	0.0	0.00
100YR-24HR	15.65	135617.4	133012.8	2604.6	0.0	0.00
100YR-24HR	15.67	135789.5	133184.4	2605.1	-0.0	-0.00
100YR-24HR	15.68	135961.3	133355.7	2605.7	-0.0	-0.00
100YR-24HR	15.70	136133.0	133526.8	2606.3	-0.0	-0.00
100YR-24HR	15.72	136304.6	133697.6	2607.0	-0.0	-0.00
100YR-24HR	15.73	136475.9	133868.2	2607.7	0.0	0.00
100YR-24HR	15.75	136647.1	134038.7	2608.5	-0.0	-0.00
100YR-24HR	15.77	136818.2	134208.9	2609.3	-0.0	-0.00
100YR-24HR	15.78	136989.2	134379.0	2610.2	-0.0	-0.00
100YR-24HR	15.80	137160.0	134548.9	2611.1	-0.0	-0.00
100YR-24HR	15.82	137330.8	134718.7	2612.1	-0.0	-0.00
100YR-24HR	15.83	137501.5	134888.4	2613.1	-0.0	-0.00
100YR-24HR	15.85	137672.1	135057.9	2614.2	-0.0	-0.00
100YR-24HR	15.87	137842.6	135227.4	2615.2	-0.0	-0.00
100YR-24HR	15.88	138013.1	135396.7	2616.4	-0.0	-0.00
100YR-24HR	15.90	138183.5	135566.0	2617.5	-0.0	-0.00
100YR-24HR	15.92	138353.9	135735.2	2618.7	-0.0	-0.00
100YR-24HR	15.93	138524.2	135904.3	2619.9	-0.0	-0.00
100YR-24HR	15.95	138694.6	136073.4	2621.2	-0.0	-0.00
100YR-24HR	15.97	138864.8	136242.4	2622.5	-0.0	-0.00
100YR-24HR	15.98	139035.1	136411.3	2623.8	-0.0	-0.00
100YR-24HR	16.00	139205.4	136580.3	2625.1	-0.0	-0.00
100YR-24HR	16.08	140045.1	137421.1	2624.0	0.0	0.00
100YR-24HR	16.17	140850.1	138241.3	2608.9	0.0	0.00
100YR-24HR	16.25	141616.5	139026.0	2590.5	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	16.33	142357.2	139779.8	2577.4	0.0	0.00
100YR-24HR	16.42	143080.7	140511.1	2569.6	0.0	0.00
100YR-24HR	16.50	143792.2	141226.5	2565.8	0.0	0.00
100YR-24HR	16.58	144494.8	141930.5	2564.3	0.0	0.00
100YR-24HR	16.67	145190.2	142625.9	2564.3	0.0	0.00
100YR-24HR	16.75	145880.4	143314.6	2565.8	0.0	0.00
100YR-24HR	16.83	146567.2	143998.7	2568.5	0.0	0.00
100YR-24HR	16.92	147252.0	144679.8	2572.2	0.0	0.00
100YR-24HR	17.00	147935.8	145359.1	2576.7	0.0	0.00
100YR-24HR	17.08	148619.3	146037.6	2581.7	0.0	0.00
100YR-24HR	17.17	149302.5	146715.7	2586.8	0.0	0.00
100YR-24HR	17.25	149985.4	147393.4	2591.9	0.0	0.00
100YR-24HR	17.33	150668.1	148070.9	2597.1	0.0	0.00
100YR-24HR	17.42	151350.6	148748.2	2602.4	0.0	0.00
100YR-24HR	17.50	152033.2	149425.4	2607.7	0.0	0.00
100YR-24HR	17.58	152715.7	150102.6	2613.1	0.0	0.00
100YR-24HR	17.67	153398.2	150779.7	2618.4	0.0	0.00
100YR-24HR	17.75	154080.7	151456.9	2623.8	0.0	0.00
100YR-24HR	17.83	154763.2	152134.0	2629.2	0.0	0.00
100YR-24HR	17.92	155445.7	152811.2	2634.6	0.0	0.00
100YR-24HR	18.00	156128.3	153488.4	2640.0	0.0	0.00
100YR-24HR	18.08	156811.0	154165.6	2645.4	0.0	0.00
100YR-24HR	18.17	157493.7	154842.9	2650.8	0.0	0.00
100YR-24HR	18.25	158176.4	155520.3	2656.2	0.0	0.00
100YR-24HR	18.33	158859.2	156197.7	2661.6	0.0	0.00
100YR-24HR	18.42	159542.1	156875.1	2667.0	0.0	0.00
100YR-24HR	18.50	160225.0	157552.6	2672.4	0.0	0.00
100YR-24HR	18.58	160907.9	158230.2	2677.8	0.0	0.00
100YR-24HR	18.67	161591.0	158907.8	2683.2	0.0	0.00
100YR-24HR	18.75	162274.0	159585.4	2688.6	0.0	0.00
100YR-24HR	18.83	162957.1	160263.1	2694.0	0.0	0.00
100YR-24HR	18.92	163640.3	160940.9	2699.4	-0.0	-0.00
100YR-24HR	19.00	164323.5	161618.7	2704.8	-0.0	-0.00
100YR-24HR	19.08	164995.0	162293.0	2702.0	-0.0	-0.00
100YR-24HR	19.17	165631.5	162946.7	2684.8	-0.0	-0.00
100YR-24HR	19.25	166229.2	163565.0	2664.1	-0.0	-0.00
100YR-24HR	19.33	166800.9	164152.2	2648.8	-0.0	-0.00
100YR-24HR	19.42	167355.4	164716.5	2638.8	-0.0	-0.00
100YR-24HR	19.50	167897.7	165264.9	2632.9	-0.0	-0.00
100YR-24HR	19.58	168431.0	165801.6	2629.3	-0.0	-0.00
100YR-24HR	19.67	168957.1	166329.6	2627.4	-0.0	-0.00
100YR-24HR	19.75	169477.9	166850.9	2626.9	-0.0	-0.00
100YR-24HR	19.83	169995.2	167367.5	2627.7	-0.0	-0.00
100YR-24HR	19.92	170510.5	167880.9	2629.5	-0.0	-0.00
100YR-24HR	20.00	171024.7	168392.6	2632.2	-0.0	-0.00
100YR-24HR	20.08	171538.6	168904.9	2633.7	-0.0	-0.00
100YR-24HR	20.17	172052.3	169418.3	2634.0	-0.0	-0.00
100YR-24HR	20.25	172565.7	169931.8	2634.0	-0.0	-0.00
100YR-24HR	20.33	173079.0	170445.1	2633.9	-0.0	-0.00
100YR-24HR	20.42	173592.1	170958.3	2633.8	-0.0	-0.00
100YR-24HR	20.50	174105.2	171471.5	2633.8	-0.0	-0.00
100YR-24HR	20.58	174618.3	171984.5	2633.7	-0.0	-0.00
100YR-24HR	20.67	175131.3	172497.6	2633.7	-0.0	-0.00
100YR-24HR	20.75	175644.3	173010.6	2633.7	-0.0	-0.00
100YR-24HR	20.83	176157.3	173523.6	2633.7	-0.0	-0.00
100YR-24HR	20.92	176670.3	174036.6	2633.7	-0.0	-0.00
100YR-24HR	21.00	177183.3	174549.6	2633.7	-0.0	-0.00
100YR-24HR	21.08	177684.3	175058.2	2626.1	-0.0	-0.00
100YR-24HR	21.17	178149.8	175545.0	2604.8	-0.0	-0.00
100YR-24HR	21.25	178576.2	175996.0	2580.2	-0.0	-0.00
100YR-24HR	21.33	178976.5	176415.5	2561.1	-0.0	-0.00
100YR-24HR	21.42	179359.4	176812.0	2547.5	-0.0	-0.00
100YR-24HR	21.50	179730.2	177192.4	2537.8	-0.0	-0.00
100YR-24HR	21.58	180091.8	177561.1	2530.7	-0.0	-0.00
100YR-24HR	21.67	180446.2	177921.0	2525.2	-0.0	-0.00
100YR-24HR	21.75	180795.2	178274.1	2521.1	-0.0	-0.00
100YR-24HR	21.83	181140.7	178622.4	2518.3	-0.0	-0.00
100YR-24HR	21.92	181484.2	178967.6	2516.6	-0.0	-0.00
100YR-24HR	22.00	181826.6	179311.0	2515.6	-0.0	-0.00
100YR-24HR	22.08	182156.9	179649.1	2507.8	-0.0	-0.00
100YR-24HR	22.17	182452.0	179965.6	2486.5	-0.0	-0.00
100YR-24HR	22.25	182708.0	180246.1	2461.9	-0.0	-0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	22.33	182937.9	180494.7	2443.2	-0.0	-0.00
100YR-24HR	22.42	183150.3	180720.3	2429.9	-0.0	-0.00
100YR-24HR	22.50	183350.5	180929.9	2420.5	-0.0	-0.00
100YR-24HR	22.58	183541.5	181127.9	2413.6	-0.0	-0.00
100YR-24HR	22.67	183725.3	181316.9	2408.4	-0.0	-0.00
100YR-24HR	22.75	183903.8	181499.2	2404.5	-0.0	-0.00
100YR-24HR	22.83	184078.7	181676.8	2401.9	-0.0	-0.00
100YR-24HR	22.92	184251.6	181851.4	2400.2	-0.0	-0.00
100YR-24HR	23.00	184423.4	182024.1	2399.3	-0.0	-0.00
100YR-24HR	23.08	184594.9	182195.8	2399.1	-0.0	-0.00
100YR-24HR	23.17	184766.3	182367.1	2399.2	-0.0	-0.00
100YR-24HR	23.25	184937.6	182538.3	2399.3	-0.0	-0.00
100YR-24HR	23.33	185108.9	182709.4	2399.4	-0.0	-0.00
100YR-24HR	23.42	185280.1	182880.4	2399.7	-0.0	-0.00
100YR-24HR	23.50	185451.3	183051.3	2399.9	-0.0	-0.00
100YR-24HR	23.58	185622.5	183222.3	2400.2	-0.0	-0.00
100YR-24HR	23.67	185793.6	183393.2	2400.5	-0.0	-0.00
100YR-24HR	23.75	185964.8	183564.0	2400.8	-0.0	-0.00
100YR-24HR	23.83	186135.9	183734.8	2401.1	-0.0	-0.00
100YR-24HR	23.92	186307.0	183905.5	2401.6	-0.0	-0.00
100YR-24HR	24.00	186478.1	184076.0	2402.2	-0.0	-0.00
100YR-24HR	24.25	186844.4	184487.6	2356.9	-0.0	-0.00
100YR-24HR	24.50	186902.6	184583.7	2318.8	-0.0	-0.00
100YR-24HR	24.75	186902.6	184616.6	2286.0	-0.0	-0.00
100YR-24HR	25.00	186902.6	184642.8	2259.8	-0.0	-0.00
100YR-24HR	25.25	186902.6	184674.8	2227.8	-0.0	-0.00
100YR-24HR	25.50	186902.6	184707.0	2195.5	0.0	0.00
100YR-24HR	25.75	186902.6	184739.3	2163.3	0.0	0.00
100YR-24HR	26.00	186902.6	184771.5	2131.0	0.0	0.00
100YR-24HR	26.25	186902.6	184803.8	2098.8	0.0	0.00
100YR-24HR	26.50	186902.6	184836.0	2066.6	0.0	0.00
100YR-24HR	26.75	186902.6	184868.2	2034.3	0.0	0.00
100YR-24HR	27.00	186902.6	184900.4	2002.1	0.0	0.00
100YR-24HR	27.25	186902.6	184932.6	1969.9	0.0	0.00
100YR-24HR	27.50	186902.6	184965.9	1936.7	0.0	0.00
100YR-24HR	27.75	186902.6	184998.8	1903.8	0.0	0.00
100YR-24HR	28.00	186902.6	185031.9	1870.7	0.0	0.00
100YR-24HR	28.25	186902.6	185065.3	1837.3	0.0	0.00
100YR-24HR	28.50	186902.6	185098.8	1803.8	0.0	0.00
100YR-24HR	28.75	186902.6	185132.4	1770.1	0.0	0.00
100YR-24HR	29.00	186902.6	185166.2	1736.3	0.0	0.00
100YR-24HR	29.25	186902.6	185200.2	1702.3	0.0	0.00
100YR-24HR	29.50	186902.6	185234.4	1668.1	0.0	0.00
100YR-24HR	29.75	186902.6	185268.8	1633.7	0.0	0.00
100YR-24HR	30.00	186902.6	185303.4	1599.2	0.0	0.00
100YR-24HR	30.25	186902.6	185338.1	1564.5	0.0	0.00
100YR-24HR	30.50	186902.6	185372.9	1529.7	0.0	0.00
100YR-24HR	30.75	186902.6	185407.7	1494.8	0.0	0.00
100YR-24HR	31.00	186902.6	185443.2	1459.3	0.0	0.00
100YR-24HR	31.25	186902.6	185479.1	1423.5	0.0	0.00
100YR-24HR	31.50	186902.6	185515.2	1387.4	0.0	0.00
100YR-24HR	31.75	186902.6	185551.6	1351.0	0.0	0.00
100YR-24HR	32.00	186902.6	185588.2	1314.4	0.0	0.00
100YR-24HR	32.25	186902.6	185625.0	1277.5	0.0	0.00
100YR-24HR	32.50	186902.6	185662.2	1240.3	0.0	0.00
100YR-24HR	32.75	186902.6	185699.8	1202.8	0.0	0.00
100YR-24HR	33.00	186902.6	185737.6	1165.0	0.0	0.00
100YR-24HR	33.25	186902.6	185775.7	1126.9	0.0	0.00
100YR-24HR	33.50	186902.6	185814.0	1088.6	0.0	0.00
100YR-24HR	33.75	186902.6	185852.5	1050.1	0.0	0.00
100YR-24HR	34.00	186902.6	185891.4	1011.1	0.0	0.00
100YR-24HR	34.25	186902.6	185930.4	972.2	0.0	0.00
100YR-24HR	34.50	186902.6	185969.4	933.1	0.0	0.00
100YR-24HR	34.75	186902.6	186008.7	893.9	0.0	0.00
100YR-24HR	35.00	186902.6	186048.0	854.6	0.0	0.00
100YR-24HR	35.25	186902.6	186087.6	815.0	0.0	0.00
100YR-24HR	35.50	186902.6	186127.2	775.3	0.0	0.00
100YR-24HR	35.75	186902.6	186167.1	735.5	0.0	0.00
100YR-24HR	36.00	186902.6	186207.2	695.4	0.0	0.00
100YR-24HR	36.25	186902.6	186218.2	684.3	0.0	0.00
100YR-24HR	36.50	186902.6	186218.7	683.8	0.0	0.00
100YR-24HR	36.75	186902.6	186218.8	683.8	0.0	0.00

Simulation	Time hrs	Inflow Volume ft3	Outflow Volume ft3	Change in Sys Storage ft3	Difference ft3	Error %
100YR-24HR	37.00	186902.6	186218.7	683.8	0.0	0.00
100YR-24HR	37.25	186902.6	186218.7	683.8	0.0	0.00
100YR-24HR	37.50	186902.6	186218.7	683.8	0.0	0.00
100YR-24HR	37.75	186902.6	186218.7	683.8	0.0	0.00
100YR-24HR	38.00	186902.6	186218.7	683.9	0.0	0.00
100YR-24HR	38.25	186902.6	186218.7	683.9	0.0	0.00
100YR-24HR	38.50	186902.6	186218.7	683.9	0.0	0.00
100YR-24HR	38.75	186902.6	186218.7	683.9	0.0	0.00
100YR-24HR	39.00	186902.6	186218.7	683.9	0.0	0.00
100YR-24HR	39.25	186902.6	186218.7	683.9	0.0	0.00
100YR-24HR	39.50	186902.6	186218.6	683.9	0.0	0.00
100YR-24HR	39.75	186902.6	186218.6	683.9	0.0	0.00
100YR-24HR	40.00	186902.6	186218.6	683.9	0.0	0.00
100YR-24HR	40.25	186902.6	186218.6	684.0	0.0	0.00
100YR-24HR	40.50	186902.6	186218.6	684.0	0.0	0.00
100YR-24HR	40.75	186902.6	186218.6	684.0	0.0	0.00
100YR-24HR	41.00	186902.6	186218.6	684.0	0.0	0.00
100YR-24HR	41.25	186902.6	186218.6	684.0	0.0	0.00
100YR-24HR	41.50	186902.6	186218.6	684.0	0.0	0.00
100YR-24HR	41.75	186902.6	186218.5	684.0	0.0	0.00
100YR-24HR	42.00	186902.6	186218.5	684.0	0.0	0.00
100YR-24HR	42.25	186902.6	186218.5	684.0	0.0	0.00
100YR-24HR	42.50	186902.6	186218.5	684.0	0.0	0.00
100YR-24HR	42.75	186902.6	186218.5	684.1	0.0	0.00
100YR-24HR	43.00	186902.6	186218.5	684.1	0.0	0.00
100YR-24HR	43.25	186902.6	186218.5	684.1	0.0	0.00
100YR-24HR	43.50	186902.6	186218.5	684.1	0.0	0.00
100YR-24HR	43.75	186902.6	186218.5	684.1	0.0	0.00
100YR-24HR	44.00	186902.6	186218.5	684.1	0.0	0.00
100YR-24HR	44.25	186902.6	186218.4	684.1	0.0	0.00
100YR-24HR	44.50	186902.6	186218.4	684.1	0.0	0.00
100YR-24HR	44.75	186902.6	186218.4	684.1	0.0	0.00
100YR-24HR	45.00	186902.6	186218.4	684.1	0.0	0.00
100YR-24HR	45.25	186902.6	186218.4	684.2	0.0	0.00
100YR-24HR	45.50	186902.6	186218.4	684.2	0.0	0.00
100YR-24HR	45.75	186902.6	186218.4	684.2	0.0	0.00
100YR-24HR	46.00	186902.6	186218.4	684.2	0.0	0.00
100YR-24HR	46.25	186902.6	186218.4	684.2	0.0	0.00
100YR-24HR	46.50	186902.6	186218.4	684.2	0.0	0.00
100YR-24HR	46.75	186902.6	186218.3	684.2	0.0	0.00
100YR-24HR	47.00	186902.6	186218.3	684.2	0.0	0.00
100YR-24HR	47.25	186902.6	186218.3	684.2	0.0	0.00
100YR-24HR	47.50	186902.6	186218.3	684.3	0.0	0.00
100YR-24HR	47.75	186902.6	186218.3	684.3	0.0	0.00
100YR-24HR	48.00	186902.6	186218.3	684.3	0.0	0.00
100YR-24HR	48.00	186902.6	186218.3	684.3	0.0	0.00

APPENDIX I
Hydroplaning Calculations

Hydroplaning Analysis Tool

General Inputs

FPID	447165-1-52-01	Roadway Section Number	SR 826
District No.	6	Station	434+78.16 to 467+49.78
County	Miami-Dade	(Please Select Milepost or Station above)	
		Direction	South

Analysis Options

Select Analysis Option: Deterministic (Default) : Show intermediate outputs? (e.g., Drainage Path Length): Yes

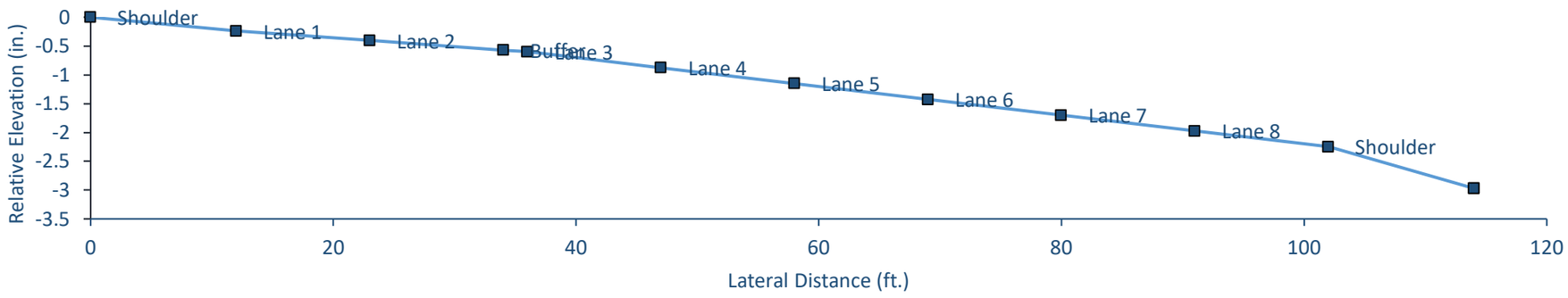
Risk Analysis? (Per FDOT's Design Guidance): Yes

Pavement Inputs

Deterministic Analysis

Longitudinal Grade (%)	2.84	Pavement Texture (Please Select MTD or MPD below)	
Surface Type	Open Graded Friction Course	Mean Texture Depth (in.)	0.067
Permeability (in/hr)	0		

Plane Number	1	2	3	4	5	6	7	8	9	10	11	12
Description	Shoulder	Lane 1	Lane 2	Buffer	Lane 3	Lane 4	Lane 5	Lane 6	Lane 7	Lane 8	Shoulder	
Design Speed (mph)		60	60		60	60	60	60	60	60		
Cross Slope (%)	2	1.5	1.5	1.5	2.5	2.5	2.5	2.5	2.5	2.5	6	
Width (ft.)	12	11	11	2	11	11	11	11	11	11	12	



Risk Analysis Results

(Based on Gallaway WFT and PAVDRN HPS Models)

Predicted Water Film Thickness (in.)

Plane Number	1	2	3	4	5	6	7	8	9	10	11	12
Intensity (in/hr)	Shoulder	Lane 1	Lane 2	Buffer	Lane 3	Lane 4	Lane 5	Lane 6	Lane 7	Lane 8	Shoulder	
0.1		-0.049	-0.044		-0.042	-0.040	-0.038	-0.036	-0.034	-0.032		
0.25		-0.036	-0.029		-0.026	-0.022	-0.018	-0.015	-0.012	-0.009		
0.5		-0.022	-0.011		-0.006	0.000	0.005	0.010	0.014	0.019		
1		0.000	0.016		0.023	0.031	0.039	0.046	0.053	0.060		
2		0.031	0.055		0.066	0.078	0.089	0.100	0.110	0.120		
3		0.056	0.087		0.100	0.115	0.130	0.143	0.156	0.168		
4		0.078	0.114		0.129	0.147	0.164	0.180	0.195	0.209		

Predicted Driver Speed (mph)

Plane Number	1	2	3	4	5	6	7	8	9	10	11	12
Intensity (in/hr)	Shoulder	Lane 1	Lane 2	Buffer	Lane 3	Lane 4	Lane 5	Lane 6	Lane 7	Lane 8	Shoulder	
0.1		60.0	60.0		60.0	60.0	60.0	60.0	60.0	60.0		
0.25		60.0	60.0		60.0	60.0	60.0	60.0	60.0	60.0		
0.5		54.0	54.0		54.0	54.0	54.0	54.0	54.0	54.0		
1		52.0	52.0		52.0	52.0	52.0	52.0	52.0	52.0		
2		48.0	48.0		48.0	48.0	48.0	48.0	48.0	48.0		
3		45.0	45.0		45.0	45.0	45.0	45.0	45.0	45.0		
4		45.0	45.0		45.0	45.0	45.0	45.0	45.0	45.0		

Predicted Hydroplaning Speed (mph)

Plane Number	1	2	3	4	5	6	7	8	9	10	11	12
Intensity (in/hr)	Shoulder	Lane 1	Lane 2	Buffer	Lane 3	Lane 4	Lane 5	Lane 6	Lane 7	Lane 8	Shoulder	
0.1		999.0	999.0		999.0	999.0	999.0	999.0	999.0	999.0		
0.25		999.0	999.0		999.0	999.0	999.0	999.0	999.0	999.0		
0.5		999.0	999.0		999.0	999.0	103.8	86.5	78.1	72.9		
1		999.0	76.0		69.3	63.9	60.3	57.7	55.7	54.0		
2		63.9	55.1		52.7	50.4	48.7	53.8	53.4	53.0		

3		54.8	49.0		53.8	53.2	52.7	52.3	52.0	51.7		
4		50.4	53.3		52.7	52.2	51.8	51.4	51.1	50.8		

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

(X) NATIONAL HIGHWAY SYSTEM
(X) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

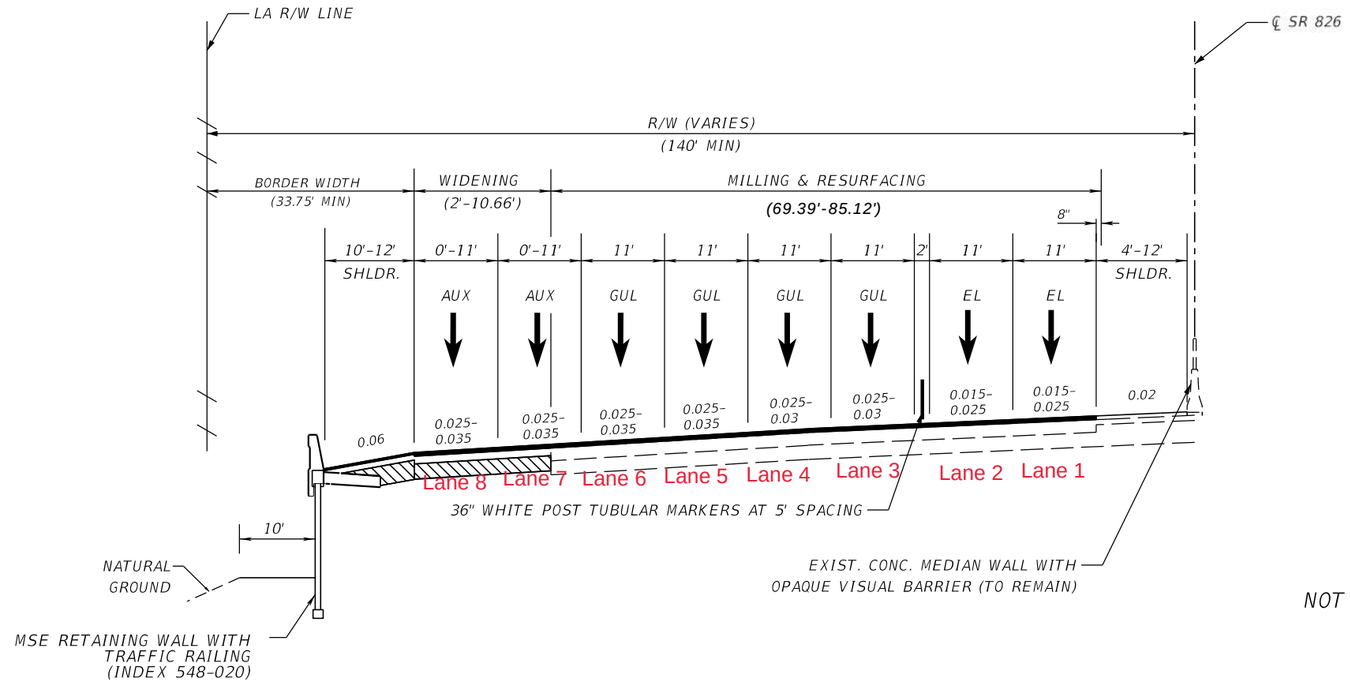
CRITERIA

(X) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN EXCEPTION
1. LANE & SHOULDER WIDTH
DESIGN VARIATION
1. SHOULDER WIDTH
2. CROSS SLOPE
3. EXPRESS LANE BUFFER SEPARATION WIDTH
4. BORDER WIDTH

TYPICAL SECTION No. 1



NOT TO SCALE

SR 826 SOUTHBOUND
STA. 434+78.16 TO STA. 467+49.78

LEGEND:
EL = EXPRESS LANES
GUL = GENERAL USE LANES
AUX = AUXILARY LANES

NOTES;
1. MATCH EXISTING CROSS SLOPES

TRAFFIC DATA

CURRENT YEAR = 2020 AADT = **52,280 - 127,060**
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = 6.6%
DESIGN SPEED = 60 MPH
POSTED SPEED = 55 MPH

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-02	2

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

STATE PROJ. NO.	SHEET NO.
87260-3589	52

FPN 249113-1-52-01

B.M. NO 66N
BRASS DISC IN CONC. WITH
WITNESS POST 2.4' WEST
STAMPED 87-88-G-66N
STA. 458+48. 94' RT
EL. 4.106

Steepest longitudinal slope -
Sta. 434+78.16 to Sta. 467+49.78

500' VC

PVC +00
18.45

PVT +00
10.48

17.10 15.86 14.75 13.77 12.91 12.17 11.56 11.08 10.72

35 30 25 20 15 10 5 0

26.30

FROM S-107

EOP 50' LT. & RT.

CONST. 24" PIPE

14.17

DPI LT. +00, EL. 6.50

DPI LT. +56.50, EL. 6.44

(-) 0.10% 18" GM (+) 0.10%

24" GM 16" WM

26.30 25.16 23.94 22.65 21.29

4" GM

(-)12.842%

+04.98

85.00' BRIDGE

+89.98

S-118 S-117 S-114

PROFILE GRADE

+84.98

FL 14.15

100' SE TRANSITION
NC TO -0.02

BULKHEAD WALL

+84.98

(+) 0.32%

FL 4.50

END DITCH LT. +00, EL. 7.50

FL 8.85

FL 9.59

VPI +50
11.35

(-)12.842% (-)0.347%

CONST. 18" PIPE

S-121

FL 5.10

EXIST. GROUND

BEGIN DITCH RT. +00, EL. 6.40

S-121A

FL 4.30

FL 3.80

FL 3.30

CONST. 18" PIPE

S-124

(-) 0.05%

CONST. 24" PIPE

CONST. 30" PIPE

FL 2.00

18" GM

FL 2.00

4" GM

(-)0.347%

OPI RT. +00, EL. 6.25

S-125

(-)0.036%

OPI RT. +00, EL. 6.35

9.37

S-128A

(+) 0.05%

24" GM 18" WM

CONST. 18" PIPE

FL 3.25

FL 3.00

9.34

VPI +00 (NO VC)
9.44

1,980' VC

OPI LT. +00, EL. 6.58
21.29

PVT +15
20.87

-0.02

+09.98

100' SE TRANSITION
-0.02 TO NC

+09.98

LITTLE RIVER CANAL

Mark A. Ames
10/14/98

SCALE : 1" = 100' HORIZ.
1" = 10' VERT.

446 447 448 449 450 451 452 453 454 455 456 457 458 459

PROFR004.DGN
DATE : 09/25/98

REVISIONS											
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Moreland Altobelli Associates, Inc.

FLORIDA DEPARTMENT OF TRANSPORTATION

S.R. 826 PROFILE
STA 446+00 TO STA 459+00

Hydroplaning Analysis Tool

General Inputs

FPID	447165-1-52-01	Roadway Section Number	SR 826
District No.	6	Station	467+49.78 to 497+17.00
County	Miami-Dade	(Please Select Milepost or Station above)	
		Direction	South

Analysis Options

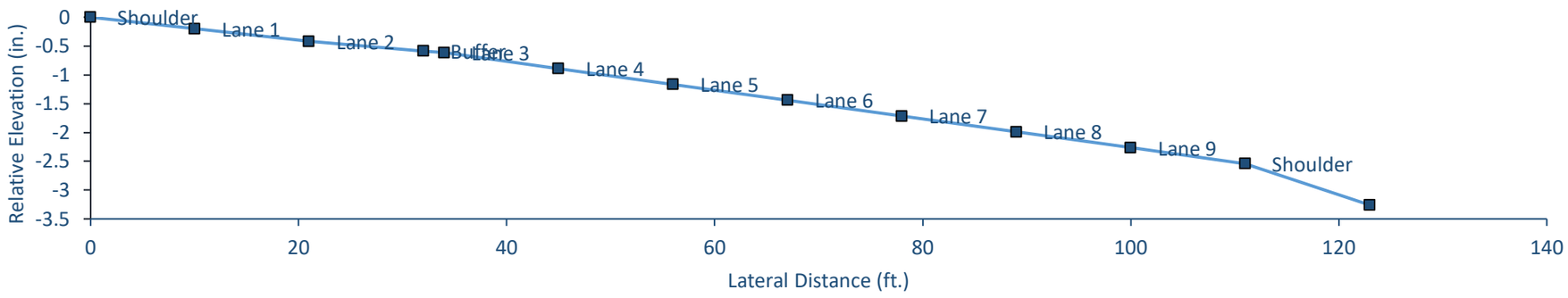
Select Analysis Option	Deterministic (Default)	: Show intermediate outputs? (e.g., Drainage Path Length)	Yes
Risk Analysis? (Per FDOT's Design Guidance)	Yes		

Pavement Inputs

Deterministic Analysis

		Pavement Texture (Please Select MTD or MPD below)	
Longitudinal Grade (%)	2.2	Mean Texture Depth (in.)	0.067
Surface Type	Open Graded Friction Course		
Permeability (in/hr)	0		

Plane Number	1	2	3	4	5	6	7	8	9	10	11	12
Description	Shoulder	Lane 1	Lane 2	Buffer	Lane 3	Lane 4	Lane 5	Lane 6	Lane 7	Lane 8	Lane 9	Shoulder
Design Speed (mph)		60	60		60	60	60	60	60	60	60	
Cross Slope (%)	2	2	1.5	1.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	6
Width (ft.)	10	11	11	2	11	11	11	11	11	11	11	12



Risk Analysis Results

(Based on Gallaway WFT and PAVDRN HPS Models)

Predicted Water Film Thickness (in.)

Plane Number	1	2	3	4	5	6	7	8	9	10	11	12
Intensity (in/hr)	Shoulder	Lane 1	Lane 2	Buffer	Lane 3	Lane 4	Lane 5	Lane 6	Lane 7	Lane 8	Lane 9	Shoulder
0.1		-0.051	-0.046		-0.044	-0.042	-0.040	-0.038	-0.036	-0.034	-0.032	
0.25		-0.041	-0.032		-0.029	-0.025	-0.022	-0.018	-0.015	-0.012	-0.009	
0.5		-0.028	-0.015		-0.011	-0.005	0.000	0.005	0.010	0.014	0.019	
1		-0.010	0.009		0.016	0.024	0.032	0.040	0.047	0.053	0.059	
2		0.017	0.046		0.055	0.068	0.079	0.090	0.101	0.110	0.120	
3		0.039	0.075		0.086	0.102	0.117	0.131	0.144	0.156	0.167	
4		0.057	0.099		0.113	0.132	0.149	0.165	0.180	0.195	0.209	

Predicted Driver Speed (mph)

Plane Number	1	2	3	4	5	6	7	8	9	10	11	12
Intensity (in/hr)	Shoulder	Lane 1	Lane 2	Buffer	Lane 3	Lane 4	Lane 5	Lane 6	Lane 7	Lane 8	Lane 9	Shoulder
0.1		60.0	60.0		60.0	60.0	60.0	60.0	60.0	60.0	60.0	
0.25		60.0	60.0		60.0	60.0	60.0	60.0	60.0	60.0	60.0	
0.5		54.0	54.0		54.0	54.0	54.0	54.0	54.0	54.0	54.0	
1		52.0	52.0		52.0	52.0	52.0	52.0	52.0	52.0	52.0	
2		48.0	48.0		48.0	48.0	48.0	48.0	48.0	48.0	48.0	
3		45.0	45.0		45.0	45.0	45.0	45.0	45.0	45.0	45.0	
4		45.0	45.0		45.0	45.0	45.0	45.0	45.0	45.0	45.0	

Predicted Hydroplaning Speed (mph)

Plane Number	1	2	3	4	5	6	7	8	9	10	11	12
Intensity (in/hr)	Shoulder	Lane 1	Lane 2	Buffer	Lane 3	Lane 4	Lane 5	Lane 6	Lane 7	Lane 8	Lane 9	Shoulder
0.1		999.0	999.0		999.0	999.0	999.0	999.0	999.0	999.0	999.0	
0.25		999.0	999.0		999.0	999.0	999.0	999.0	999.0	999.0	999.0	
0.5		999.0	999.0		999.0	999.0	246.6	101.7	86.0	78.1	73.1	
1		999.0	87.3		76.6	68.3	63.4	60.1	57.6	55.7	54.1	
2		74.6	57.9		55.2	52.3	50.2	48.5	53.8	53.4	53.1	

3		60.5	51.0		49.2	53.7	53.2	52.7	52.3	52.0	51.7	
4		54.6	53.8		53.3	52.7	52.1	51.7	51.4	51.0	50.8	

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

(X) NATIONAL HIGHWAY SYSTEM
(X) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

CRITERIA

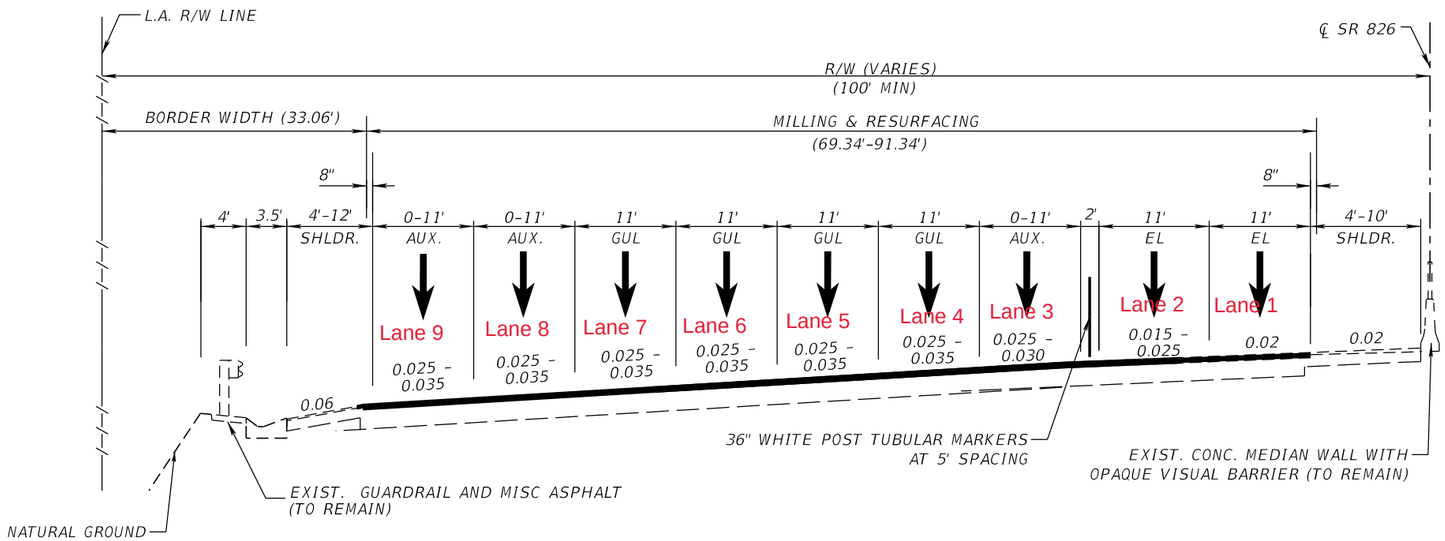
(X) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN EXCEPTION:
1. LANE WIDTH & SHOULDER WIDTH

DESIGN VARIATION:
1. SHOULDER WIDTH
2. CROSS SLOPE
3. EXPRESS LANE BUFFER SEPARATION WIDTH
4. BORDER WIDTH

TYPICAL SECTION No. 2



NOT TO SCALE

SR 826 SOUTHBOUND

STA. 467+49.78 TO STA. 497+17.00

LEGEND:

EL = EXPRESS LANES
GUL = GENERAL USE LANES
AUX = AUXILLIARY LANES

NOTES:

1. MATCH EXISTING CROSS SLOPE.

TRAFFIC DATA

CURRENT YEAR = 2020 AADT = 52,280 - 127,060
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = N/A%
DESIGN SPEED = 60 MPH
POSTED SPEED = 55 MPH

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-01	3

STATE PROJ. NO.	SHEET NO.
87260-3589	55
FPN 249113-1-52-01	

B.M. NO 72N
BRASS DISC IN CONC. WITH
WITNESS POST 2.0' WEST
STAMPED 87-88-G-72N
STA. 488+40. 91' RT
EL. 6.166

833' VC

END PROJECT
MATCH EXISTING PAVEMENT
STA. 494+22.94

steepest longitudinal slope -
Sta. 467+49.78 to Sta. 497+17.00

STATION EQUATION:
STA. 485+87.15 (BK.) =
STA. 485+83.25 (AHD.)

21.64
PVC +89.55
19.58
18.37 17.53 16.86 16.34 15.97 15.77 15.71 15.82 16.08 16.50 17.07 17.80 18.68 19.73 20.92 22.28
PVT +22.55
22.94
25.16

LOW POINT STA. 489+41.59, EL. 15.71

PROFILE GRADE

FROM S-147
CONST. 18" PIPE
FL 12.50
S-149
CONST. 24" PIPE
FL 12.00
S-151
CONST. 24" PIPE
FL 9.00
S-153
CONST. 24" PIPE
FL 8.80
S-154
FL 8.70
FL (-) 0.93
(EXISTING)

(-)2.200%
(-)2.200%
(+)3.006%

8.89

EXIST. GROUND
24" GM
16" WM
18" GM
16" WM
24" GM
18" GM

VPI +06.05
10.42

SCALE : 1" = 100' HORIZ.
1" = 10' VERT.

Mark A. Quam
10/14/98

REVISIONS											
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

PROFROOT.DGN
DATE : 09/25/98

Moreland Altobelli Associates, Inc.

FLORIDA DEPARTMENT OF TRANSPORTATION

S.R. 826 PROFILE
STA 485+00 TO STA 495+00

Hydroplaning Analysis Tool

General Inputs

FPID	447165-1-52-01		Roadway Section Number	SR 826	
District No.	6		Station	497+17.00 to	518+41.90
County	Miami-Dade		(Please Select Milepost or Station above)		
			Direction	South	

Analysis Options

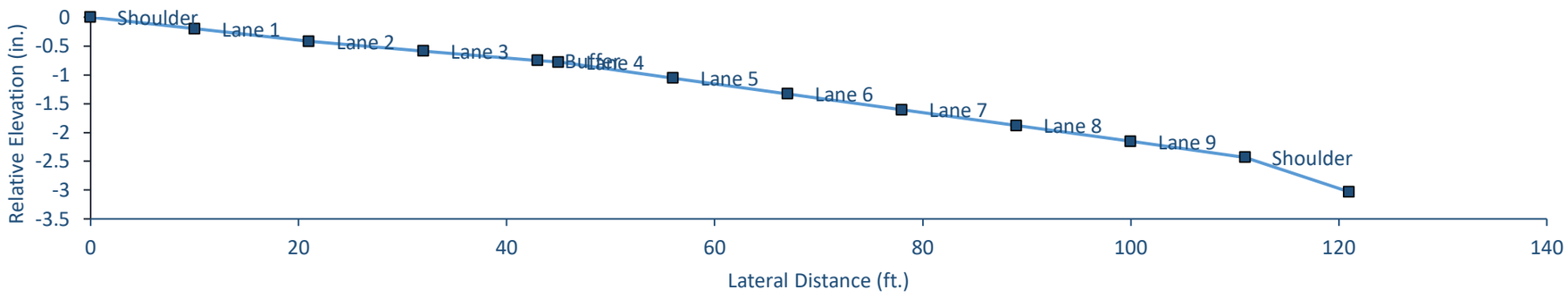
Select Analysis Option	Deterministic (Default)	: Show intermediate outputs? (e.g., Drainage Path Length)	Yes
Risk Analysis? (Per FDOT's Design Guidance)	Yes		

Pavement Inputs

Deterministic Analysis

		Pavement Texture (Please Select MTD or MPD below)	
Longitudinal Grade (%)	2.02	Mean Texture Depth (in.)	0.067
Surface Type	Open Graded Friction Course		
Permeability (in/hr)	0		

Plane Number	1	2	3	4	5	6	7	8	9	10	11	12
Description	Shoulder	Lane 1	Lane 2	Lane 3	Buffer	Lane 4	Lane 5	Lane 6	Lane 7	Lane 8	Lane 9	Shoulder
Design Speed (mph)		60	60	60		60	60	60	60	60	60	
Cross Slope (%)	2	2	1.5	1.5	1.5	2.5	2.5	2.5	2.5	2.5	2.5	6
Width (ft.)	10	11	11	11	2	11	11	11	11	11	11	10



Risk Analysis Results

(Based on Gallaway WFT and PAVDRN HPS Models)

Predicted Water Film Thickness (in.)

Plane Number	1	2	3	4	5	6	7	8	9	10	11	12
Intensity (in/hr)	Shoulder	Lane 1	Lane 2	Lane 3	Buffer	Lane 4	Lane 5	Lane 6	Lane 7	Lane 8	Lane 9	Shoulder
0.1		-0.051	-0.046	-0.042		-0.042	-0.039	-0.037	-0.036	-0.034	-0.032	
0.25		-0.041	-0.032	-0.026		-0.024	-0.021	-0.018	-0.014	-0.011	-0.009	
0.5		-0.029	-0.016	-0.006		-0.004	0.001	0.006	0.011	0.015	0.019	
1		-0.010	0.009	0.023		0.026	0.034	0.041	0.048	0.054	0.060	
2		0.017	0.045	0.066		0.070	0.081	0.092	0.102	0.112	0.121	
3		0.038	0.074	0.100		0.105	0.119	0.133	0.146	0.158	0.169	
4		0.056	0.099	0.129		0.135	0.152	0.168	0.183	0.197	0.210	

Predicted Driver Speed (mph)

Plane Number	1	2	3	4	5	6	7	8	9	10	11	12
Intensity (in/hr)	Shoulder	Lane 1	Lane 2	Lane 3	Buffer	Lane 4	Lane 5	Lane 6	Lane 7	Lane 8	Lane 9	Shoulder
0.1		60.0	60.0	60.0		60.0	60.0	60.0	60.0	60.0	60.0	
0.25		60.0	60.0	60.0		60.0	60.0	60.0	60.0	60.0	60.0	
0.5		54.0	54.0	54.0		54.0	54.0	54.0	54.0	54.0	54.0	
1		52.0	52.0	52.0		52.0	52.0	52.0	52.0	52.0	52.0	
2		48.0	48.0	48.0		48.0	48.0	48.0	48.0	48.0	48.0	
3		45.0	45.0	45.0		45.0	45.0	45.0	45.0	45.0	45.0	
4		45.0	45.0	45.0		45.0	45.0	45.0	45.0	45.0	45.0	

Predicted Hydroplaning Speed (mph)

Plane Number	1	2	3	4	5	6	7	8	9	10	11	12
Intensity (in/hr)	Shoulder	Lane 1	Lane 2	Lane 3	Buffer	Lane 4	Lane 5	Lane 6	Lane 7	Lane 8	Lane 9	Shoulder
0.1		999.0	999.0	999.0		999.0	999.0	999.0	999.0	999.0	999.0	
0.25		999.0	999.0	999.0		999.0	999.0	999.0	999.0	999.0	999.0	
0.5		999.0	999.0	999.0		999.0	152.3	97.9	84.5	77.3	72.5	
1		999.0	88.3	69.3		67.2	62.7	59.6	57.3	55.4	53.9	
2		75.3	58.1	52.7		51.9	49.9	48.3	53.7	53.3	53.0	

3		60.8	51.1	53.8		53.6	53.1	52.6	52.2	51.9	51.6	
4		54.8	53.9	52.7		52.5	52.1	51.7	51.3	51.0	50.7	

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( ) C1 : NATURAL
( ) C2 : RURAL
( ) C2T : RURAL TOWN
( ) C3R : SUBURBAN RES.
( ) C3C : SUBURBAN COMM.
( ) C4 : URBAN GENERAL
( ) C5 : URBAN CENTER
( ) C6 : URBAN CORE
(X) N/A : L.A. FACILITY

FUNCTIONAL CLASSIFICATION

( ) INTERSTATE
(X) FREEWAY/EXPWY.
( ) PRINCIPAL ARTERIAL
( ) MINOR ARTERIAL
( ) MAJOR COLLECTOR
( ) MINOR COLLECTOR
( ) LOCAL

HIGHWAY SYSTEM

(X) NATIONAL HIGHWAY SYSTEM
(X) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

CRITERIA

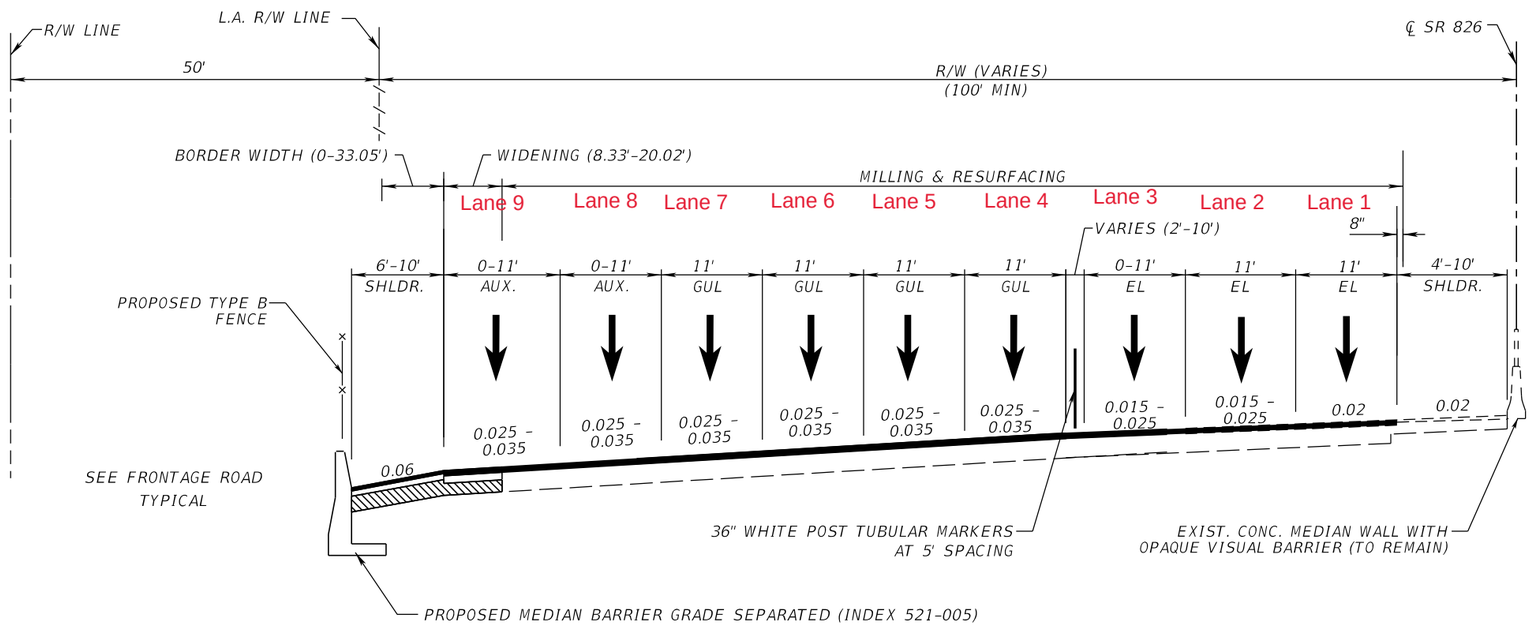
(X) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN EXCEPTION:
1. LANE WIDTH & SHOULDER WIDTH

DESIGN VARIATION:
1. SHOULDER WIDTH
2. CROSS SLOPE
3. EXPRESS LANE BUFFER SEPARATION WIDTH
4. BORDER WIDTH

TYPICAL SECTION No. 3



NOT TO SCALE

SR 826 SOUTHBOUND

STA. 497+17.00 TO STA. 518+41.90

LEGEND:

EL = EXPRESS LANES
GUL = GENERAL USE LANES
AUX = AUXILLIARY LANES

NOTES:

1. MATCH EXISTING CROSS SLOPE.

TRAFFIC DATA

CURRENT YEAR = 2020 AADT = 52,280 - 127,060
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = N/A%
DESIGN SPEED = 60 MPH
POSTED SPEED = 55 MPH

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-01	4

Critical Longitudinal Slope for Section 497+17.00 to 518+41.90 is 2.02%

40
35
30
25
20
15
10
5

El 17.04

Longitudinal Slope =
17.04-15.02 = 2.02%

El 15.02

Existing Profile
Created from as-built survey

515+00
516+00
517+00
518+00
519+00
520+00
521+00

REVISIONS					STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	

Hydroplaning Analysis Tool

General Inputs

FPID	447165-1-52-01		Roadway Section Number	SR 826	
District No.	6		Station	518+41.90 to	541+65.30
County	Miami-Dade		(Please Select Milepost or Station above)		
			Direction	South	

Analysis Options

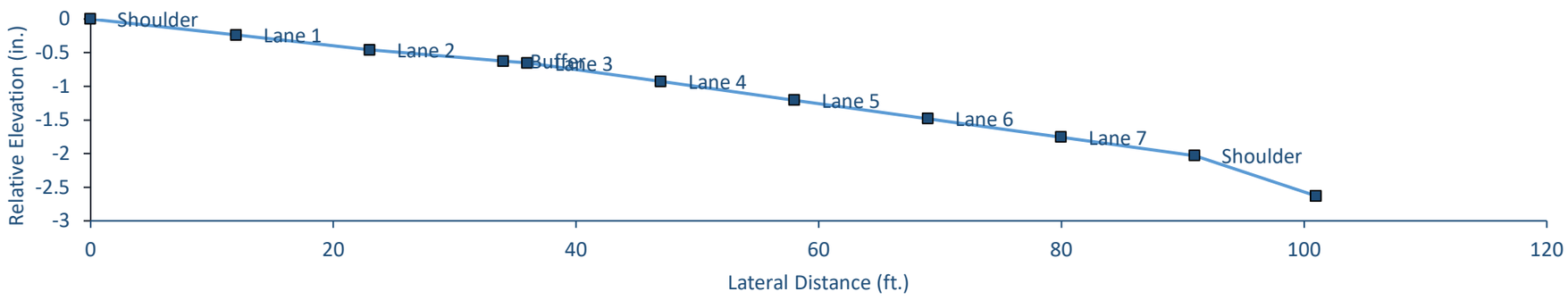
Select Analysis Option	Deterministic (Default)	: Show intermediate outputs? (e.g., Drainage Path Length)	Yes
Risk Analysis? (Per FDOT's Design Guidance)	Yes		

Pavement Inputs

Deterministic Analysis

Longitudinal Grade (%)	2.7	Pavement Texture (Please Select MTD or MPD below)	
Surface Type	Open Graded Friction Course	Mean Texture Depth (in.)	0.067
Permeability (in/hr)	0		

Plane Number	1	2	3	4	5	6	7	8	9	10	11	12
Description	Shoulder	Lane 1	Lane 2	Buffer	Lane 3	Lane 4	Lane 5	Lane 6	Lane 7	Shoulder		
Design Speed (mph)		60	60		60	60	60	60	60			
Cross Slope (%)	2	2	1.5	1.5	2.5	2.5	2.5	2.5	2.5	6		
Width (ft.)	12	11	11	2	11	11	11	11	11	10		



Risk Analysis Results

(Based on Gallaway WFT and PAVDRN HPS Models)

Predicted Water Film Thickness (in.)

Plane Number	1	2	3	4	5	6	7	8	9	10	11	12
Intensity (in/hr)	Shoulder	Lane 1	Lane 2	Buffer	Lane 3	Lane 4	Lane 5	Lane 6	Lane 7	Shoulder		
0.1		-0.050	-0.045		-0.043	-0.041	-0.039	-0.037	-0.035			
0.25		-0.039	-0.030		-0.027	-0.023	-0.020	-0.016	-0.013			
0.5		-0.026	-0.013		-0.008	-0.002	0.003	0.008	0.013			
1		-0.006	0.013		0.020	0.028	0.036	0.044	0.051			
2		0.023	0.051		0.061	0.074	0.085	0.096	0.107			
3		0.046	0.081		0.094	0.110	0.125	0.138	0.151			
4		0.066	0.107		0.122	0.141	0.158	0.174	0.189			

Predicted Driver Speed (mph)

Plane Number	1	2	3	4	5	6	7	8	9	10	11	12
Intensity (in/hr)	Shoulder	Lane 1	Lane 2	Buffer	Lane 3	Lane 4	Lane 5	Lane 6	Lane 7	Shoulder		
0.1		60.0	60.0		60.0	60.0	60.0	60.0	60.0			
0.25		60.0	60.0		60.0	60.0	60.0	60.0	60.0			
0.5		54.0	54.0		54.0	54.0	54.0	54.0	54.0			
1		52.0	52.0		52.0	52.0	52.0	52.0	52.0			
2		48.0	48.0		48.0	48.0	48.0	48.0	48.0			
3		45.0	45.0		45.0	45.0	45.0	45.0	45.0			
4		45.0	45.0		45.0	45.0	45.0	45.0	45.0			

Predicted Hydroplaning Speed (mph)

Plane Number	1	2	3	4	5	6	7	8	9	10	11	12
Intensity (in/hr)	Shoulder	Lane 1	Lane 2	Buffer	Lane 3	Lane 4	Lane 5	Lane 6	Lane 7	Shoulder		
0.1		999.0	999.0		999.0	999.0	999.0	999.0	999.0			
0.25		999.0	999.0		999.0	999.0	999.0	999.0	999.0			
0.5		999.0	999.0		999.0	999.0	117.6	91.1	80.7			
1		999.0	80.6		71.9	65.5	61.5	58.6	56.4			
2		69.3	56.3		53.7	51.1	49.2	54.0	53.5			

3		57.8	49.9		54.1	53.4	52.9	52.5	52.1			
4		52.7	53.5		53.0	52.4	51.9	51.5	51.2			

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

(X) NATIONAL HIGHWAY SYSTEM
(X) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

CRITERIA

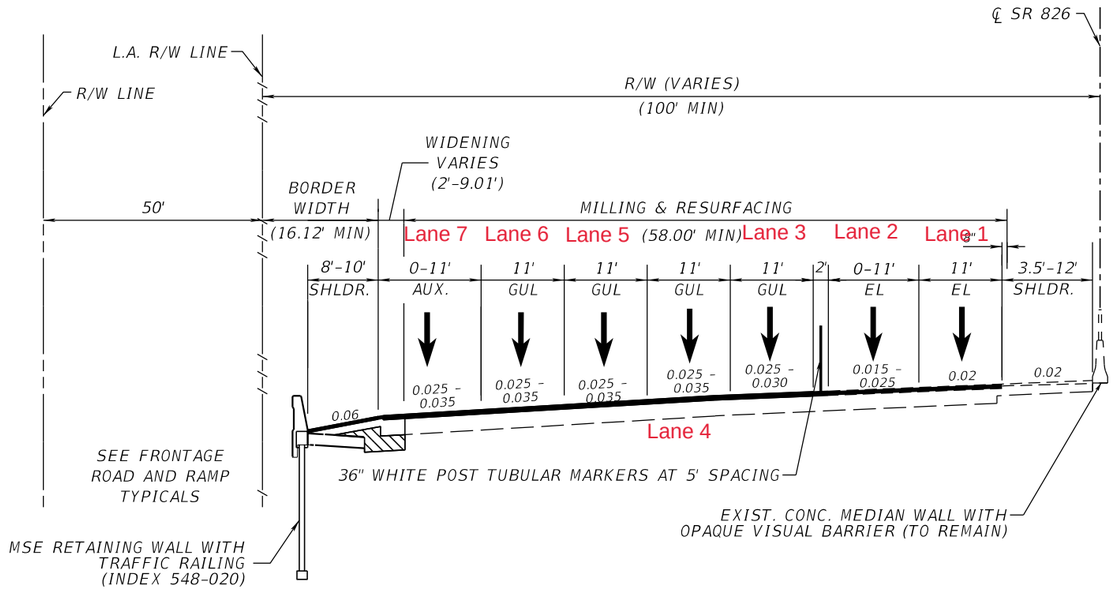
(X) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN EXCEPTION
1. LANE & SHOULDER WIDTH

DESIGN VARIATION
1. CROSS SLOPE
2. EXPRESS LANE BUFFER SEPARATION WIDTH
3. BORDER WIDTH

TYPICAL SECTION No. 4



NOT TO SCALE

SR 826 SOUTHBOUND
STA. 518+41.90 TO STA. 541+65.30

LEGEND:
EL = EXPRESS LANES
GUL = GENERAL USE LANES
AUX = AUXILARY LANES

NOTES;
1. MATCH EXISTING CROSS SLOPES

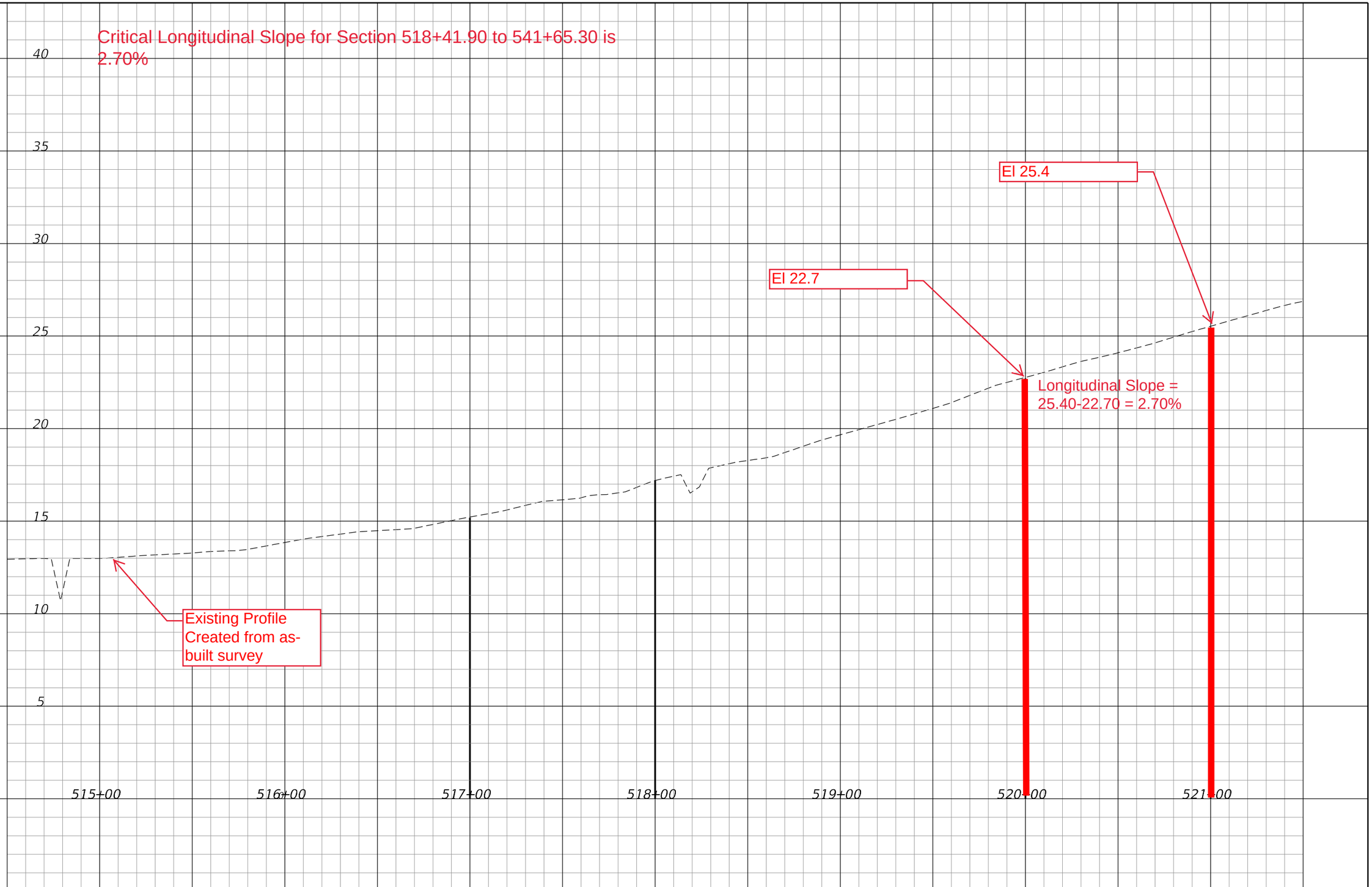
TRAFFIC DATA

CURRENT YEAR = 2020 AADT = **52,280 - 127,060**
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = 6.6%
DESIGN SPEED = 60 MPH
POSTED SPEED = 55 MPH

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-02	5

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

Critical Longitudinal Slope for Section 518+41.90 to 541+65.30 is 2.70%



REVISIONS					STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	

Hydroplaning Analysis Tool

General Inputs

FPID	447165-1-52-01		Roadway Section Number	SR 826	
District No.	6		Station	520+08.96 to	538+48.37
County	Miami-Dade		(Please Select Milepost or Station above)		
			Direction	North	

Analysis Options

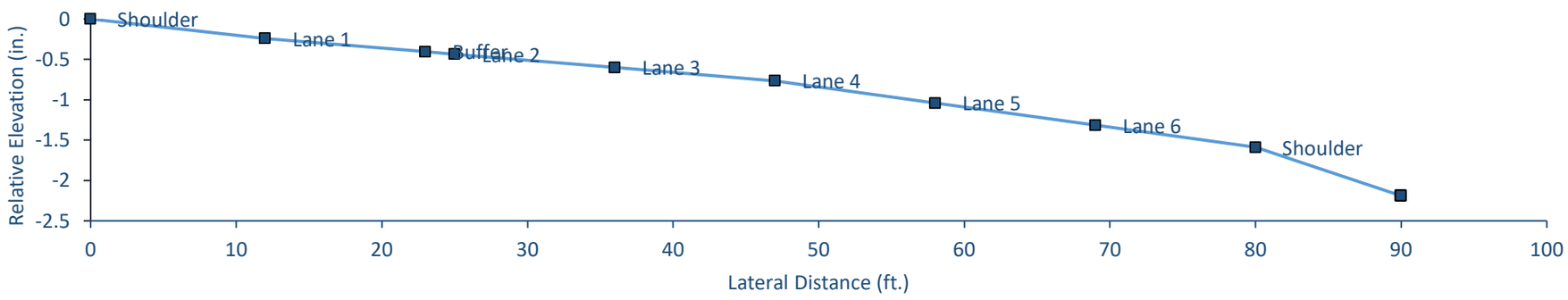
Select Analysis Option	Deterministic (Default)	: Show intermediate outputs? (e.g., Drainage Path Length)	Yes
Risk Analysis? (Per FDOT's Design Guidance)	Yes		

Pavement Inputs

Deterministic Analysis

Longitudinal Grade (%)	2.76	Pavement Texture (Please Select MTD or MPD below)	
Surface Type	Open Graded Friction Course	Mean Texture Depth (in.)	0.067
Permeability (in/hr)	0		

Plane Number	1	2	3	4	5	6	7	8	9	10	11	12
Description	Shoulder	Lane 1	Buffer	Lane 2	Lane 3	Lane 4	Lane 5	Lane 6	Shoulder			
Design Speed (mph)		60		60	60	60	60	60				
Cross Slope (%)	2	1.5	1.5	1.5	1.5	2.5	2.5	2.5	6			
Width (ft.)	12	11	2	11	11	11	11	11	10			



Risk Analysis Results

(Based on Gallaway WFT and PAVDRN HPS Models)

Predicted Water Film Thickness (in.)

Plane Number	1	2	3	4	5	6	7	8	9	10	11	12
Intensity (in/hr)	Shoulder	Lane 1	Buffer	Lane 2	Lane 3	Lane 4	Lane 5	Lane 6	Shoulder			
0.1		-0.049		-0.044	-0.040	-0.039	-0.037	-0.035				
0.25		-0.037		-0.028	-0.022	-0.021	-0.017	-0.014				
0.5		-0.022		-0.009	0.000	0.001	0.007	0.011				
1		-0.001		0.018	0.032	0.034	0.042	0.049				
2		0.031		0.059	0.079	0.082	0.093	0.104				
3		0.056		0.091	0.116	0.120	0.134	0.147				
4		0.078		0.119	0.148	0.153	0.170	0.185				

Predicted Driver Speed (mph)

Plane Number	1	2	3	4	5	6	7	8	9	10	11	12
Intensity (in/hr)	Shoulder	Lane 1	Buffer	Lane 2	Lane 3	Lane 4	Lane 5	Lane 6	Shoulder			
0.1		60.0		60.0	60.0	60.0	60.0	60.0				
0.25		60.0		60.0	60.0	60.0	60.0	60.0				
0.5		54.0		54.0	54.0	54.0	54.0	54.0				
1		52.0		52.0	52.0	52.0	52.0	52.0				
2		48.0		48.0	48.0	48.0	48.0	48.0				
3		45.0		45.0	45.0	45.0	45.0	45.0				
4		45.0		45.0	45.0	45.0	45.0	45.0				

Predicted Hydroplaning Speed (mph)

Plane Number	1	2	3	4	5	6	7	8	9	10	11	12
Intensity (in/hr)	Shoulder	Lane 1	Buffer	Lane 2	Lane 3	Lane 4	Lane 5	Lane 6	Shoulder			
0.1		999.0		999.0	999.0	999.0	999.0	999.0				
0.25		999.0		999.0	999.0	999.0	999.0	999.0				
0.5		999.0		999.0	999.0	142.1	95.8	83.1				
1		999.0		73.3	63.6	62.5	59.3	57.0				
2		64.1		54.2	50.3	49.7	48.1	53.7				

3		54.9		48.4	53.2	53.0	52.6	52.2				
4		50.5		53.1	52.2	52.0	51.6	51.3				

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

(X)	NATIONAL HIGHWAY SYSTEM
(X)	STRATEGIC INTERMODAL SYSTEM
(X)	STATE HIGHWAY SYSTEM
( )	OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X)	1 - FREEWAY
( )	2 - RESTRICTIVE w/Service Roads
( )	3 - RESTRICTIVE w/660 ft. Connection Spacing
( )	4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( )	5 - RESTRICTIVE w/440 ft. Connection Spacing
( )	6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( )	7 - BOTH MEDIAN TYPES

CRITERIA

(X)	NEW CONSTRUCTION / RECONSTRUCTION
( )	RESURFACING (LA FACILITIES)
( )	RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

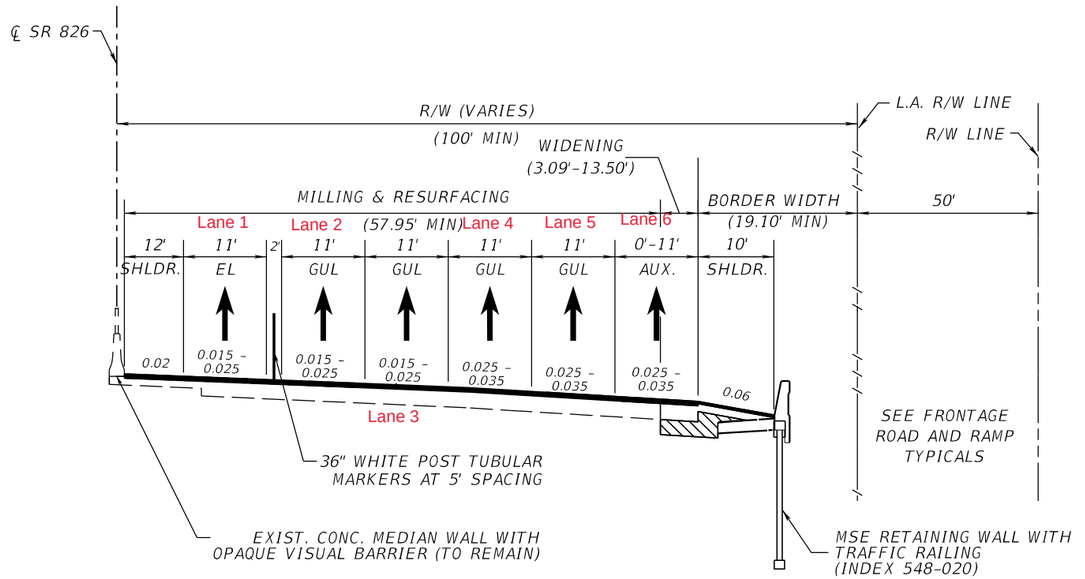
DESIGN EXCEPTION

1. LANE WIDTH

DESIGN VARIATION

1. SHOULDER WIDTH
2. CROSS SLOPE
3. EXPRESS LANE BUFFER SEPARATION WIDTH
4. BORDER WIDTH

TYPICAL SECTION No. 5



NOT TO SCALE

SR 826 NORTHBOUND

STA. 520+08.96 TO STA. 538+48.37

LEGEND:
EL = EXPRESS LANES
GUL = GENERAL USE LANES
AUX = AUXILARY LANES

NOTES;
1. MATCH EXISTING CROSS SLOPES

TRAFFIC DATA

CURRENT YEAR = 2020 AADT = **52,280 - 127,060**
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = 6.6%
DESIGN SPEED = 60 MPH
POSTED SPEED = 55 MPH

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-02	6

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

Critical Longitudinal Slope for Section 520+08.96 to 538+48.37 is 2.76%

40
35
30
25
20
15
10
5

El 19.30

El 16.54

Longitudinal Slope =
19.30-16.54 = 2.76%

Existing Profile
Created from as-built survey

538+00
539+00
540+00
541+00
542+00
543+00
544+00

REVISIONS					STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY	FINANCIAL PROJECT ID	

Hydroplaning Analysis Tool

General Inputs

FPID	447165-1-52-01	Roadway Section Number	SR 826
District No.	6	Station	541+65.30/726+43.34 to 612+24.77/763+11.02
County	Miami-Dade	(Please Select Milepost or Station above)	
		Direction	South

Analysis Options

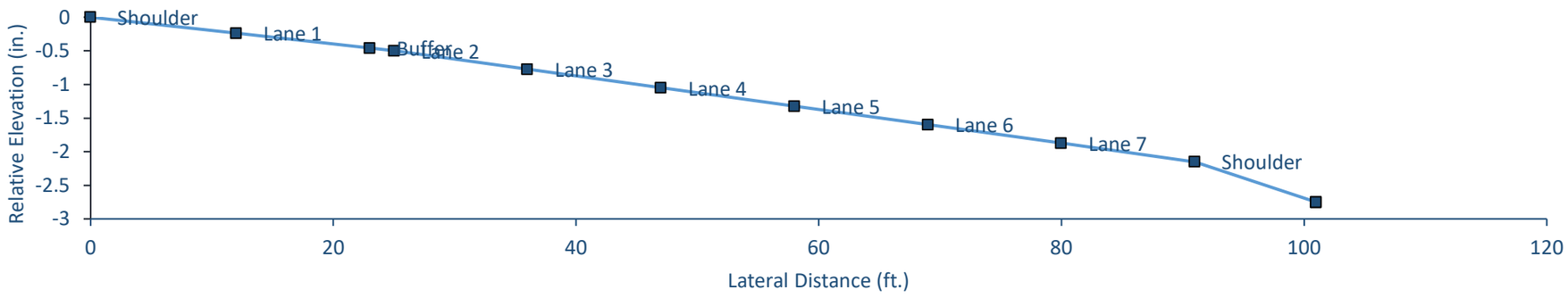
Select Analysis Option	Deterministic (Default)	: Show intermediate outputs? (e.g., Drainage Path Length)	Yes
Risk Analysis? (Per FDOT's Design Guidance)	Yes		

Pavement Inputs

Deterministic Analysis

Longitudinal Grade (%)	3	Pavement Texture (Please Select MTD or MPD below)	
Surface Type	Open Graded Friction Course	Mean Texture Depth (in.)	0.067
Permeability (in/hr)	0		

Plane Number	1	2	3	4	5	6	7	8	9	10	11	12
Description	Shoulder	Lane 1	Buffer	Lane 2	Lane 3	Lane 4	Lane 5	Lane 6	Lane 7	Shoulder		
Design Speed (mph)		60		60	60	60	60	60	60			
Cross Slope (%)	2	2	2	2.5	2.5	2.5	2.5	2.5	2.5	6		
Width (ft.)	12	11	2	11	11	11	11	11	11	10		



Risk Analysis Results

(Based on Gallaway WFT and PAVDRN HPS Models)

Predicted Water Film Thickness (in.)

Plane Number	1	2	3	4	5	6	7	8	9	10	11	12
Intensity (in/hr)	Shoulder	Lane 1	Buffer	Lane 2	Lane 3	Lane 4	Lane 5	Lane 6	Lane 7	Shoulder		
0.1		-0.050		-0.047	-0.044	-0.042	-0.039	-0.037	-0.035			
0.25		-0.039		-0.033	-0.029	-0.024	-0.021	-0.017	-0.014			
0.5		-0.025		-0.017	-0.010	-0.004	0.001	0.007	0.011			
1		-0.005		0.007	0.017	0.026	0.034	0.042	0.049			
2		0.024		0.042	0.057	0.070	0.082	0.093	0.104			
3		0.047		0.070	0.088	0.105	0.120	0.134	0.148			
4		0.067		0.094	0.116	0.135	0.153	0.170	0.185			

Predicted Driver Speed (mph)

Plane Number	1	2	3	4	5	6	7	8	9	10	11	12
Intensity (in/hr)	Shoulder	Lane 1	Buffer	Lane 2	Lane 3	Lane 4	Lane 5	Lane 6	Lane 7	Shoulder		
0.1		60.0		60.0	60.0	60.0	60.0	60.0	60.0			
0.25		60.0		60.0	60.0	60.0	60.0	60.0	60.0			
0.5		54.0		54.0	54.0	54.0	54.0	54.0	54.0			
1		52.0		52.0	52.0	52.0	52.0	52.0	52.0			
2		48.0		48.0	48.0	48.0	48.0	48.0	48.0			
3		45.0		45.0	45.0	45.0	45.0	45.0	45.0			
4		45.0		45.0	45.0	45.0	45.0	45.0	45.0			

Predicted Hydroplaning Speed (mph)

Plane Number	1	2	3	4	5	6	7	8	9	10	11	12
Intensity (in/hr)	Shoulder	Lane 1	Buffer	Lane 2	Lane 3	Lane 4	Lane 5	Lane 6	Lane 7	Shoulder		
0.1		999.0		999.0	999.0	999.0	999.0	999.0	999.0			
0.25		999.0		999.0	999.0	999.0	999.0	999.0	999.0			
0.5		999.0		999.0	999.0	999.0	142.6	95.6	82.9			
1		999.0		94.7	75.0	67.2	62.5	59.3	56.9			
2		68.5		59.2	54.8	51.9	49.8	48.1	53.6			

3		57.4		51.9	48.8	53.6	53.0	52.6	52.2			
4		52.4		48.0	53.2	52.5	52.0	51.6	51.3			

PROJECT CONTROLS

CONTEXT CLASSIFICATION

( )	C1 : NATURAL	( )	C3C : SUBURBAN COMM.
( )	C2 : RURAL	( )	C4 : URBAN GENERAL
( )	C2T : RURAL TOWN	( )	C5 : URBAN CENTER
( )	C3R : SUBURBAN RES.	( )	C6 : URBAN CORE
(X)	N/A : L.A. FACILITY		

FUNCTIONAL CLASSIFICATION

( )	INTERSTATE	( )	MAJOR COLLECTOR
(X)	FREEWAY/EXPWY.	( )	MINOR COLLECTOR
( )	PRINCIPAL ARTERIAL	( )	LOCAL
( )	MINOR ARTERIAL		

HIGHWAY SYSTEM

(X) NATIONAL HIGHWAY SYSTEM
(X) STRATEGIC INTERMODAL SYSTEM
(X) STATE HIGHWAY SYSTEM
( ) OFF-STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

CRITERIA

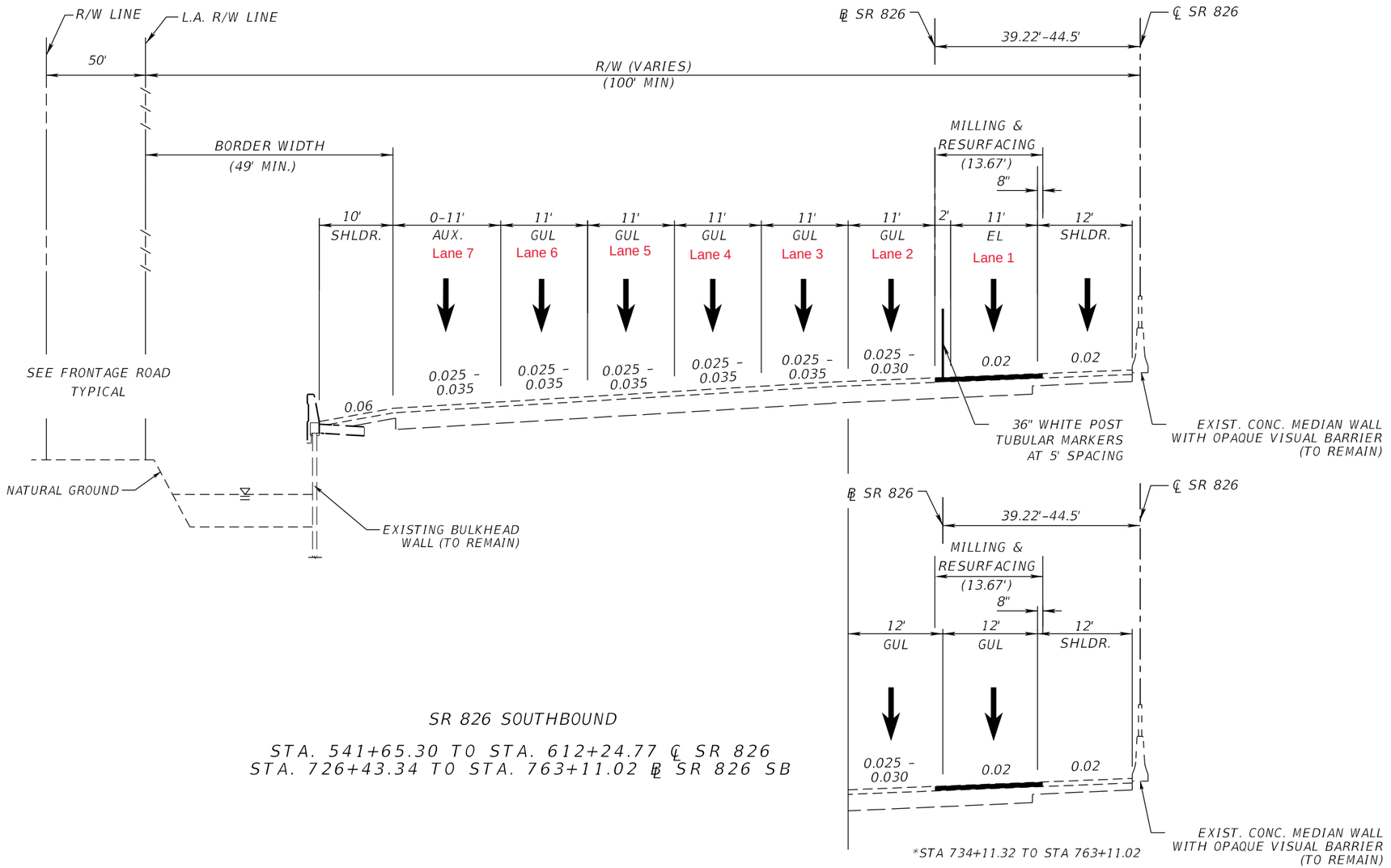
(X) NEW CONSTRUCTION / RECONSTRUCTION
( ) RESURFACING (LA FACILITIES)
( ) RRR (ARTERIALS & COLLECTORS)

POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION:

DESIGN EXCEPTION:
1. LANE WIDTH & SHOULDER WIDTH

DESIGN VARIATION:
1. SHOULDER WIDTH
2. CROSS SLOPE
3. EXPRESS LANE BUFFER SEPARATION WIDTH
4. BORDER WIDTH

TYPICAL SECTION No. 6



SR 826 SOUTHBOUND

STA. 541+65.30 TO STA. 612+24.77 ℄ SR 826
STA. 726+43.34 TO STA. 763+11.02 ℄ SR 826 SB

NOT TO SCALE

LEGEND:

EL = EXPRESS LANES
GUL = GENERAL USE LANES
AUX = AUXILLIARY LANES

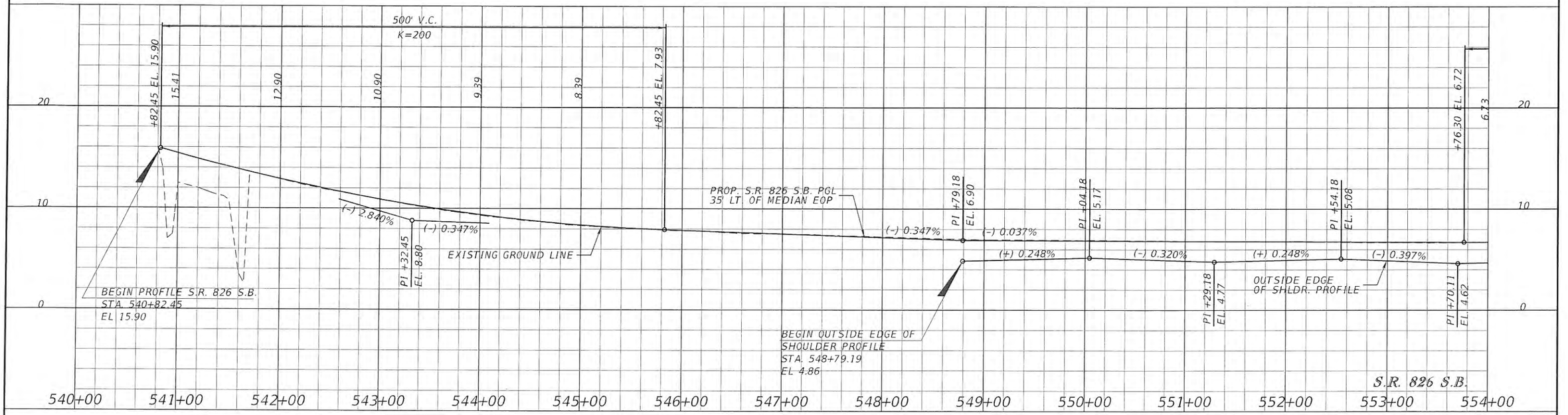
NOTES:

1. MATCH EXISTING CROSS SLOPE.

TRAFFIC DATA

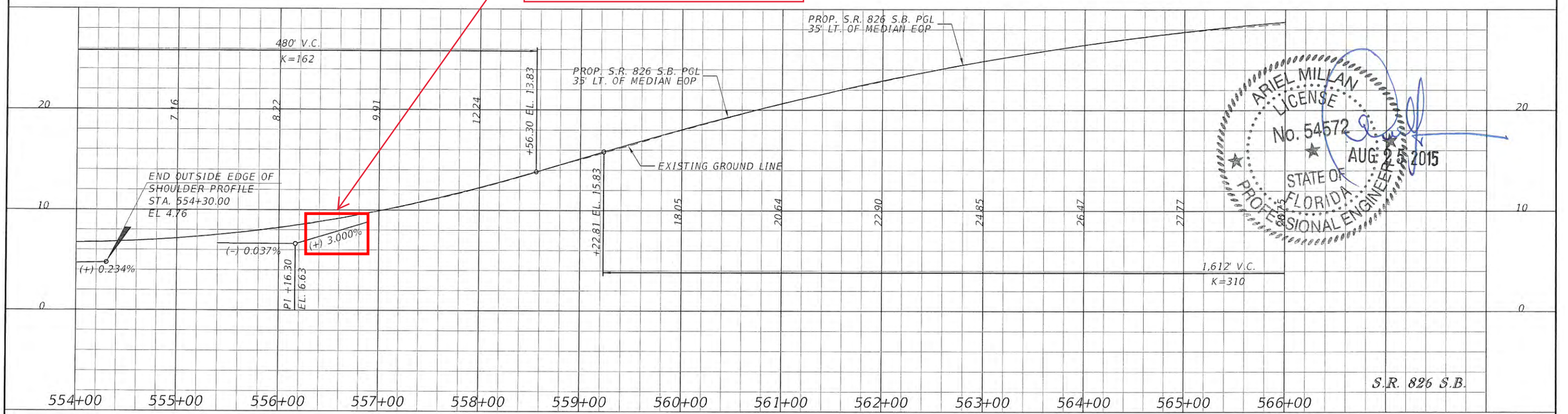
CURRENT YEAR = 2020 AADT = 52,280 - 127,060
ESTIMATED OPENING YEAR = 2022 AADT = N/A
ESTIMATED DESIGN YEAR = 2036 AADT = 381,000
K = 7.59% D = 50.0% T = 6.6% (24 HOUR)
DESIGN HOUR T = N/A%
DESIGN SPEED = 60 MPH
POSTED SPEED = 55 MPH

FINANCIAL PROJECT ID	SHEET NO.
447165-1-52-01	7



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

Steepest longitudinal slope -
Sta. 541+65.30/726+43.34 to
Sta. 612+24.77/763+11.02



SCALE: 1" = 100' HORIZONTAL
1" = 10' VERTICAL

ARIEL MILLAN
LICENSE
No. 54572
STATE OF
FLORIDA
PROFESSIONAL ENGINEER
AUG. 25 2015

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

BCC Engineering, Inc.
Ariel Millan
P.E. License No. 54572
7300 N Kendall Drive, Suite 400. Miami, Florida 33156
Phone: (305) 670-2350 Fax: (305) 670-2351
Certificate of Authorization No. 7184

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
826	MIAMI-DADE	432687-1-52-01

ROADWAY PROFILES

SHEET NO. 2A-44

gdragoni 8/25/2015 9:48:17 AM K:\43268715201\roadway\Segment 2A\PROFRD22.dgn

APPENDIX J
Design Aids

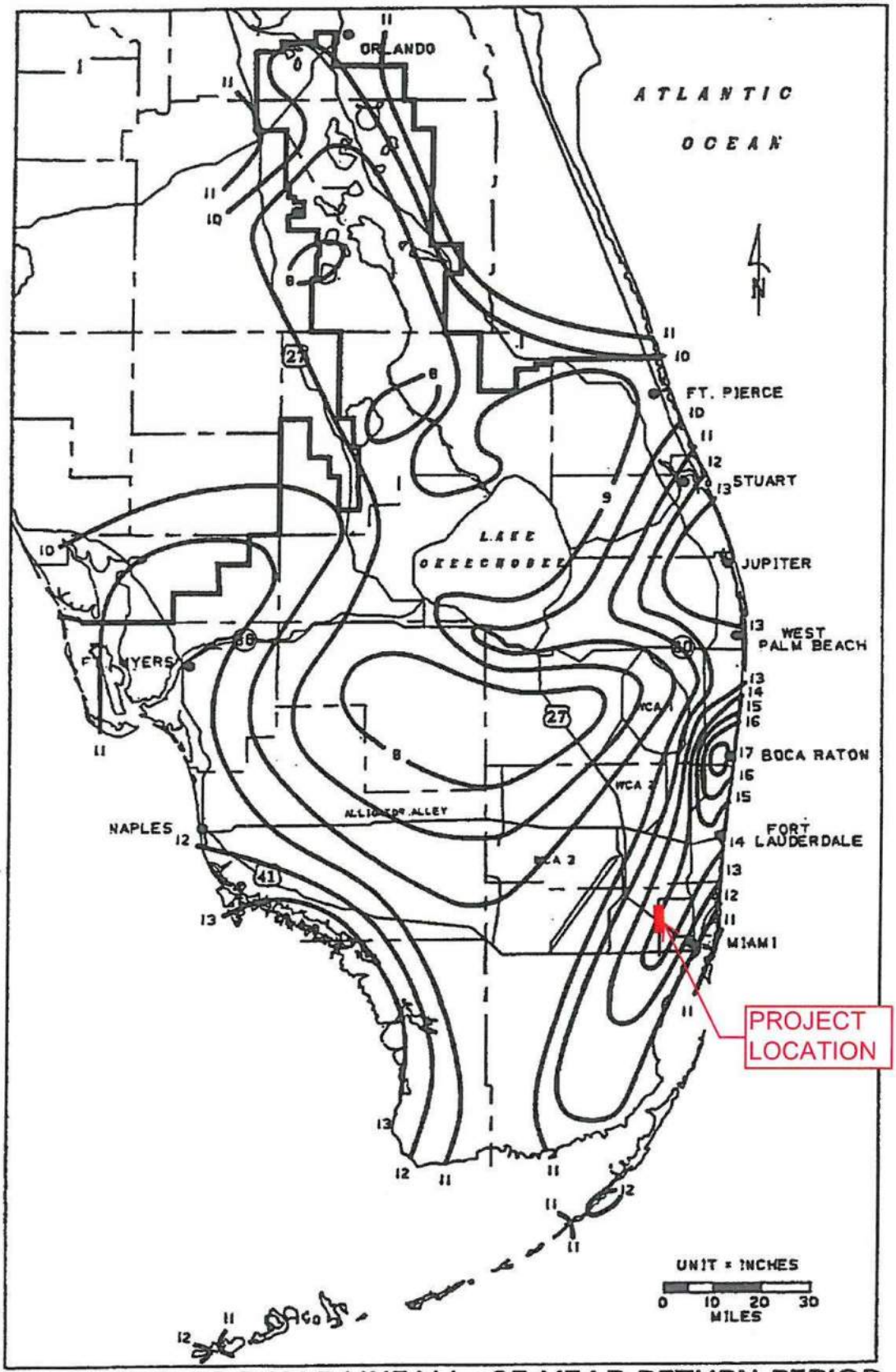
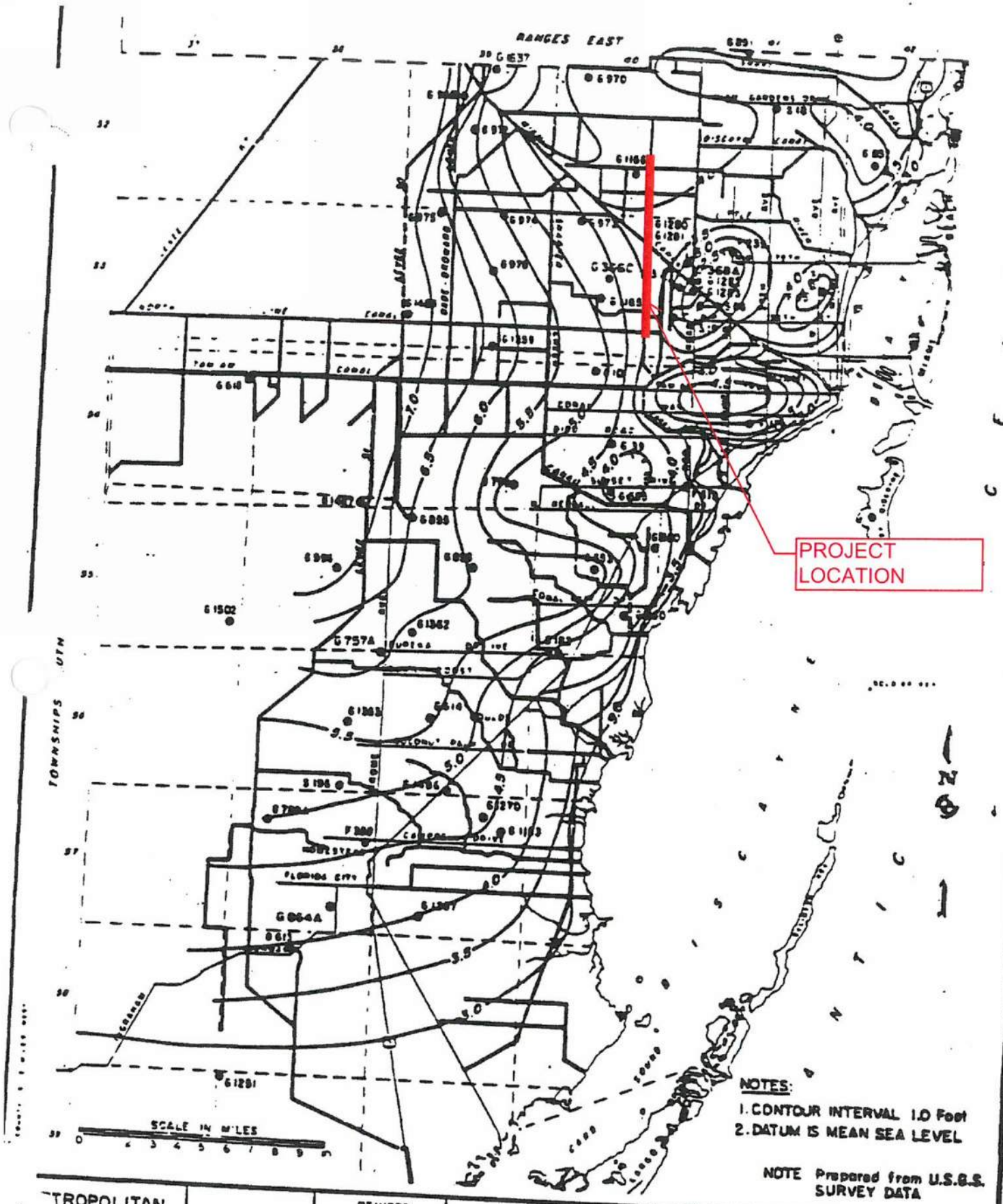
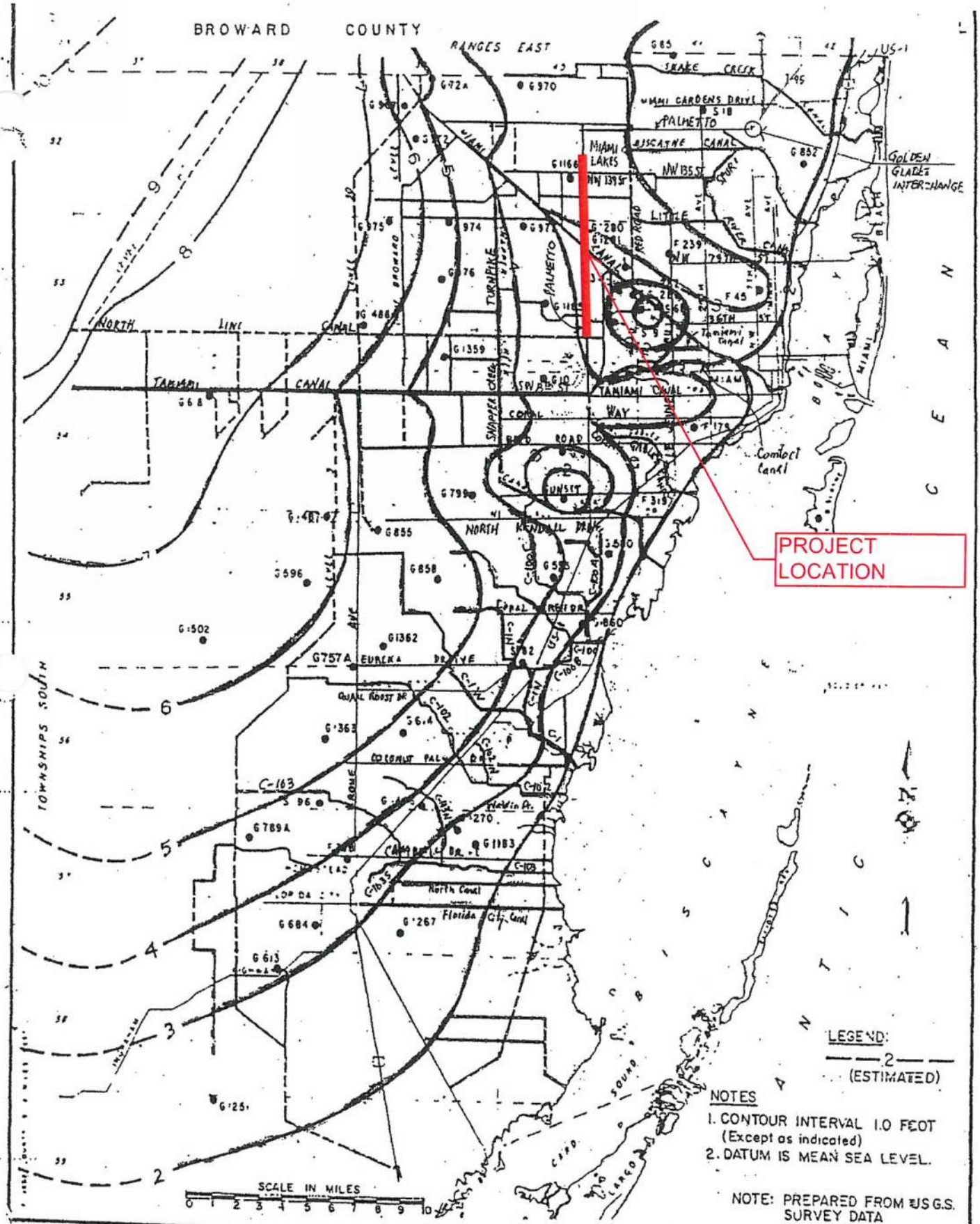


FIGURE C-8. 3-DAY RAINFALL: 25-YEAR RETURN PERIOD

Figure C-8



METROPOLITAN DADE COUNTY PUBLIC WORKS DEPARTMENT	APPROVED	REVISED	DESIGN STANDARDS	W.C. 2.1
	6/5/72	2/19/75 4/14/77 2/7/83	AVERAGE YEARLY HIGHEST GROUND WATER LEVEL 1965 - 78	SHEET 1 OF 1



METROPOLITAN DADE COUNTY PUBLIC WORKS DEPARTMENT	APPROVED 4/5/72	REVISED 2/19/75 4/14/77	DESIGN STANDARDS AVERAGE OCTOBER GROUND WATER LEVEL 1960–75	W.C. 2.2 SHEET 1 OF 1

Table T-6
Definitions Of Four SCS Hydrologic Soil Groups

Hydrologic Soil Group	Definition
A	Low Runoff Potential Soils having high infiltration rates even when thoroughly wetted, consisting chiefly of deep, well-to-excessively-drained sands or gravels. These soils have a high rate of water transmission.
B	Moderately Low Runoff Potential Soils having moderate infiltration rates when thoroughly wetted and consisting chiefly of moderately deep, to deep, moderately fine to moderately coarse textures. These soils have a moderate rate of water transmission.
C	Moderately High Runoff Potential Soils having slow infiltration rates when thoroughly wetted and consisting chiefly of soils with a layer that impedes downward movement of water, soils with moderate fine to fine texture, or soils with moderate water tables. These soils have a slow rate of water transmission.
D	High Runoff Potential Soils having very slow infiltration rates when thoroughly wetted and consisting chiefly of clay soils with high swelling potential, soils with a permanent high water table, soils with a clay pan or clay layer at or near the surface, and shallow soils over nearly impervious material. These soils have a very slow rate of water transmission.

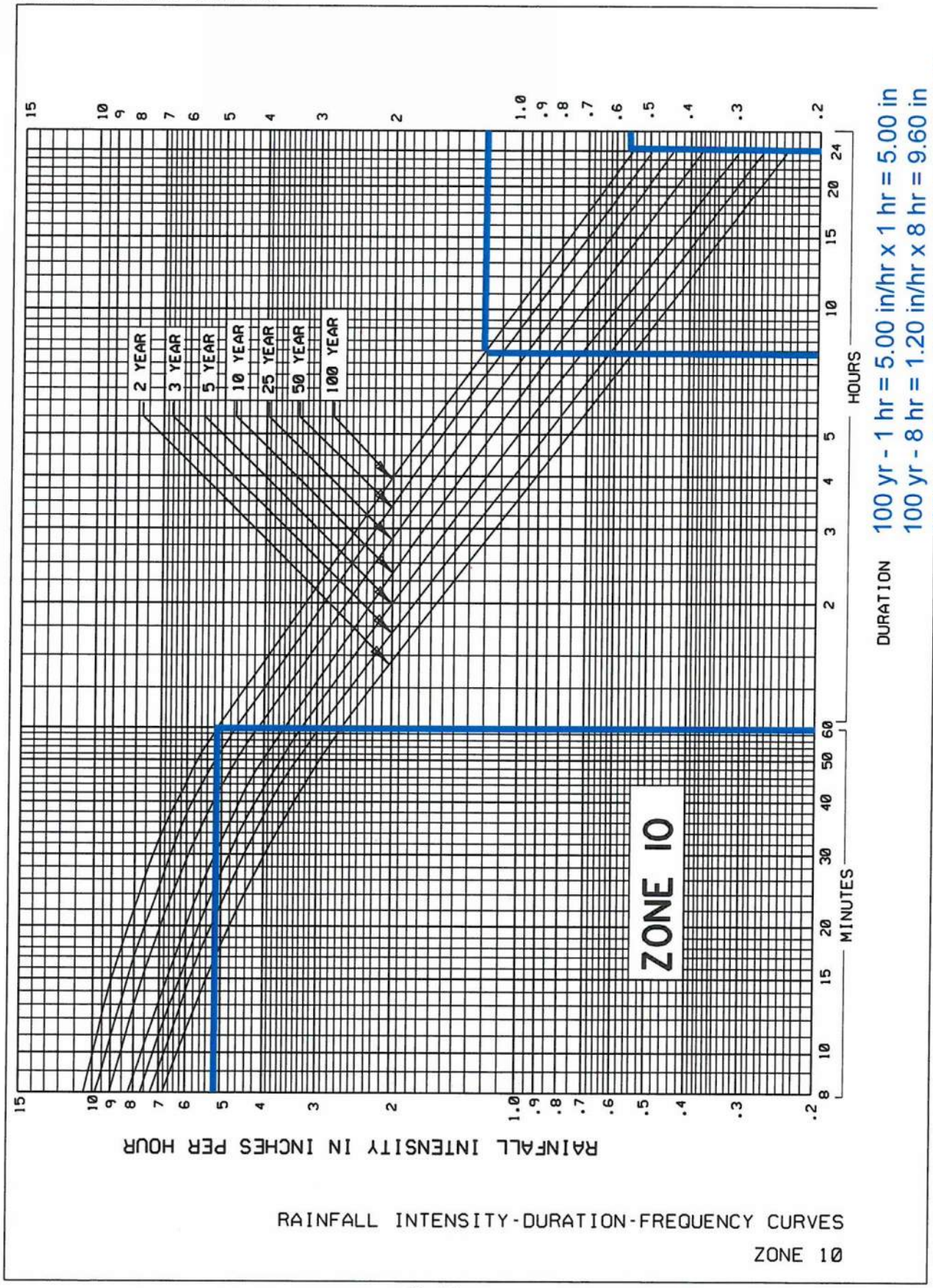
Reference: USDA, SCS, NEH-4 (1972).

Table T-7
SCS Runoff Curve Numbers for Selected Agricultural, Suburban, and Urban Land Use

Land Use Description		Hydrologic Soil Group A	B	C	D
Cultivated Land[a]:					
Without conservation treatment		72	81	88	91
With conservation treatment		62	71	78	81
Pasture or range land:					
Poor condition		68	79	86	89
Good condition		39	61	74	80
Meadow: good condition		30	58	71	78
Wood or Forest Land:					
Thin stand, poor cover, no mulch		45	66	77	83
Good cover[b]		25	55	70	77
Open Spaces, Lawns, Parks, Golf Courses, Cemeteries:					
Good condition: grass cover on 75% or more of the area		39	61	74	80
Fair condition: grass cover on 50% to 75% of the area		49	69	79	84
Poor condition: grass cover on 50% or less of the area		68	79	86	89
Commercial and Business Areas (85% impervious)		89	92	94	95
Industrial Districts (72% impervious)		81	88	91	93
Residential[c]					
Average lot size	Average % Impervious[d]				
1/8 acre or less	65	77	85	90	92
1/4 acre	38	61	75	83	87
1/3 acre	30	57	72	81	86
1/2 acre	25	54	70	80	85
1 acre	20	51	68	79	84
Paved Parking Lots, Roofs, Driveways[e]:		98	98	98	98
Streets and Roads:					
Paved with curbs and storm sewers[e]		98	98	98	98
Gravel		76	85	89	91
Dirt		72	82	87	89
Paved with open ditches		83	89	92	93
Newly graded area (no vegetation established)[f]		77	86	91	94

[a] For a more detailed description of agricultural land use curve numbers, refer to Table T-8.
[b] Good cover is protected from grazing and litter and brush cover soil.
[c] Curve numbers are computed assuming the runoff from the house and driveway is directed toward the street with a minimum of roof water directed to lawns where additional infiltration could occur. Depends on depth and degree of permeability of underlying strata.
[d] The remaining pervious areas (lawn) are considered to be in good pasture condition for these curve numbers.
[e] In some warmer climates of the country, a curve number of 96 may be used.
[f] Use for temporary conditions during grading and construction.
Note: These values are for Antecedent Moisture Condition II, and $I_a = 0.2S$.

Reference: USDA, SCS, TR-55 (1984).



RAINFALL INTENSITY-DURATION-FREQUENCY CURVES

ZONE 10

APPENDIX K
Percolation Testing

Report of Subsurface Exploration and Geotechnical Consulting Engineering
Palmetto Expressway Improvement Program
State Road 826 at: N.W. 74 Street,
Dade County, Florida
W.P.I. No. 6113829
State Project No. 87260-1518
KBC Project No. 8859

Prepared for:

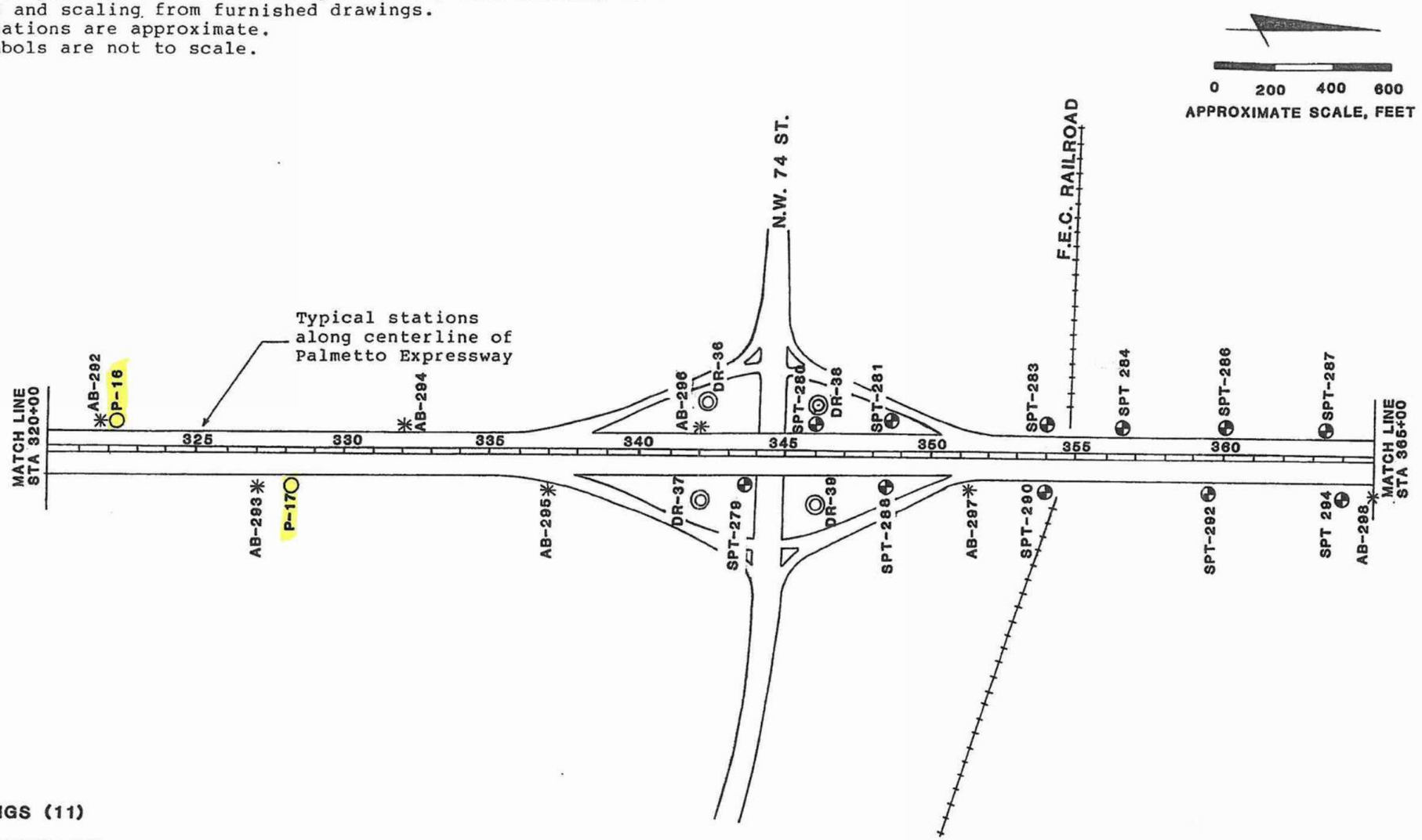
J. B. Gonzalez, Jr., P.E.
Post, Buckley, Schuh and Jernigan, Inc.
8725 N.W. 18 Terrace
Suite 302
Miami, Florida 33166

Prepared by:

KBC CONSULTANTS, INC.
4711 S.W. 72 Avenue
Miami, Florida 33155

April 27, 1989

NOTES:
1. Tests were performed in the field by measuring from existing site features and scaling from furnished drawings.
2. Test locations are approximate.
3. Test symbols are not to scale.



LEGEND

- SPT BORINGS (11)
- AUGER BORINGS (7)
- DOUBLE RING INFILTRATION TESTS (4)
- PERCOLATION TESTS (2)

KBC CONSULTANTS, INC. GEOTECHNICAL SERVICES	DWG TITLE: TEST LOCATION PLAN–N.W. 74 ST			DWN BY: KJL
	PROJ NAME: PALMETTO EXPRESSWAY IMPROVEMENTS			CKD BY: TJK
	PROJ NO: 8859	DATE: 9/22/88	DWG NO: 2	APD BY:

NATIONAL NO. 185BL-11X17

RESULTS OF CONSTANT HEAD FIELD BOREHOLE DRAINAGE TEST
KBC CONSULTANTS, INC./MIAMI, FLORIDA
PALMETTO EXPRESSWAY IMPROVEMENTS - PROJECT NO. 8859

Project Name: Palmetto Expressway — Interchange or Street Location: N.W. 74 Street
Test No.: P-16 — Station: 323+25 — Offset: 82' West
Test date: 11-9-88 — Test performed by: W. Wallace
Approximate ground surface elevation, feet, NGVD: 5.4"
Depth to stabilized groundwater, feet: 4'1"
Depth to water surface during test, feet: 0
Head, test head, test hydraulic head (H), feet: 4'1"
Depth of open hole after drilling, feet: 9'
Perforated casing length, feet :
Perforated casing diameter, (d) inches: 6
Length of borehole below stabilized groundwater (S), feet: 6
Time to stabilize test head, minutes: 4'11"
Average flow rate at constant head (Q), CFS: 38 seconds
Hydraulic conductivity (K), CFS/Sq.Ft.-foot head: 0.0057
Formula used (DOT or SFWMD): 0.00013

DOT Standard Test Formula

$$K = \frac{4Q}{3.14\,[20.3(H) - (H)\,(H) - 9]}$$

SFWMD Usual open Hole Formula

$$K = \frac{4Q}{3.14(d)\,[2(H)(H)+4(H)(S)+(H)(d)]}$$

Time, Minutes	Water meter reading begin	Water meter reading end	Flow rate (Q) Gallons/ Minute
1			2.50
2			2.50
3			2.63
4			2.63
5			2.63
6			
7			
8			
9			
10			

Average (Q) 2.55 GPMx0.00223= 0.0057 CFS

Depth below ground Surface, Feet	Soil/Rock Description
0'-5'	Dark brown medium to fine silty sand
5'-10'	Fine sand (tan) with limestone fragments

Note: Flow rate was measured using a container of known volume and a stop watch.

RESULTS OF CONSTANT HEAD FIELD BOREHOLE DRAINAGE TEST
KBC CONSULTANTS, INC./MIAMI, FLORIDA
PALMETTO EXPRESSWAY IMPROVEMENTS - PROJECT NO. 8859

Project Name: Palmetto Expressway
Interchange or Street Location: N.W. 74 Street
Test No.: P-17 Station: 328+30 Offset: 80' East
Test date: 10-7-88 Test performed by: W. Wallace/J. French
Approximate ground surface elevation, feet, NGVD: +4.8
Depth to stabilized groundwater, feet: 4
Depth to water surface during test, feet: 0
Head, test head, test hydraulic head (H), feet: 4
Depth of open hole after drilling, feet: 9
Perforated casing length, feet : 6
Perforated casing diameter, (d) inches: 6
Length of borehole below stabilized groundwater (S), feet: 5
Time to stabilize test head, minutes: 1 minute, 5 seconds
Average flow rate at constant head (Q), CFS: 0.0110
Hydraulic conductivity (K), CFS/Sq.Ft.-foot head: 0.00025
Formula used (DOT or SFWMD): DOT

DOT Standard Test Formula

$$K = \frac{4Q}{3.14\,[20.3(H) - (H)\,(H) - 9]}$$

SFWMD Usual open Hole Formula

$$K = \frac{4Q}{3.14(d)\,[2(H)(H)+4(H)(S)+(H)(d)]}$$

Time, Minutes	Water meter reading begin	Water meter reading end	Flow rate (Q) Gallons/ Minute
1			4.50
2			5.00
3			5.00
4			5.00
5			0.00
6			0.00
7			0.00
8			0.00
9			0.00
10			0.00

Average (Q) 4.9 GPMx0.00223= 0.0110 CFS

Depth below ground Surface, Feet	Soil/Rock Description
0'-10'	Medium to fine dark gray sand with limestone fragments.

Note: Flow rate was measured using a container of known volume and a stop watch.

REPORT OF PRELIMINARY GEOTECHNICAL ENGINEERING
PALMETTO EXPRESSWAY IMPROVEMENT PROGRAM
U.S. HIGHWAY 1 TO N.W. 158 STREET
DADE COUNTY, FLORIDA
W.P.I. NO. 6119903
STATE PROJECT NO. 99006-1562
KBC PROJECT NO. 8859

Prepared for:

J. B. Gonzalez, Jr., P.E.
Post, Buckley, Schuh and Jernigan, Inc.
8725 N.W. 18 Terrace
Suite 302
Miami, Florida 33166

Prepared by:

KBC CONSULTANTS, INC.
4711 S.W. 72 Avenue
Miami, Florida 33155

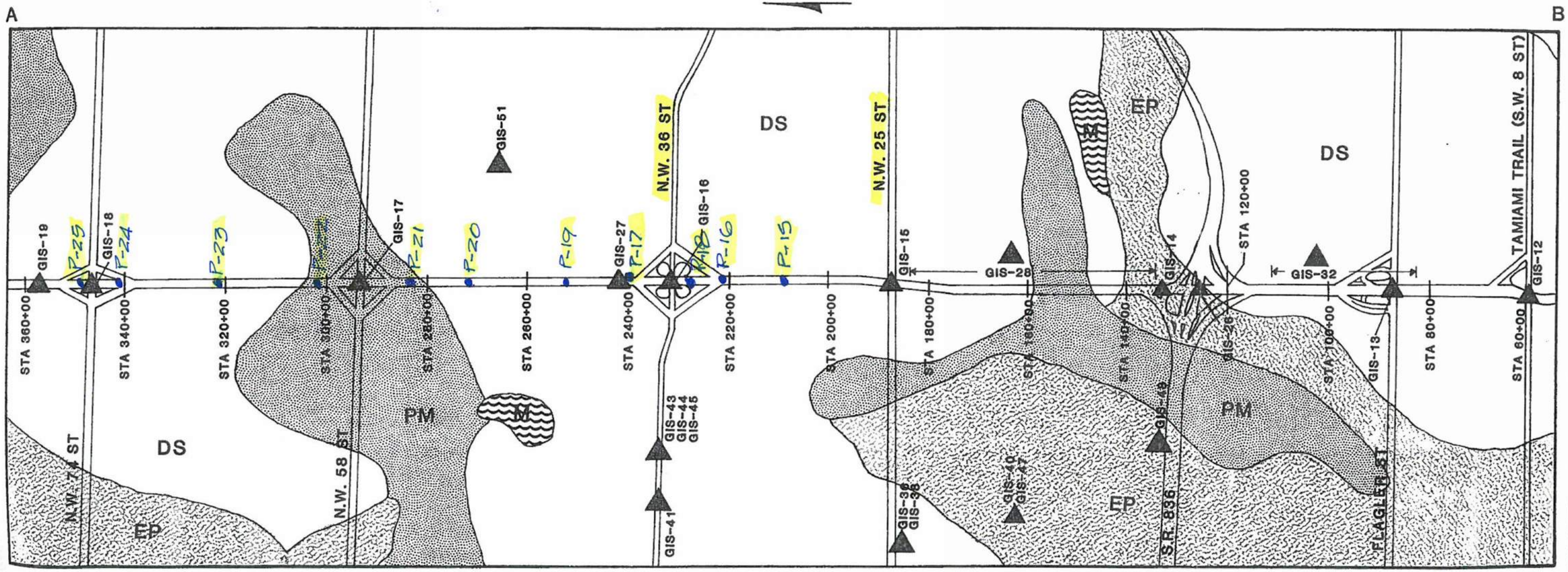
August 9, 1988

KBC

T.-. 708.19

NOTES:

1. Soil information obtained from United States Department of Agriculture Soil Conservation Service, Soil Survey for Dade County, Florida Series 1947, No. 4, issued April 1958.
2. Stations shown are those provided by PBS&J.
3. GIS Numbers refer to structures or bridges summarized on the Geotechnical Information Sheets.



LEGEND

- EP-EVERGLADES PEAT
- PM-PERRINE AND HIALEAH MARL
- M-MINES, PITS, AND DUMPS
- DS-DAVIE FINE SANDS
- RSL-ROCKDALE FINE SANDS
- RL-ROCKLAND LIMESTONE

0 1500 3000
APPROXIMATE SCALE, FEET

KBC CONSULTANTS, INC.
GEOTECHNICAL SERVICES

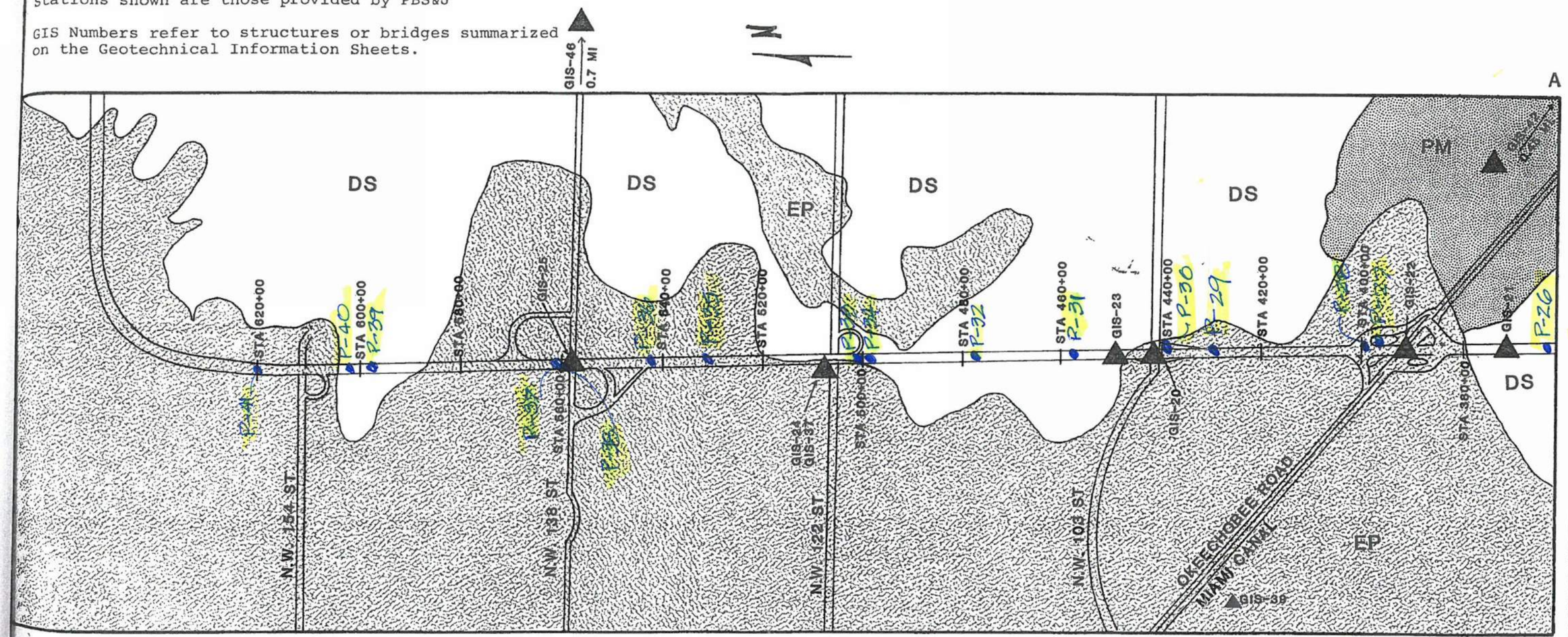
DWG TITLE: PLAN VIEW OF DATA RECOVERED			DWN BY: KJL
PROJ NAME: PALMETTO EXPRESSWAY IMPROVEMENTS			CKD BY: DK
PROJ NO: 8859	DATE: 7/1/88	DWG NO: 3	APD BY: DK

NOTES:

Soil information obtained from United States Department of Agriculture Soil Conservation Service, Soil Survey for Dade County, Florida Series 1947, No. 4, issued April 1958.

Stations shown are those provided by PBS&J

GIS Numbers refer to structures or bridges summarized on the Geotechnical Information Sheets.



LEGEND

- EP–EVERGLADES PEAT
- PM–PERRINE AND HIALEAH MARL
- M–MINES, PITS, AND DUMPS
- DS–DAVIE FINE SANDS
- RSL–ROCKDALE FINE SANDS
- RL–ROCKLAND LIMESTONE

0 1500 3000
APPROXIMATE SCALE, FEET

KBC CONSULTANTS, INC.
GEOTECHNICAL SERVICES

DWG TITLE: PLAN VIEW OF DATA RECOVERED			DWN BY: KJL
PROJ NAME: PALMETTO EXPRESSWAY IMPROVEMENTS			CKD BY: DK
PROJ NO: 8859	DATE: 6/30/88	DWG NO: 4	APD BY: DK

NO. 185BL-11X17

TABLE 3

SUMMARY OF EXFILTRATION DRAINAGE TESTS
PALMETTO EXPRESSWAY IMPROVEMENT PROGRAM
KBC CONSULTANTS, INC. - PROJECT NO. 8859

Test No.	Station	Q Discharge cfs	Depth to GWL, feet	Test head (H) feet	Hydraulic Conductivity cfs/ft^2 - ft.head	pH	Resistivity ohm-cm	Sulfates ppm	Chlorides ppm
P-1	22+40	0.0024	10++	9	$3.3X10^{-5}$	N.T.	N.T.	N.T.	N.T.
P-2	38+70	0.00022	8.9	7.9	$3.1X10^{-6}$	N.T.	N.T.	N.T.	N.T.
P-3	42+40	0.00132	5.8	4.8	$2.6X10^{-5}$	7.9	2100	<5	20
P-4	55+40	0.0025	5.6	4.6	$5.0X10^{-5}$	N.T.	N.T.	N.T.	N.T.
P-5	70+30	0.00668	3.8	2.8	$2.1X10^{-4}$	N.T.	N.T.	N.T.	N.T.
P-6	91+50	0.059	5.8	4.8	$1.1X10^{-3}$	7.0	2200	<5	40
P-7	96+00	0.053	5.6	4.6	$1.0X10^{-3}$	N.T.	N.T.	N.T.	N.T.
P-8	114+00	0.020	6.5	5.5	$3.5X10^{-4}$	N.T.	N.T.	N.T.	N.T.
P-9	117+00	0.046	4.9	3.9	$1.1X10^{-3}$	7.3	4600	30	40
P-10	140+50	0.111+	5.3	4.3	$2.4X10^{-3}$	N.T.	N.T.	N.T.	N.T.
P-11	143+00	0.053	4.4	3.4	$1.4X10^{-3}$	N.T.	N.T.	N.T.	N.T.
P-12	168+00	0.031	6.0	5.0	$5.8X10^{-4}$	7.3	2000	<5	40
P-13	178+00	0.00022	3.0	2.0	$1.0X10^{-5}$	N.T.	N.T.	N.T.	N.T.
P-14	195+00	0.041	4.6	3.6	$1.0X10^{-3}$	N.T.	N.T.	N.T.	N.T.
P-15	208+50	0.030	1.6	0.6	$1.4X10^{-2}$	7.4	2500	<5	40
P-16	220+30	0.029	3.8	2.8	$9.3X10^{-4}$	N.T.	N.T.	N.T.	N.T.
P-17	239+00	0.00245	5.3	4.3	$5.2X10^{-5}$	N.T.	N.T.	N.T.	N.T.
P-18	229+00	0.026	5.8	4.8	$5.1X10^{-4}$	7.3	2600	<5	40
P-19	251+60	0.00245	4.5	3.5	$6.3X10^{-5}$	N.T.	N.T.	N.T.	N.T.
P-20	276+00	0.0029	10++	9.0	$4.0X10^{-5}$	N.T.	N.T.	N.T.	N.T.
P-21	286+50	0.11+	4.0	3.0	$3.3X10^{-3}$	7.4	3400	<5	40
P-22	306+00	0.0138	5.2	4.2	$3.0X10^{-4}$	N.T.	N.T.	N.T.	N.T.
P-23	321+50	0.0468	3.0	2.0	$2.2X10^{-3}$	N.T.	N.T.	N.T.	N.T.
P-24	341+50	0.060	3.4	2.4	$2.2X10^{-3}$	7.8	2600	<5	40
P-25	353+00	0.00022	2.2	1.2	$2.0X10^{-5}$	N.T.	N.T.	N.T.	N.T.
P-26	376+00	0.041	0.9	0.5	$6.0X10^{-2}$	N.T.	N.T.	N.T.	N.T.
P-27	395+30	0.00022	1.9	0.9	$3.3X10^{-5}$	8.2	1900	<5	40
P-28	399+00	0.111	3.4	2.4	$4.1X10^{-3}$	N.T.	N.T.	N.T.	N.T.
P-29	432+50	0.000445	2.9	1.9	$2.2X10^{-5}$	N.T.	N.T.	N.T.	N.T.
P-30	439+70	0.0318	2.4	1.4	$2.3X10^{-3}$	7.5	2700	<5	40
P-31	457+00	0.0029	3.1	2.1	$1.3X10^{-4}$	8.1	2200	<5	40
P-32	478+00	0.011	3.4	2.4	$4.1X10^{-4}$	N.T.	N.T.	N.T.	N.T.
P-33	505+50	0.0062	2.1	1.1	$6.5X10^{-4}$	N.T.	N.T.	N.T.	N.T.
P-34	502+00	0.00022	2.3	1.3	$1.8X10^{-5}$	7.8	4500	<5	40
P-35	531+00	0.0013	3.6	2.6	$4.4X10^{-5}$	N.T.	N.T.	N.T.	N.T.
P-36	545+00	0.0065	3.9	2.9	$2.0X10^{-4}$	N.T.	N.T.	N.T.	N.T.
P-37	563+50	0.00022	1.5	0.5	$3.2X10^{-4}$	7.8	3900	<5	20
P-38	560+00	0.0098	5.1	4.1	$2.2X10^{-4}$	N.T.	N.T.	N.T.	N.T.

TABLE 3

SUMMARY OF EXFILTRATION DRAINAGE TESTS
PALMETTO EXPRESSWAY IMPROVEMENT PROGRAM
KBC CONSULTANTS, INC. - PROJECT NO. 8859

Test No.	Station	Q Discharge cfs	Depth to GWL, feet	Test head (H) feet	Hydraulic Conductivity cfs/ft^2 - ft.head	pH	Resistivity ohm-cm	Sulfates ppm	Chlorides ppm
P-39	597+50	0.0018	4.1	3.1	$5.2X10^{-5}$	N.T.	N.T.	N.T.	N.T.
P-40	614+00	0.00089	2.5	1.5	$5.9X10^{-5}$	N.T.	N.T.	N.T.	N.T.
P-41	620+00	0.00022	2.4	1.4	$1.6X10^{-5}$	8.3	2100	<5	40
P-43	657+00	0.032	1.6	0.6	$1.46X10^{-2}$	N.T.	N.T.	N.T.	N.T.
P-44	659+00	0.00022	2.4	1.4	$1.6X10^{-5}$	N.T.	N.T.	N.T.	N.T.
P-45	673+00	0.047	7.4	6.4	$7.5X10^{-4}$	7.7	1800	<5	40
P-46	681+00	0.0076	4.4	3.4	$2.0X10^{-4}$	N.T.	N.T.	N.T.	N.T.
P-47	715+00	0.00067	5.2	4.2	$1.5X10^{-5}$	N.T.	N.T.	N.T.	N.T.
P-48	736+50	0.043	5.3	4.3	$9.2X10^{-4}$	N.T.	N.T.	N.T.	N.T.
P-49	740+50	0.058	5.0	4.0	$1.3X10^{-3}$	N.T.	N.T.	N.T.	N.T.
P-50	772+50	0.038	1.9	0.9	$5.7X10^{-3}$	N.T.	N.T.	N.T.	N.T.
P-51	789+00	0.0013	4.7	3.7	$3.2X10^{-5}$	N.T.	N.T.	N.T.	N.T.
P-53	883+00	0.00022	4.0	3.0	$6.5X10^{-6}$	N.T.	N.T.	N.T.	N.T.
P-54	897+00	0.00044	5.4	4.4	$9.2X10^{-6}$	N.T.	N.T.	N.T.	N.T.

NOTES:

1. "N.T." means not tested.
2. Test data performed by and furnished by Florida DOT.
3. Stations shown are those established by Florida DOT.
4. See KBC Consultants, Inc. drawing nos. 2, 3, and 4 for station locations.
5. Hydraulic conductivity calculated using the following formula:

$$K = \frac{4\,Q}{\pi\,(20.25H - H^2 - 9)}$$

6. Tests performed using 7-1/4 inch diameter borehole using open borehole test methods with 10 foot test depth. Test head in many instances was maintained one foot below ground surface which may effect the hydraulic conductivity calculations.

APPENDIX L
Corrosion Analysis FPID 432687-1-52-01

Florida Department of Transportation

Corrosion Research Laboratory

Culvert Service Life Estimator

Date Jul 14, 2015

Project Name:	SR 826/I-75 Express Lanes Segment 1 & 2A
FM #:	432687-1-52-01
County:	Miami-Dade
Designer:	L.F.

Design Life (Years)	100	pH	7.5
Manning's n Value	0.012	Resistivity	2156
Diameter (inches)	15.00	Chlorides	43
		Sulfates	27

Type of Culvert	Service Life	Environment			
(NRCP) Non-Reinforced Concrete	360	Pass			
(RCP) Steel-Reinforced Concrete	295	Pass			
(RCP) Steel-Reinforced Concrete	295	Pass			
(SRAP) Aluminum - Spiral Rib, 16 GA.	174	Pass			
(HDPE) High Density Polyethylene, Cl. II	100+	Pass			1
(PP) Polypropylene	100+	Pass			2
(PVC) Polyvinyl Chloride, ASTM F-949	100+	Pass			
(HDPE)CANNOT be used		Fail			

1) HDPE and PP not allowed in the Florida Keys for 100 year service life. No restrictions for 50 year service life.
2) HDPE and PP not allowed in the Florida Keys for 100 year service life. No restrictions for 50 year service life.

This Program is developed by the Florida Department of Transportation Corrosion Research Laboratory to calculate the approximate service life of culverts corresponding to environmental parameters. Given these parameters, the program will list the performance of the most commonly used culverts in descending order. This program is intended for use as an environmental durability estimator ONLY. It is the designer's responsibility to choose the proper culvert to meet all structural and hydraulic requirements. If you have any questions or suggestions regarding the use of this program, please contact Rick Jenkins, P.E. at the Roadway Design Office - Drainage, Email: rick.jenkins@dot.state.fl.us

Florida Department of Transportation

Corrosion Research Laboratory

Culvert Service Life Estimator

Date Jul 14, 2015

Project Name:	SR 826/I-75 Express Lanes Segment 1 & 2A
FM #:	432687-1-52-01
County:	Miami-Dade
Designer:	L.F.

Design Life (Years)	100	pH	7.5
Manning's n Value	0.012	Resistivity	2156
Diameter (inches)	18.00	Chlorides	43
		Sulfates	27

Type of Culvert	Service Life	Environment			
(NRCP) Non-Reinforced Concrete	360	Pass			
(RCP) Steel-Reinforced Concrete	295	Pass			
(RCP) Steel-Reinforced Concrete	295	Pass			
(SRAP) Aluminum - Spiral Rib, 16 GA.	174	Pass			
(SRASP) Aluminized Steel - Spiral Rib, 14 GA.	103	Pass			
(HDPE) High Density Polyethylene, Cl. II	100+	Pass			1
(PP) Polypropylene	100+	Pass			2
(PVC) Polyvinyl Chloride, ASTM F-949	100+	Pass			
(HDPE)CANNOT be used		Fail			

1) HDPE and PP not allowed in the Florida Keys for 100 year service life. No restrictions for 50 year service life.
2) HDPE and PP not allowed in the Florida Keys for 100 year service life. No restrictions for 50 year service life.

This Program is developed by the Florida Department of Transportation Corrosion Research Laboratory to calculate the approximate service life of culverts corresponding to environmental parameters. Given these parameters, the program will list the performance of the most commonly used culverts in descending order. This program is intended for use as an environmental durability estimator ONLY. It is the designer's responsibility to choose the proper culvert to meet all structural and hydraulic requirements. If you have any questions or suggestions regarding the use of this program, please contact Rick Jenkins, P.E. at the Roadway Design Office - Drainage. Email: rick.jenkins@dot.state.fl.us

Florida Department of Transportation

Corrosion Research Laboratory

Culvert Service Life Estimator

Date Jul 14, 2015

Project Name:	SR 826/I-75 Express Lanes Segment 1 & 2A
FM #:	432687-1-52-01
County:	Miami-Dade
Designer:	L.F.

Design Life (Years)	100	pH	7.5
Manning's n Value	0.012	Resistivity	2156
Diameter (inches)	24.00	Chlorides	43
		Sulfates	27

Type of Culvert	Service Life	Environment			
(NRCP) Non-Reinforced Concrete	360	Pass			
(RCP) Steel-Reinforced Concrete	338	Pass			
(RCP) Steel-Reinforced Concrete	338	Pass			
(SRAP) Aluminum - Spiral Rib, 16 GA.	174	Pass			
(SRASP) Aluminized Steel - Spiral Rib, 14 GA.	103	Pass			
(HDPE) High Density Polyethylene, Cl. II	100+	Pass			1
(PP) Polypropylene	100+	Pass			2
(PVC) Polyvinyl Chloride, ASTM F-949	100+	Pass			
(HDPE)CANNOT be used		Fail			

1) HDPE and PP not allowed in the Florida Keys for 100 year service life. No restrictions for 50 year service life.
2) HDPE and PP not allowed in the Florida Keys for 100 year service life. No restrictions for 50 year service life.

This Program is developed by the Florida Department of Transportation Corrosion Research Laboratory to calculate the approximate service life of culverts corresponding to environmental parameters. Given these parameters, the program will list the performance of the most commonly used culverts in descending order. This program is intended for use as an environmental durability estimator ONLY. It is the designer's responsibility to choose the proper culvert to meet all structural and hydraulic requirements. If you have any questions or suggestions regarding the use of this program, please contact Rick Jenkins, P.E. at the Roadway Design Office - Drainage. Email: rick.jenkins@dot.state.fl.us

APPENDIX M
Variable Tailwater Elevations

Variable Groundwater Levels (Node GWT_ 12)

8-Hour Storm:

Time	Porcentage Rise in Groundwater	Stage
0	0.00	0.95
1	0.02	0.98
2	0.13	1.15
3	0.28	1.37
4	0.70	2.00
5	0.86	2.24
6	0.92	2.33
7	0.97	2.41
8	1.00	2.45
12	0.00	0.95
36	0.00	0.95

24-Hour Storm:

Time	Porcentage Rise in Groundwater	Stage
0	0.00	0.95
1	0.01	0.97
2	0.03	1.00
3	0.06	1.04
4	0.09	1.09
5	0.12	1.13
6	0.16	1.19
7	0.20	1.25
8	0.24	1.31
9	0.30	1.40
10	0.36	1.49
11	0.44	1.61
12	0.54	1.76
13	0.61	1.87
14	0.67	1.96
15	0.73	2.05
16	0.78	2.12
17	0.82	2.18
18	0.86	2.24
19	0.90	2.30
20	0.93	2.35
21	0.96	2.39
22	0.98	2.42
23	0.99	2.44
24	1.00	2.45
36	0.00	0.95
48	0.00	0.95

Variable Groundwater Levels (Node GWT_ 12)

72-Hour Storm:

Time	Porcentage Rise in Groundwater	Stage
0	0.00	0.95
24	0.1074	1.11
36	0.1854	1.23
48	0.2642	1.35
49	0.2715	1.36
50	0.2789	1.37
51	0.2877	1.38
52	0.2973	1.40
53	0.3098	1.41
54	0.3252	1.44
55	0.3436	1.47
56	0.3650	1.50
57	0.3900	1.54
57.5	0.4047	1.56
58	0.4209	1.58
58.5	0.4386	1.61
59	0.4621	1.64
59.5	0.4989	1.70
60	0.7469	2.07
60.5	0.8006	2.15
61	0.8286	2.19
61.5	0.8492	2.22
62	0.8661	2.25
62.5	0.8786	2.27
63	0.8896	2.28
64	0.9117	2.32
65	0.9249	2.34
66	0.9382	2.36
68	0.9647	2.40
70	0.9823	2.42
72	1.00	2.45
96	0.00	0.95

Average October Groundwater Level = 0.95
Average Yearly Groundwater Level = 2.45

Variable Groundwater Levels (Node GWT_13)

8-Hour Storm:

Time	Porcentage Rise in Groundwater	Stage
0	0.00	0.95
1	0.02	0.98
2	0.13	1.11
3	0.28	1.30
4	0.70	1.83
5	0.86	2.03
6	0.92	2.10
7	0.97	2.16
8	1.00	2.20
12	0.00	0.95
36	0.00	0.95

24-Hour Storm:

Time	Porcentage Rise in Groundwater	Stage
0	0.00	0.95
1	0.01	0.96
2	0.03	0.99
3	0.06	1.03
4	0.09	1.06
5	0.12	1.10
6	0.16	1.15
7	0.20	1.20
8	0.24	1.25
9	0.30	1.33
10	0.36	1.40
11	0.44	1.50
12	0.54	1.63
13	0.61	1.71
14	0.67	1.79
15	0.73	1.86
16	0.78	1.93
17	0.82	1.98
18	0.86	2.03
19	0.90	2.08
20	0.93	2.11
21	0.96	2.15
22	0.98	2.18
23	0.99	2.19
24	1.00	2.20
36	0.00	0.95
48	0.00	0.95

Variable Groundwater Levels (Node GWT_13)

72-Hour Storm:

Time	Porcentage Rise in Groundwater	Stage
0	0.00	0.95
24	0.1074	1.08
36	0.1854	1.18
48	0.2642	1.28
49	0.2715	1.29
50	0.2789	1.30
51	0.2877	1.31
52	0.2973	1.32
53	0.3098	1.34
54	0.3252	1.36
55	0.3436	1.38
56	0.3650	1.41
57	0.3900	1.44
57.5	0.4047	1.46
58	0.4209	1.48
58.5	0.4386	1.50
59	0.4621	1.53
59.5	0.4989	1.57
60	0.7469	1.88
60.5	0.8006	1.95
61	0.8286	1.99
61.5	0.8492	2.01
62	0.8661	2.03
62.5	0.8786	2.05
63	0.8896	2.06
64	0.9117	2.09
65	0.9249	2.11
66	0.9382	2.12
68	0.9647	2.16
70	0.9823	2.18
72	1.00	2.20
96	0.00	0.95

Average October Groundwater Level = 0.95
Average Yearly Groundwater Level = 2.20

Variable Groundwater Levels (Node GWT_15-17)

8-Hour Storm:

Time	Porcentage Rise in Groundwater	Stage
0	0.00	1.45
1	0.02	1.47
2	0.13	1.55
3	0.28	1.66
4	0.70	1.98
5	0.86	2.10
6	0.92	2.14
7	0.97	2.18
8	1.00	2.20
12	0.00	1.45
36	0.00	1.45

24-Hour Storm:

Time	Porcentage Rise in Groundwater	Stage
0	0.00	1.45
1	0.01	1.46
2	0.03	1.47
3	0.06	1.50
4	0.09	1.52
5	0.12	1.54
6	0.16	1.57
7	0.20	1.60
8	0.24	1.63
9	0.30	1.68
10	0.36	1.72
11	0.44	1.78
12	0.54	1.86
13	0.61	1.91
14	0.67	1.95
15	0.73	2.00
16	0.78	2.04
17	0.82	2.07
18	0.86	2.10
19	0.90	2.13
20	0.93	2.15
21	0.96	2.17
22	0.98	2.19
23	0.99	2.19
24	1.00	2.20
36	0.00	1.45
48	0.00	1.45

Variable Groundwater Levels (Node GWT_15-17)

72-Hour Storm:

Time	Porcentage Rise in Groundwater	Stage
0	0.00	1.45
24	0.1074	1.53
36	0.1854	1.59
48	0.2642	1.65
49	0.2715	1.65
50	0.2789	1.66
51	0.2877	1.67
52	0.2973	1.67
53	0.3098	1.68
54	0.3252	1.69
55	0.3436	1.71
56	0.3650	1.72
57	0.3900	1.74
57.5	0.4047	1.75
58	0.4209	1.77
58.5	0.4386	1.78
59	0.4621	1.80
59.5	0.4989	1.82
60	0.7469	2.01
60.5	0.8006	2.05
61	0.8286	2.07
61.5	0.8492	2.09
62	0.8661	2.10
62.5	0.8786	2.11
63	0.8896	2.12
64	0.9117	2.13
65	0.9249	2.14
66	0.9382	2.15
68	0.9647	2.17
70	0.9823	2.19
72	1.00	2.20
96	0.00	1.45

Average October Groundwater Level = 1.45
Average Yearly Groundwater Level = 2.20

Variable Groundwater Levels (Node GWT_18)

8-Hour Storm:

Time	Porcentage Rise in Groundwater	Stage
0	0.00	1.95
1	0.02	1.96
2	0.13	2.02
3	0.28	2.09
4	0.70	2.30
5	0.86	2.38
6	0.92	2.41
7	0.97	2.44
8	1.00	2.45
12	0.00	1.95
36	0.00	1.95

24-Hour Storm:

Time	Porcentage Rise in Groundwater	Stage
0	0.00	1.95
1	0.01	1.96
2	0.03	1.97
3	0.06	1.98
4	0.09	2.00
5	0.12	2.01
6	0.16	2.03
7	0.20	2.05
8	0.24	2.07
9	0.30	2.10
10	0.36	2.13
11	0.44	2.17
12	0.54	2.22
13	0.61	2.26
14	0.67	2.29
15	0.73	2.32
16	0.78	2.34
17	0.82	2.36
18	0.86	2.38
19	0.90	2.40
20	0.93	2.42
21	0.96	2.43
22	0.98	2.44
23	0.99	2.45
24	1.00	2.45
36	0.00	1.95
48	0.00	1.95

Variable Groundwater Levels (Node GWT_18)

72-Hour Storm:

Time	Porcentage Rise in Groundwater	Stage
0	0.00	1.95
24	0.1074	2.00
36	0.1854	2.04
48	0.2642	2.08
49	0.2715	2.09
50	0.2789	2.09
51	0.2877	2.09
52	0.2973	2.10
53	0.3098	2.10
54	0.3252	2.11
55	0.3436	2.12
56	0.3650	2.13
57	0.3900	2.15
57.5	0.4047	2.15
58	0.4209	2.16
58.5	0.4386	2.17
59	0.4621	2.18
59.5	0.4989	2.20
60	0.7469	2.32
60.5	0.8006	2.35
61	0.8286	2.36
61.5	0.8492	2.37
62	0.8661	2.38
62.5	0.8786	2.39
63	0.8896	2.39
64	0.9117	2.41
65	0.9249	2.41
66	0.9382	2.42
68	0.9647	2.43
70	0.9823	2.44
72	1.00	2.45
96	0.00	1.95

Average October Groundwater Level = 1.95
Average Yearly Groundwater Level = 2.45

Variable Groundwater Levels (Node GWT_19)

8-Hour Storm:

Time	Porcentage Rise in Groundwater	Stage
0	0.00	1.65
1	0.02	1.67
2	0.13	1.78
3	0.28	1.93
4	0.70	2.35
5	0.86	2.51
6	0.92	2.57
7	0.97	2.62
8	1.00	2.65
12	0.00	1.65
36	0.00	1.65

24-Hour Storm:

Time	Porcentage Rise in Groundwater	Stage
0	0.00	1.65
1	0.01	1.66
2	0.03	1.68
3	0.06	1.71
4	0.09	1.74
5	0.12	1.77
6	0.16	1.81
7	0.20	1.85
8	0.24	1.89
9	0.30	1.95
10	0.36	2.01
11	0.44	2.09
12	0.54	2.19
13	0.61	2.26
14	0.67	2.32
15	0.73	2.38
16	0.78	2.43
17	0.82	2.47
18	0.86	2.51
19	0.90	2.55
20	0.93	2.58
21	0.96	2.61
22	0.98	2.63
23	0.99	2.64
24	1.00	2.65
36	0.00	1.65
48	0.00	1.65

Variable Groundwater Levels (Node GWT_19)

72-Hour Storm:

Time	Porcentage Rise in Groundwater	Stage
0	0.00	1.65
24	0.1074	1.76
36	0.1854	1.84
48	0.2642	1.91
49	0.2715	1.92
50	0.2789	1.93
51	0.2877	1.94
52	0.2973	1.95
53	0.3098	1.96
54	0.3252	1.98
55	0.3436	1.99
56	0.3650	2.02
57	0.3900	2.04
57.5	0.4047	2.05
58	0.4209	2.07
58.5	0.4386	2.09
59	0.4621	2.11
59.5	0.4989	2.15
60	0.7469	2.40
60.5	0.8006	2.45
61	0.8286	2.48
61.5	0.8492	2.50
62	0.8661	2.52
62.5	0.8786	2.53
63	0.8896	2.54
64	0.9117	2.56
65	0.9249	2.57
66	0.9382	2.59
68	0.9647	2.61
70	0.9823	2.63
72	1.00	2.65
96	0.00	1.65

Average October Groundwater Level = 1.65
Average Yearly Groundwater Level = 2.65

APPENDIX N
Spread Calculations

Spread and Inlet Capacity Calculation-South Bound

SR 826 NB South of W 49th Street

I = 4.00 in/hr SPREAD (Intensity)

I = 9.63 in/hr SAG VC 50-Years (Intensity)

$Q_i = C_o * A_i * (2gd)^{0.50}$

n = 0.016

C_1 = 0.95

C_2 = 0.25

C= $(C_1*A_1+C_2*A_2)/A$

S_x= Cross Slope

S_L= Longitudinal Slope

T= Spread (ft)

V= Velocity ft/s

E_O= Ratio of frontal flow to total g

S_w= Slope of the inlet witdth

W= gutter

R_f= frontal flow

R_s= flow

E= Efficiency

Q_i= Intercepted flow cfs

Cw= Weir Coefficient

L= Length of the grate (ft)

Structure	Type	Location	Side	*Area (Ac) Total A	*Area (Ac) Impervious A1	*Area (Ac) Pervious A2	C	Q = CIA (CFS) SPREAD	Sx (FT/FT)	S_L (FT/FT)	T (FT)	Max. Shoulder Spread (FT)	Spread Remarks	Velocity V ft/s	W/T	S_w/S_x	E_O Chart 4	Vo Chart7 ft/s	L Grate ft	R_f Chart7	R_s	E	Q_i cfs	By Pass Flow Flow Q_b cfs
S12-104	BW	437+65.00	L	0.430	0.430	0.000	0.95	1.634	0.06	0.0050	4.98	11.90	OK	2.20	0.75	1.00	0.97	11.00	3.70	1.00	0.66	0.990	1.617	0.017
S12-201	BW	440+60.00	L	0.240	0.240	0.000	0.95	0.912	0.06	0.0030	4.41	11.90	OK	1.57	0.85	1.00	1.00	11.00	3.70	1.00	0.78	1.000	0.912	0.000
S12-202	BW	440+75.00	L	0.040	0.040	0.000	0.95	0.152	0.06	0.0035	2.19	11.90	OK	1.06	1.71	1.00	1.00	11.00	3.70	1.00	0.88	1.000	0.152	0.000
S12-206	BW	441+50.00	L	0.180	0.180	0.000	0.95	0.684	0.06	0.0035	3.84	11.90	OK	1.55	0.98	1.00	1.00	11.00	3.70	1.00	0.79	1.000	0.684	0.000
S12-208	BW	442+88.00	L	0.310	0.310	0.000	0.95	1.178	0.06	0.0060	4.26	12.00	OK	2.17	0.76	1.00	0.89	11.00	3.70	1.00	0.67	0.963	1.135	0.043
S12-210	BW	443+98.00	L	0.250	0.250	0.000	0.95	2.330	0.06	0.0030	6.27	12.00	OK											
Low Point																								
S12-210	BW	443+98.00	L	0.260	0.260	0.000	0.95	2.433	0.06	0.0030	6.37	12.00	OK											
S12-212	BW	444+00.00	L	0.370	0.370	0.000	0.95	1.406	0.06	0.0076	4.36	12.00	OK	2.48	0.75	1.00	0.90	11.00	3.70	1.00	0.61	0.961	1.351	0.055
High Point																								
S13-202	BW	448+00.00	L	0.280	0.280	0.000	0.95	1.064	0.06	0.0128	3.56	12.00	OK	2.81	0.91	1.00	0.98	11.00	3.70	1.00	0.56	0.991	1.055	0.009
EX13-1	BW	3460+60.00	L	0.370	0.370	0.000	0.95	1.415	0.06	0.0214	3.60	8.00	OK	3.66	0.90	1.00	1.00	11.00	3.70	1.00	0.44	1.000	1.415	0.000
EX13-4	BW	3459+12.00	L	0.450	0.450	0.000	0.95	1.710	0.06	0.0185	3.97	8.00	OK	3.64	0.82	1.00	0.99	11.00	3.70	1.00	0.44	0.994	1.700	0.010
S13-203	BW	452+05.00	L	0.640	0.640	0.000	0.95	2.442	0.06	0.0248	4.29	8.00	OK	4.44	0.76	1.00	0.97	11.00	3.70	1.00	0.36	0.981	2.394	0.047
S13-204	BW	453+70.00	L	0.420	0.420	0.000	0.95	1.643	0.06	0.0093	4.45	8.00	OK	2.78	0.73	1.00	0.97	11.00	3.70	1.00	0.56	0.987	1.622	0.022
S13-205	BW	454+45.00	L	0.200	0.200	0.000	0.95	1.851	0.06	0.0030	5.75	12.00	OK											
Low Point																								
S13-205	BW	454+45.00	L	0.170	0.170	0.000	0.95	1.584	0.06	0.0030	5.42	12.00	OK											
S13-206	BW	455+18.00	L	0.430	0.430	0.000	0.95	1.661	0.06	0.0053	4.96	12.00	OK	2.26	0.66	1.00	0.95	11.00	3.70	1.00	0.65	0.983	1.632	0.029
S13-207	BW	456+85.00	L	0.580	0.580	0.000	0.95	2.204	0.06	0.0216	4.24	12.00	OK	4.11	0.77	1.00	0.98	11.00	3.70	1.00	0.39	0.988	2.177	0.027
S13-208	BW	459+19.00	L	0.450	0.450	0.000	0.95	1.767	0.06	0.0216	3.90	12.00	OK	3.89	0.83	1.00	1.00	11.00	3.70	1.00	0.41	1.000	1.767	0.000
S13-209	BW	461+00.00	L	0.570	0.570	0.000	0.95	2.166	0.06	0.0133	4.61	12.00	OK	3.41	0.70	1.00	0.95	11.00	3.70	1.00	0.47	0.974	2.109	0.057
High Point																								
S13-210	BW	465+45.00	L	0.520	0.520	0.000	0.95	1.976	0.06	0.0176	4.23	12.00	OK	3.70	0.77	1.00	0.97	11.00	3.70	1.00	0.43	0.983	1.942	0.034
EX13-46	BW	467+58.55	L	0.520	0.520	0.000	0.95	1.976	0.06	0.0298	3.83	8.00	OK	4.51	0.85	1.00	1.00	11.00	3.70	1.00	0.35	1.000	1.976	0.000

Inlet Capacity Analysis-Grate Inlets (interseptors)

$$V = \frac{1.12}{n} x S^{0.5} x S_x^{0.67} x T^{0.67}$$

$$Rs = \frac{1}{1 + \frac{0.15 x V^{1.8}}{S_x \times L^{2.3}}}$$

W= 3.75 ft for BW Inlets Index 425-031

$E = R_f x E_o + R_s (1-E_o)$

Structure	Type	Location	Side	*Area (Ac) Total A	*Area (Ac) Impervious A1	*Area (Ac) Pervious A2	C	Q = CIA (CFS) SPREAD	Sx (FT/FT)	S_L (FT/FT)	T (FT)	Max. Shoulder Spread (FT)	Spread Remarks	Velocity V ft/s	W/T	S_w/S_x	E_O Chart 4	Vo Chart7 ft/s	L Grate ft	R_f Chart7	R_s	E	Q_i cfs	By Pass Flow Q_b cfs
								Q_i= ExQ																

E_o= Chart 4
V_o= Chart 7
Q_b= Q-Q_i

Inlet Capacity Analysis in Sag Locations-Grate Inlets

W = 2 ft
L = 3.92 ft (P-5 and P-6) Length of the grate
C_w = 3 Weir coefficient for non depressed curb opening
***** Spread per HEC-12 Chapter 8
Qi= $C_wPd^{1.5}$

Q_i= Intercepted flow cfs P=
Cw= Weir Coefficient d=

$$T=\left(\frac{Qxn}{0.56xS_x^{1.67}xS_L^{0.50}}\right)^{3/8}$$

HEC-12 Chapter 5

Inlet Capacity Analysis in Sag Locations-Grate Inlets

W = 3.08 ft ft
L = 4.25 ft (**Gutter Inlet Type S**) ft (**BW Inlet**) Length of the grate
C_w = 3 Weir coefficient for non depr Weir coefficient for non depressed curb opening
***** Spread per HEC-12 Chapter 8
Qi= $C_wPd^{1.5}$
Q_i= Intercepted flow cfs
Cw= Weir Coefficient

Spread and Inlet Capacity Calculation-South Bound

SR 826 NB South of W 49th Street

I = 4.00 in/hr SPREAD (Intensity)

I = 9.63 in/hr SAG VC 50-Years (Intensity)

$Q_i = C_o * A_i * (2gd)^{0.50}$

n = 0.016

C_1 = 0.95

C_2 = 0.25

C= $(C_1*A_1+C_2*A_2)/A$

S_x= Cross Slope

S_L= Longitudinal Slope

T= Spread (ft)

V= Velocity ft/s

E_O= Ratio of frontal flow to total g

S_w= Slope of the inlet witdth

W= gutter

R_f= frontal flow

R_s= flow

E= Efficiency

Q_i= Intercepted flow cfs

Cw= Weir Coefficient

L= Length of the grate (ft)

Structure	Type	Location	Side	*Area (Ac) Total A	*Area (Ac) Impervious A1	*Area (Ac) Pervious A2	C	Q = CIA (CFS) SPREAD	Sx (FT/FT)	S_L (FT/FT)	T (FT)	Max. Shoulder Spread (FT)	Spread Remarks	Velocity V ft/s	W/T	S_w/S_x	E_O Chart 4	Vo Chart7 ft/s	L Grate ft	R_f Chart7	R_s	E	Q_i cfs	By Pass Flow Flow Q_b cfs
EX15-7	BW	492+63.08	L	0.460	0.460	0.000	0.95	1.748	0.06	0.0087	4.61	8.80	OK	2.76	0.81	1.00	0.99	11.00	3.70	1.00	0.57	0.996	1.740	0.008
EX15-15A	BW	502+40.00	L	0.060	0.060	0.000	0.95	0.556	0.02	0.0030	7.29	8.00	OK											
Low Point																								
EX15-15A	BW	502+40.00	L	0.050	0.050	0.000	0.95	0.457	0.02	0.0030	6.77	8.00	OK											
S15-201	BW	494+02.00	L	0.340	0.340	0.000	0.95	1.300	0.06	0.0171	3.63	12.80	OK	3.30	1.03	1.00	1.00	11.00	3.70	1.00	0.49	1.000	1.300	0.000
EX15-11A	BW	496+91.13	L	0.480	0.480	0.000	0.95	1.832	0.06	0.0072	4.86	8.00	OK	2.60	0.77	1.00	0.97	11.00	3.70	1.00	0.59	0.988	1.810	0.022
S15-202	BW	498+54.00	L	0.360	0.360	0.000	0.95	1.368	0.06	0.0044	4.78	8.00	OK	2.01	0.79	1.00	0.98	11.00	3.70	1.00	0.70	0.994	1.360	0.008
High Point																								
S15-203	BW	501+18.00	L	0.380	0.380	0.000	0.95	3.485	0.06	0.0030	7.29	8.00	OK											
Low Point																								
S15-203	BW	501+18.00	L	0.360	0.360	0.000	0.95	3.293	0.06	0.0030	7.13	8.00	OK											
S15-16	BW	503+81.00	L	0.340	0.340	0.000	0.95	3.110	0.06	0.0030	6.98	8.00	OK											
Low Point																								
S15-16	BW	503+81.00	L	0.320	0.320	0.000	0.95	#REF!	0.06	0.0030	#REF!	8.00	#REF!											

Inlet Capacity Analysis-Grate Inlets (interseptors)

$$V = \frac{1.12}{n} x S^{0.5} x S_x^{0.67} x T^{0.67}$$

$$Rs = \frac{1}{1 + \frac{0.15 x V^{1.8}}{S_x \times L^{2.3}}}$$

W= 3.75 ft for BW Inlets Index 425-031

E_o= Chart 4

V_o= Chart 7

$E = R_f x E_o + R_s (1-E_o)$

$Q_i = ExQ$

$Q_b = Q-Q_i$

Inlet Capacity Analysis in Sag Locations-Grate Inlets

W = 2 ft

L = 3.92 ft (P-5 and P-6) Length of the grate

C_w = 3 Weir coefficient for non depressed curb opening

* Spread per HEC-12 Chapter 8

$Qi = C_w P d^{1.5}$

Q_i= Intercepted flow cfs P=

Cw= Weir Coefficient d=

$$T = \left(\frac{Qxn}{0.56 x S_x^{1.67} x S_L^{0.50}} \right)^{3/8}$$

HEC-12 Chapter 5

Inlet Capacity Analysis in Sag Locations-Grate Inlets

W = 3.08 ft ft

L = 4.25 ft (**Gutter Inlet Type S**) ft (**BW Inlet**) Length of the grate

C_w = 3 Weir coefficient for non depr Weir coefficient for non depressed curb opening

* Spread per HEC-12 Chapter 8

$Qi = C_w P d^{1.5}$

Q_i= Intercepted flow cfs

Structure	Type	Location	Side	*Area (Ac) Total A	*Area (Ac) Impervious A1	*Area (Ac) Pervious A2	C	Q = CIA (CFS) SPREAD	Sx (FT/FT)	S_L (FT/FT)	T (FT)	Max. Shoulder Spread (FT)	Spread Remarks	Velocity V ft/s	W/T	S_w/S_x	E_O Chart 4	Vo Chart7 ft/s	L Grate ft	R_f Chart7	R_s	E	Q_i cfs	By Pass Flow Flow Q_b cfs
Cw= Weir Coefficient																								

Spread and Inlet Capacity Calculation-South Bound

SR 826 NB South of W 49th Street

I = 4.00 in/hr SPREAD (Intensity)

I = 9.63 in/hr SAG VC 50-Years (Intensity)

$Q_i = C_o * A_i * (2gd)^{0.50}$

n = 0.016

C_1 = 0.95

C_2 = 0.25

C= $(C_1*A_1+C_2*A_2)/A$

S_x= Cross Slope

S_L= Longitudinal Slope

T= Spread (ft)

V= Velocity ft/s

E_O= Ratio of frontal flow to total g

S_w= Slope of the inlet witdth

W= gutter

R_f= frontal flow

R_s= flow

E= Efficiency

Q_i= Intercepted flow cfs

Cw= Weir Coefficient

L= Length of the grate (ft)

Structure	Type	Location	Side	*Area (Ac) Total A	*Area (Ac) Impervious A1	*Area (Ac) Pervious A2	C	Q = CIA (CFS) SPREAD	Sx (FT/FT)	S_L (FT/FT)	T (FT)	Max. Shoulder Spread (FT)	Spread Remarks	Velocity V ft/s	W/T	S_w/S_x	E_O Chart 4	Vo Chart7 ft/s	L Grate ft	R_f Chart7	R_s	E	Q_i cfs	By Pass Flow Flow Q_b cfs
Low Point																								
EX17-1A	BW	712+53.00	R	0.060	0.060	0.000	0.95	0.549	0.02	0.0030	7.25	8.00	OK											
Low Point																								
EX17-3A	BW	714+31.00	R	0.040	0.040	0.000	0.95	0.366	0.02	0.0030	6.23	8.00	OK											
S17-206	BW	518+11.00	L	0.340	0.340	0.000	0.95	1.292	0.06	0.0064	4.36	8.00	OK	2.28	0.86	1.00	1.00	11.00	3.70	1.00	0.65	1.000	1.292	0.000
S17-208	BW	519+26.00	L	0.280	0.280	0.000	0.95	1.064	0.06	0.0064	4.05	8.00	OK	2.17	0.93	1.00	1.00	11.00	3.70	1.00	0.67	1.000	1.064	0.000
S17-210	BW	520+56.00	L	0.280	0.280	0.000	0.95	1.118	0.06	0.0064	4.13	8.00	OK	2.20	0.91	1.00	1.00	11.00	3.70	1.00	0.66	1.000	1.118	0.000
S17-211	BW	521+83.00	L	0.650	0.650	0.000	0.95	2.529	0.06	0.0064	5.61	8.00	OK	2.70	0.67	1.00	0.95	11.00	3.70	1.00	0.58	0.979	2.476	0.054
EX17-27A	BW	7524+33.00	L	0.720	0.720	0.000	0.95	2.736	0.06	0.0064	5.77	10.00	OK	2.75	0.65	1.00	0.95	11.00	3.70	1.00	0.57	0.978	2.677	0.059
S17-216	BW	527+70.00	L	0.300	0.300	0.000	0.95	1.140	0.06	0.0064	4.16	10.00	OK	2.21	0.90	1.00	1.00	11.00	3.70	1.00	0.66	1.000	1.140	0.000
S17-223	BW	529+26.00	L	0.290	0.290	0.000	0.95	1.102	0.06	0.0040	4.48	10.00	OK	1.84	0.84	1.00	1.00	11.00	3.70	1.00	0.73	1.000	1.102	0.000
High Point																								
S17-227	BW	534+30.00	L	0.530	0.530	0.000	0.95	2.014	0.06	0.0073	5.02	10.00	OK	2.68	0.75	1.00	0.97	11.00	3.70	1.00	0.58	0.987	1.989	0.025
S17-229	BW	537+27.00	L	0.620	0.620	0.000	0.95	2.381	0.06	0.0035	6.14	12.00	OK	2.12	0.61	1.00	0.91	11.00	3.70	1.00	0.68	0.971	2.312	0.069
S17-231	BW	539+27.00	L	0.440	0.440	0.000	0.95	1.741	0.06	0.0064	4.87	12.00	OK	2.46	0.77	1.00	0.98	11.00	3.70	1.00	0.62	0.992	1.728	0.013
S17-208A	BW	7519+54.00	L	0.080	0.080	0.000	0.95	0.304	0.06	0.0070	2.49	8.00	OK	1.64	1.30	1.00	1.00	11.00	3.70	1.00	0.77	1.000	0.304	0.000
S17-210A	BW	7520+72.00	L	0.080	0.080	0.000	0.95	0.732	0.06	0.0030	4.06	6.00	OK											
Low Point																								
S17-210A	BW	7520+72.00	L	0.020	0.020	0.000	0.95	0.183	0.06	0.0030	2.41	8.00	OK											

Inlet Capacity Analysis-Grate Inlets (interseptors)

$$V = \frac{1.12}{n} x S^{0.5} x S_x^{0.67} x T^{0.67}$$

$$Rs = \frac{1}{1 + \frac{0.15 x V^{1.8}}{S_x \times L^{2.3}}}$$

W= 3.75 ft for BW Inlets Index 425-031

$E = R_f x E_o + R_s (1-E_o)$

$Q_i = E x Q$

$Q_b = Q - Q_i$

E_o= Chart 4

V_o= Chart 7

Inlet Capacity Analysis in Sag Locations-Grate Inlets

W = 2 ft

L = 3.92 ft (P-5 and P-6) Length of the grate

C_w = 3 Weir coefficient for non depressed curb opening

* Spread per HEC-12 Chapter 8

$Qi = C_w P d^{1.5}$

$$T = \left(\frac{Qxn}{0.56 x S_x^{1.67} x S_L^{0.50}} \right)^{3/8}$$

HEC-12 Chapter 5

Structure	Type	Location	Side	Total A	*Area (Ac) Impervious A1	Pervious A2	C	Q = CIA (CFS) SPREAD	Sx (FT/FT)	S_L (FT/FT)	T (FT)	Max. Shoulder Spread (FT)	Spread Remarks	Velocity V ft/s	W/T	S_w/S_x	E_O Chart 4	Vo Chart7 ft/s	L Grate ft	R_f Chart7	R_s	E	Q_i cfs	By Pass Flow Flow Q_b cfs

Q_i= Intercepted flow cfs P=
Cw= Weir Coefficient d=

Inlet Capacity Analysis in Sag Locations-Grate Inlets

W = 3.08 ft ft
L = 4.25 ft (**Gutter Inlet Type S**) ft (**BW Inlet**) Length of the grate
C_w = 3 Weir coefficient for non depr Weir coefficient for non depressed curb opening

***** Spread per HEC-12 Chapter 8

Qi= $C_wPd^{1.5}$
Q_i= Intercepted flow cfs
Cw= Weir Coefficient

Spread and Inlet Capacity Calculation-South Bound

SR 826 NB South of W 49th Street

I = 4.00 in/hr SPREAD (Intensity)

I = 9.63 in/hr SAG VC 50-Years (Intensity)

$Q_i = C_o * A_i * (2gd)^{0.50}$

n = 0.016

C_1 = 0.95

C_2 = 0.25

C= $(C_1*A_1+C_2*A_2)/A$

S_x= Cross Slope

S_L= Longitudinal Slope

T= Spread (ft)

V= Velocity ft/s

E_O= Ratio of frontal flow to total g

S_w= Slope of the inlet witdth

W= gutter

R_f= frontal flow

R_s= flow

E= Efficiency

Q_i= Intercepted flow cfs

Cw= Weir Coefficient

L= Length of the grate (ft)

Structure	Type	Location	Side	*Area (Ac) Total A	*Area (Ac) Impervious A1	*Area (Ac) Pervious A2	C	Q = CIA (CFS) SPREAD	Sx (FT/FT)	S_L (FT/FT)	T (FT)	Max. Shoulder Spread (FT)	Spread Remarks	Velocity V ft/s	W/T	S_w/S_x	E_O Chart 4	Vo Chart7 ft/s	L Grate ft	R_f Chart7	R_s	E	Q_i cfs	By Pass Flow Flow Q_b cfs
EX17-26	BW	5522+55.32	R	0.200	0.200	0.000	0.95	0.760	0.06	0.0070	3.51	8.00	OK	2.06	0.93	1.00	1.00	11.00	3.70	1.00	0.69	1.000	0.760	0.000
S17-233	BW	523+17.00	R	0.340	0.340	0.000	0.95	1.292	0.06	0.0191	3.55	10.00	OK	3.43	1.06	1.00	1.00	11.00	3.70	1.00	0.47	1.000	1.292	0.000
S17-235	BW	524+80.00	R	0.640	0.640	0.000	0.95	2.432	0.06	0.0248	4.28	10.00	OK	4.44	0.88	1.00	1.00	11.00	3.70	1.00	0.36	1.000	2.432	0.000
S17-237	BW	527+80.00	R	0.320	0.320	0.000	0.95	1.216	0.06	0.0239	3.33	10.00	OK	3.68	1.13	1.00	1.00	11.00	3.70	1.00	0.44	1.000	1.216	0.000
S17-239	BW	529+28.00	R	0.290	0.290	0.000	0.95	1.102	0.06	0.0120	3.65	10.00	OK	2.77	1.03	1.00	1.00	11.00	3.70	1.00	0.56	1.000	1.102	0.000
High Point																								
S17-241	BW	532+77.00	R	0.450	0.450	0.000	0.95	1.710	0.06	0.0120	4.30	10.00	OK	3.09	0.76	1.00	0.97	11.00	3.70	1.00	0.51	0.985	1.685	0.025
S17-243	BW	537+32.00	R	0.800	0.800	0.000	0.95	3.065	0.06	0.0230	4.74	10.00	OK	4.57	0.69	1.00	0.95	11.00	3.70	1.00	0.34	0.967	2.964	0.100
EX17-1	BW	540+28.00	R	0.560	0.560	0.000	0.95	2.228	0.06	0.0277	4.06	10.00	OK	4.52	0.80	1.00	0.99	11.00	3.70	1.00	0.35	0.993	2.214	0.015

Inlet Capacity Analysis-Grate Inlets (interseptors)

$V = \frac{1.12}{n} xS^{0.5}xS_x^{0.67}xT^{0.67}$

$Rs = \frac{1}{1+\frac{0.15xV^{1.8}}{S_x \times L^{2.3}}}$

W= 3.75 ft for BW Inlets Index 425-031

$E = R_f xE_o + R_s (1-E_o)$

Q_i= ExQ

$Q_b = Q-Q_i$

E_o= Chart 4

V_o= Chart 7

Inlet Capacity Analysis in Sag Locations-Grate Inlets

W = 2 ft

L = 3.92 ft (P-5 and P-6) Length of the grate

C_w = 3 Weir coefficient for non depressed curb opening

* Spread per HEC-12 Chapter 8

$Qi = C_wPd^{1.5}$

Q_i= Intercepted flow cfs P=

Cw= Weir Coefficient d=

$T = \left(\frac{Qxn}{0.56xS_x^{1.67}xS_L^{0.50}}\right)^{3/8}$

HEC-12 Chapter 5

Inlet Capacity Analysis in Sag Locations-Grate Inlets

W = 3.08 ft ft

L = 4.25 ft (**Gutter Inlet Type S**) ft (**BW Inlet**) Length of the grate

C_w = 3 Weir coefficient for non depr Weir coefficient for non depressed curb opening

* Spread per HEC-12 Chapter 8

$Qi = C_wPd^{1.5}$

Q_i= Intercepted flow cfs

Cw= Weir Coefficient

APPENDIX O
Correspondence

From: Dominguez, Mario
To: Corrales, Emilio F.
Cc: Pulido, Nathaniel; Yi, Alex; Hameed, Rohan; Shaikh, Imtyaz; Suarez, Erki; Quintela, Raul
Subject: RE: 447165-1 SR 826 Capacity Improvement Project - Design Variation Hydroplaning Analysis
Date: Monday, October 26, 2020 7:52:23 AM

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Emilio;

I don't have any other comment for the hydroplaning analysis.

You are good to go move forward.

Thanks

Mario Dominguez , P.E.
Drainage Engineer

Florida Department of Transportation - District Six
Adam Leigh Cann Building
1000 NW 111th Avenue - Room 6211
Miami, Fl 33172
Phone: 305-470-5482
Fax: 305-470-5293
e-mail : mario.dominguez@dot.state.fl.us

From: Corrales, Emilio F. <Emilio.Corrales@hdrinc.com>
Sent: Thursday, October 22, 2020 5:38 PM
To: Dominguez, Mario <Mario.Dominguez@dot.state.fl.us>
Cc: Pulido, Nathaniel <Nathaniel.Pulido@dot.state.fl.us>; Yi, Alex <Alex.Yi@dot.state.fl.us>; Hameed, Rohan <Rohan.Hameed@hdrinc.com>; Shaikh, Imtyaz <Imtyazahmad.Shaikh@hdrinc.com>; Suarez, Erki <erki.suarez@hdrinc.com>; Quintela, Raul <Raul.Quintela@dot.state.fl.us>
Subject: RE: 447165-1 SR 826 Capacity Improvement Project - Design Variation Hydroplaning Analysis

Mario,

Good afternoon. Attached please find the cover sheet and the proposed pavement design package recommendation sheet for the SR 826 mainline pavement design. The recommended pavement design depicts the use of FC-5 open graded friction course. Additionally, attached for your reference please find the Pavement Design Package sheets for the DB project (432687-1) confirming that the existing pavement consists of FC-5 open graded friction course.

Do you need the complete Pavement Design Package Report or do the attached documents meet your request?

Thanks.

Emilio Corrales, PE
HDR
15450 New Barn Road, Suite 304
Miami Lakes, FL 33014
D 305.728.7428 **M** 954.258.4845
emilio.corrales@hdrinc.com

hdrinc.com/follow-us

From: Dominguez, Mario <Mario.Dominguez@dot.state.fl.us>
Sent: Thursday, October 22, 2020 4:42 PM
To: Corrales, Emilio F. <Emilio.Corrales@hdrinc.com>
Cc: Pulido, Nathaniel <Nathaniel.Pulido@dot.state.fl.us>; Yi, Alex <alex.yi@dot.state.fl.us>; Hameed, Rohan <Rohan.Hameed@hdrinc.com>; Shaikh, Imtyaz <Imtyazahmad.Shaikh@hdrinc.com>; Suarez, Erki <Erki.Suarez@hdrinc.com>; Quintela, Raul <raul.quintela@dot.state.fl.us>
Subject: RE: 447165-1 SR 826 Capacity Improvement Project - Design Variation Hydroplaning Analysis

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Emilio;

The surface type “Open Graded Friction Course” was used for the hydroplaning calculations but is not provided in your documentation.
Just for our records; please provide the backup documentation for the type of surface used.

Thanks

From: Corrales, Emilio F. <Emilio.Corrales@hdrinc.com>
Sent: Tuesday, October 20, 2020 4:02 PM
To: Pulido, Nathaniel <Nathaniel.Pulido@dot.state.fl.us>
Cc: Yi, Alex <Alex.Yi@dot.state.fl.us>; Hameed, Rohan <Rohan.Hameed@hdrinc.com>; Shaikh, Imtyaz <Imtyazahmad.Shaikh@hdrinc.com>; Suarez, Erki <erki.suarez@hdrinc.com>; Quintela, Raul <Raul.Quintela@dot.state.fl.us>

Subject: RE: 447165-1 SR 826 Capacity Improvement Project - Design Variation Hydroplaning Analysis

EXTERNAL SENDER: Use caution with links and attachments.

Nathan,

Good afternoon. Have you had an opportunity to review the Hydroplaning analysis?

Thanks and please let me know if you have any questions or require additional information.

Emilio Corrales, PE
HDR
15450 New Barn Road, Suite 304
Miami Lakes, FL 33014
D 305.728.7428 **M** 954.258.4845
emilio.corrales@hdrinc.com

hdrinc.com/follow-us

From: Corrales, Emilio F.
Sent: Monday, October 12, 2020 4:29 PM
To: nathaniel.pulido@dot.state.fl.us
Cc: 'Alex.Yi@dot.state.fl.us' <Alex.Yi@dot.state.fl.us>; Hameed, Rohan <rohan.hameed@hdrinc.com>; Shaikh, Imtyaz <Imtyazahmad.Shaikh@hdrinc.com>; Suarez, Erki <erki.suarez@hdrinc.com>; Quintela, Raul <raul.quintela@dot.state.fl.us>
Subject: 447165-1 SR 826 Capacity Improvement Project - Design Variation Hydroplaning Analysis

Nathan,

Good afternoon and hope all is going well.

As part of the 447165-1 SR 826/Palmetto Expressway Capacity Improvement Project we are documenting a Design Variation report for Cross Slopes based on the No. of lanes sloping in same direction .

Attached please find the Hydroplaning Analysis for your review and input. Please let us know if you have any questions or concerns regarding the proposed project design and analysis approach? Feel free to reply back to this email to for us to document in Design Variation report.

We conducted the Hydroplaning risk analysis for a design speed of 60 mph with a rainfall intensity from 0.1 to 4 in/hr using FDOT latest Hydroplaning Tools. Predicted hydroplaning speed (mph) is greater than predicted driver speed (mph). Therefore there is no hydroplaning anticipated for SR

826 sections evaluated in accordance with the Typical Section Package.

Thanks.

Emilio Corrales, PE
HDR
15450 New Barn Road, Suite 304
Miami Lakes, FL 33014
D 305.728.7428 **M** 954.258.4845
emilio.corrales@hdrinc.com

hdrinc.com/follow-us

From: Pulido, Nathaniel
To: Hameed, Rohan
Cc: Padron, Anaily; Shaikh, Imtyaz; Manso, Javier; Suarez, Erki; Dominguez, Mario; Marrero, Renato
Subject: RE: District 6 Drainage Engineer Approval for Palmetto Phase II - Junction Box without top side access
Date: Thursday, October 15, 2020 8:57:24 AM
Attachments: image002.png
image003.png
image004.png
image005.png

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good morning Rohan,

By converting the existing barrier wall inlets into junction boxes, it will make it difficult and nearly impossible for Maintenance to access the existing system, especially the side drains. The cost and time savings do not justify this design. A new system should be put in place within the proposed widening segment.

Thank you

Nathan V. Pulido, P.E.
District Drainage Engineer
Florida Department of Transportation - District 6 Adam Leigh Cann Building
1000 NW 111th Avenue - Room 6211
Miami, FL 33172
Office (305)-470-5264

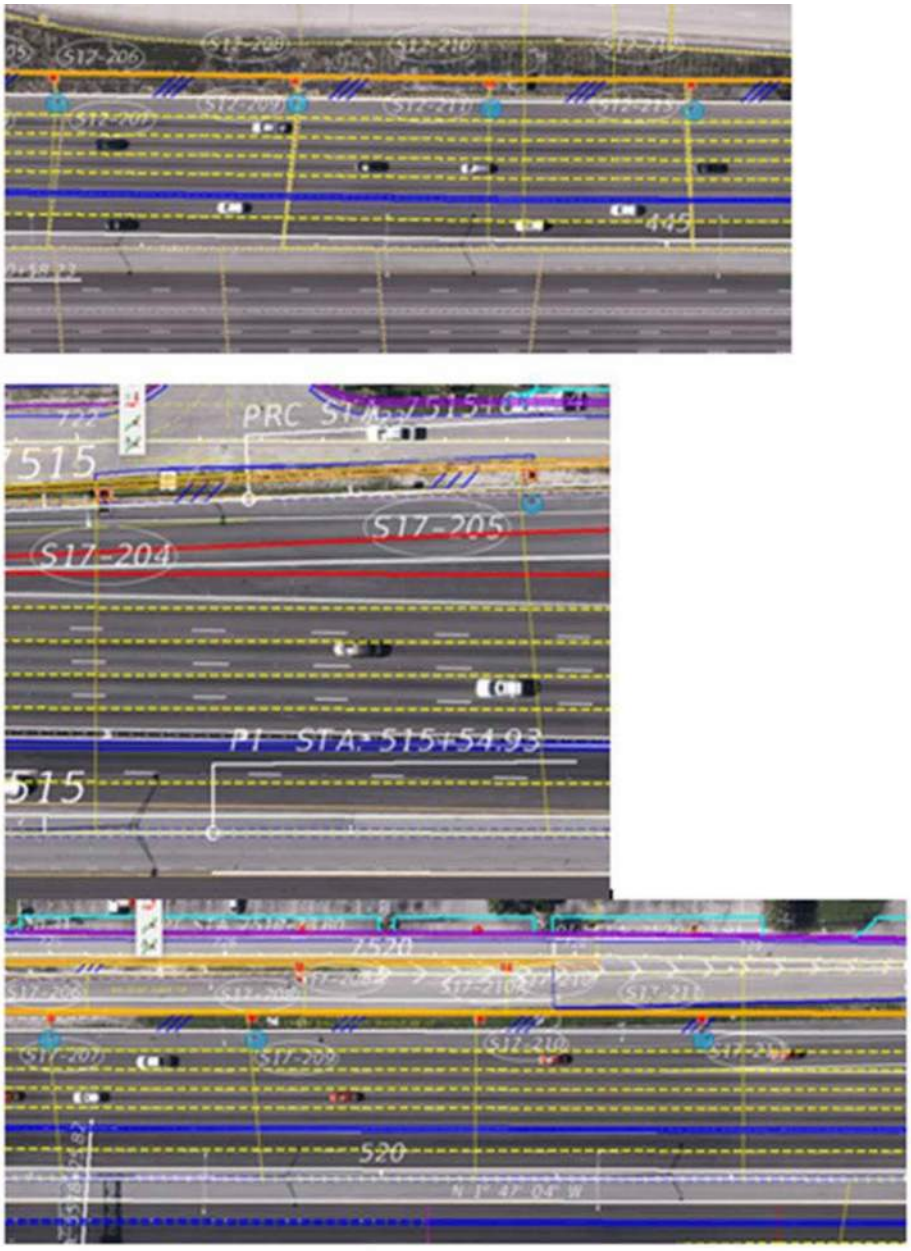
From: Hameed, Rohan <Rohan.Hameed@hdrinc.com>
Sent: Friday, October 9, 2020 11:47 AM
To: Pulido, Nathaniel <Nathaniel.Pulido@dot.state.fl.us>
Cc: Padron, Anaily <Anaily.Padron@hdrinc.com>; Shaikh, Imtyaz <Imtyazahmad.Shaikh@hdrinc.com>; Manso, Javier <Javier.Manso@hdrinc.com>; Suarez, Erki <erki.suarez@hdrinc.com>; Hameed, Rohan <Rohan.Hameed@hdrinc.com>
Subject: District 6 Drainage Engineer Approval for Palmetto Phase II - Junction Box without top side access

EXTERNAL SENDER: Use caution with links and attachments.

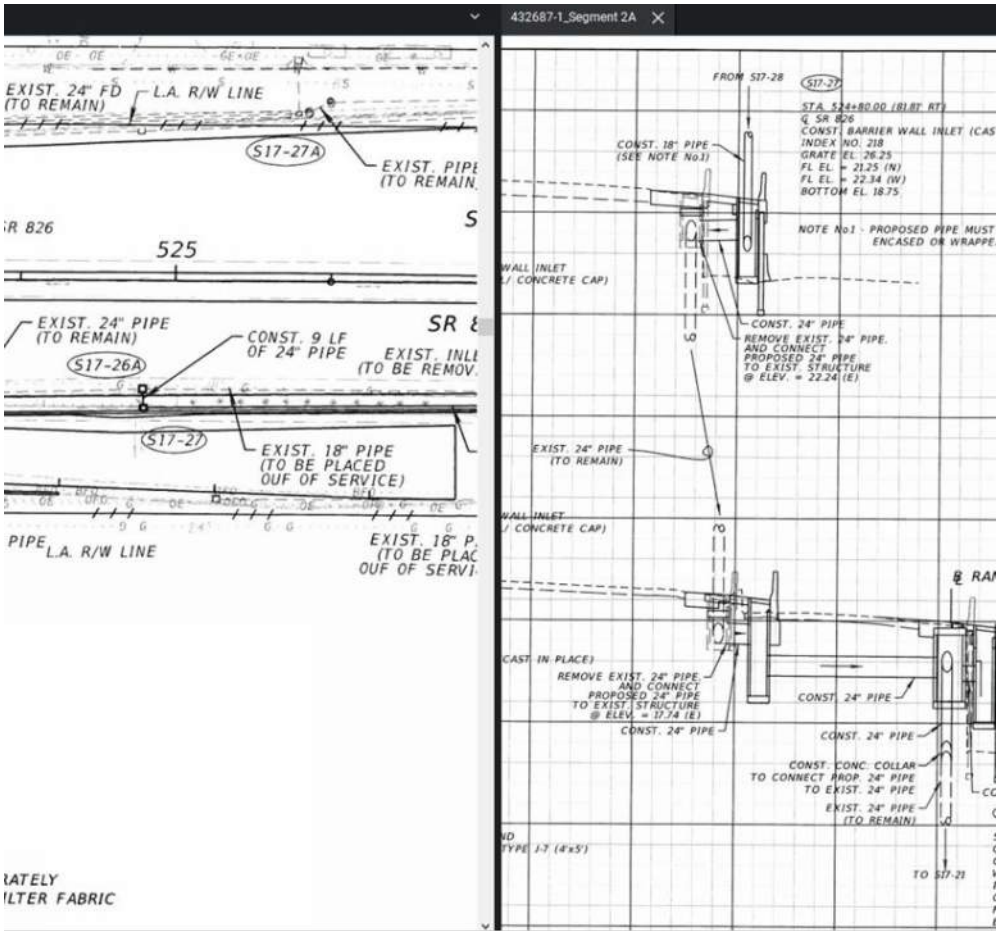
Good morning Nathan:

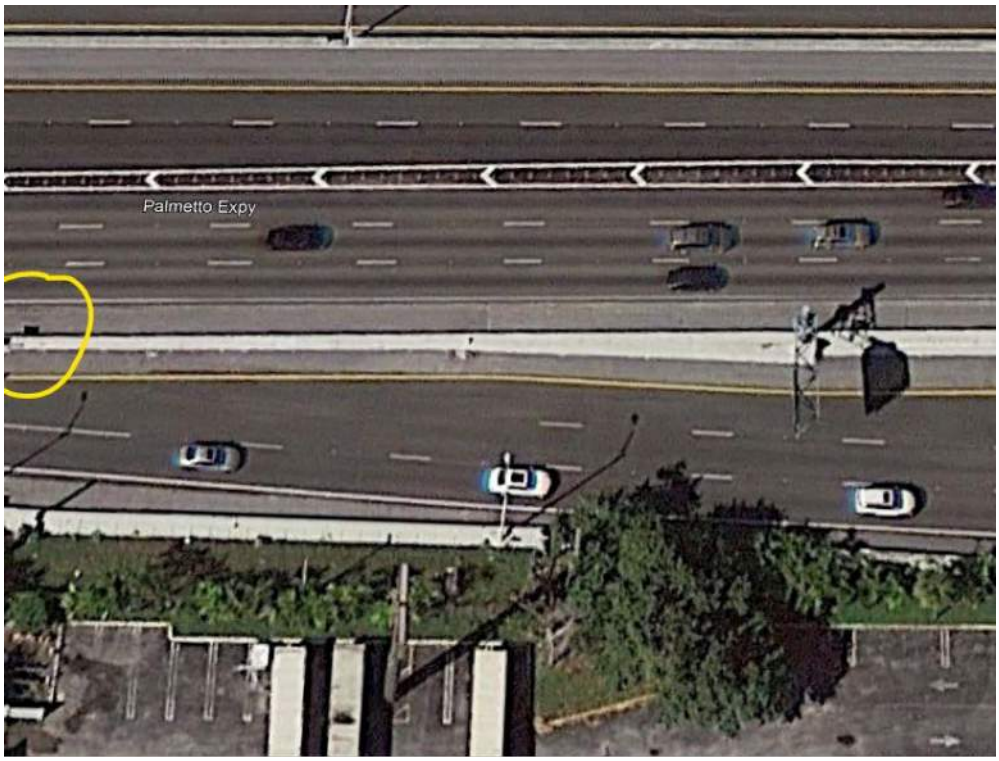
Existing inlets collect runoff from SR 826 and are located within shoulder. The existing inlets are connected with existing pipe systems . In the proposed condition widening of the shoulder and converting the existing shoulder to be a travel lane and in order to use existing pipe systems, existing inlets will be converted in to manholes but will be lied on proposed travel lane (refer to Screen Capture No. 1). The recently built project shifted the drainage inlet outside, and convert the existing inlet to be junction box thus there are no manholes today on the travel lanes (refer to Screen Captures No. 2).
The Drainage Manual Maintenance says that is very difficult to clean the structures and pipes with Junction Boxes. This needs to be approved by District Drainage Engineer (refer to Screen Capture No.3). Please approve the design.

Screen Capture No. 1:



Screen Capture No. 2


432687-1_Segment 2A
EXIST. 24" FD
(TO REMAIN)
L.A. R/W LINE
S17-27A
525
EXIST. 24" PIPE
(TO REMAIN)
CONST. 9 LF
OF 24" PIPE
S17-26A
S17-27
EXIST. 18" PIPE
(TO BE PLACED
OUF OF SERVICE)
L.A. R/W LINE
FROM S17-28
S17-27
CONST. 18" PIPE
(SEE NOTE No.3)
CONST. 24" PIPE
REMOVE EXIST. 24" PIPE
AND CONNECT
PROPOSED 24" PIPE
TO EXIST. STRUCTURE
@ ELEV. = 22.24 (E)
EXIST. 24" PIPE
(TO REMAIN)
REMOVE EXIST. 24" PIPE
AND CONNECT
PROPOSED 24" PIPE
TO EXIST. STRUCTURE
@ ELEV. = 17.74 (E)
CONST. 24" PIPE
CONST. 24" PIPE
CONST. CONC. COLLAR
TO CONNECT PROP. 24" PIPE
TO EXIST. 24" PIPE
EXIST. 24" PIPE
(TO REMAIN)


Palmetto Expy

Screen Capture No. 3

Topic No. 625-040-002
Drainage Manual

Effective: January 2020

it in the plans; and, as appropriate, provide special provisions for inclusion with the project specifications. Consider maintenance concerns of adequate physical access for cleaning and repair in the design.

Provide topside access at all pipe junctions and bends. The use of junction boxes without topside access will require District Drainage Engineer approval. Consider the use of a new inlet in place of a junction box or manhole to capture roadway runoff.

Drainage structures with internal weirs must have manhole access on each side of the weir. For areas of expected frequent entry, ask FDOT Maintenance if a two piece, three-foot diameter manhole cover is needed for maintenance access.

Regards

R.A. Hameed PE
Roadway Section Manager

HDR
15450 New Barn Rd, Suite 304
Miami Lakes, FL 33014
D 305-728-7413 **C** 954-445-2635
rohan.hameed@hdrinc.com

hdrinc.com/follow-us

From:	Shaikh, Imtyaz
To:	Hameed, Rohan
Subject:	RE: 447165-1 SR 826 Capacity Improvement Project - Frontage Road Drainage Complaints or Issues
Date:	Wednesday, October 14, 2020 11:14:00 AM
Attachments:	image003.png

Thank you.

Imtyaz Shaikh, PE
D 305-728-7434 **M** 813-956-8487

From: Hameed, Rohan <Rohan.Hameed@hdrinc.com>
Sent: Wednesday, October 14, 2020 11:13 AM
To: Shaikh, Imtyaz <Imtyazahmad.Shaikh@hdrinc.com>
Cc: Hameed, Rohan <Rohan.Hameed@hdrinc.com>
Subject: FW: 447165-1 SR 826 Capacity Improvement Project - Frontage Road Drainage Complaints or Issues

Regards

R.A. Hameed, PE
D 305-728-7413 **C** 954-445-2635

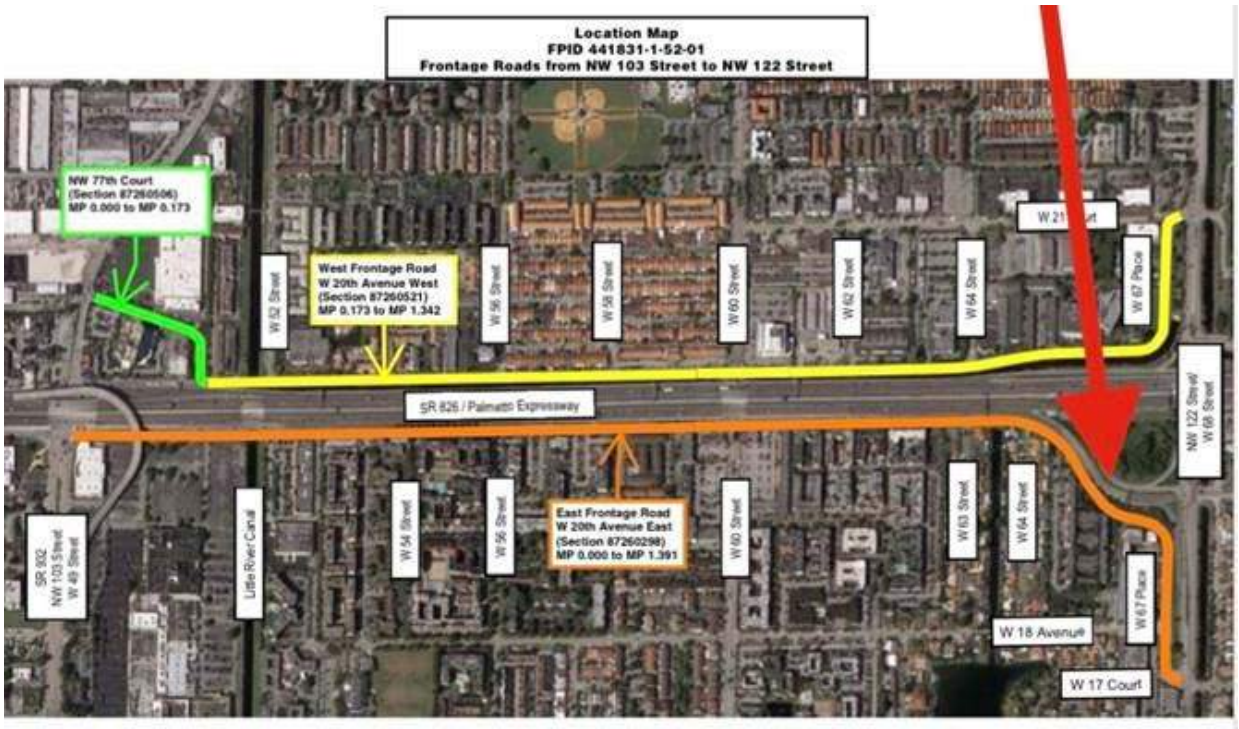
hdrinc.com/follow-us

From: Padron, Anaily <Anaily.Padron@dot.state.fl.us>
Sent: Wednesday, October 14, 2020 11:11 AM
To: Corrales, Emilio F. <Emilio.Corrales@hdrinc.com>
Cc: Yi, Alex <alex.yi@dot.state.fl.us>; Hameed, Rohan <Rohan.Hameed@hdrinc.com>; Suarez, Erki <Erki.Suarez@hdrinc.com>; Quintela, Raul <raul.quintela@dot.state.fl.us>; Pulido, Nathaniel <Nathaniel.Pulido@dot.state.fl.us>; Manso, Javier <Javier.Manso@hdrinc.com>; Sandin, Carl <Carl.Sandin@hdrinc.com>; Jett, Elizabeth <Elizabeth.Jett@dot.state.fl.us>; Salazar, Leonard <leonard.salazar@dot.state.fl.us>
Subject: RE: 447165-1 SR 826 Capacity Improvement Project - Frontage Road Drainage Complaints or Issues

CAUTION: [EXTERNAL] This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Emilio,

Please see attached the response from FDOT/DBI. The only drainage complaints and/or issues along the Frontage Roads for the following limit is the area shown below in red. Please do not hesitate to contact me if you have any questions.



Thank you,

Anaily Padron, P.E.
In-House Consultant – HDR Engineering, Inc.
Drainage Design Section
Florida Department of Transportation - District 6
Adam Leigh Cann Building
1000 NW 111th Avenue - Room 6211
Miami, FL 33172
Office (305)-470-5223
Email: anaily.padron@dot.state.fl.us

From: Corrales, Emilio F. <Emilio.Corrales@hdrinc.com>
Sent: Monday, October 12, 2020 4:59 PM
To: Salazar, Leonard <Leonard.Salazar@dot.state.fl.us>; Padron, Anaily <Anaily.Padron@dot.state.fl.us>
Cc: Yi, Alex <Alex.Yi@dot.state.fl.us>; Hameed, Rohan <Rohan.Hameed@hdrinc.com>; Suarez, Erki <erki.suarez@hdrinc.com>; Quintela, Raul <Raul.Quintela@dot.state.fl.us>; Pulido, Nathaniel <Nathaniel.Pulido@dot.state.fl.us>; Manso, Javier <Javier.Manso@hdrinc.com>; Sandin, Carl <Carl.Sandin@hdrinc.com>
Subject: RE: 447165-1 SR 826 Capacity Improvement Project - Frontage Road Drainage Complaints or Issues

EXTERNAL SENDER: Use caution with links and attachments.

Leonard and Anaily,

Good afternoon and hope all is going well.

As part of the 447165-1 SR 826/Palmetto Expressway Capacity Improvement Project we are documenting a Design Variation report for Cross Slopes along the frontage roads.

Attached please find the plan sheets depicting Frontage Road limits, MP, side street names, and section numbers for your reference.

We would like to inquire to see if there have been any drainage complaints and/or issues along the Frontage Roads for the following limits:

- FPID 441830-1-52-01
  - Section 87260151 (MP 0.000-0.720), W 20th Avenue from Okeechobee Road to W 44th Place.
  - Section 87260152 (MP 0.011-0.715), NW 77th Avenue from south of NW 95th Street to NW 103rd Street.

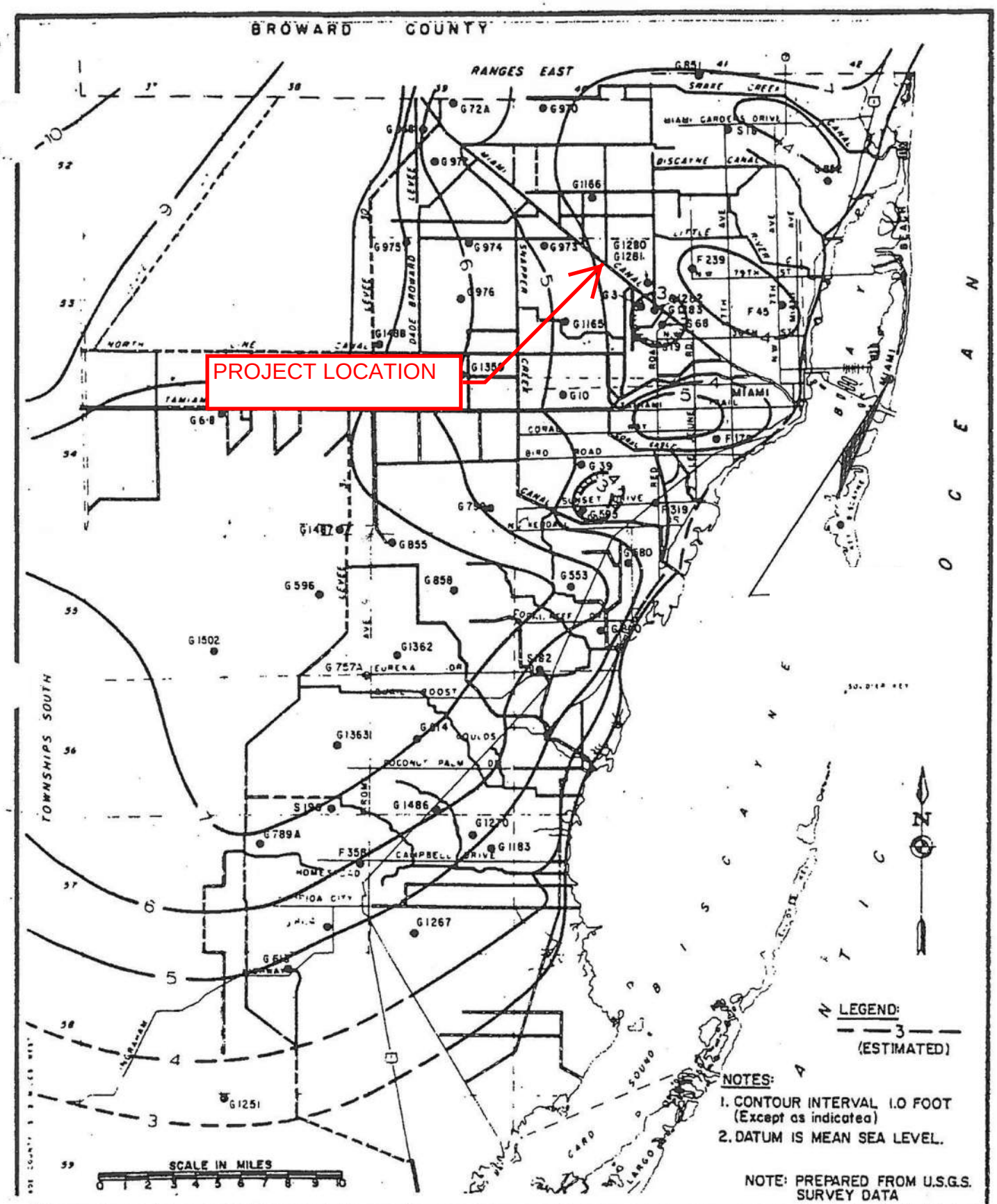
- FPID 441831-1-52-01
  - Section 87260298 (MP 0.000-1.391), W 20th Avenue East from NW 103rd Street/W 49th Street to NW 122nd Street/W 68th Street, including W 67th Place from west of W 18th Avenue to W 17th Court.
  - Section 87260506 (MP 0.000-0.173), NW 77th Court from NW 103rd Street to south of Little River Canal.
  - Section 87260521 (MP 0.173-1.342), NW 77th Avenue from south of Little River Canal to Little River Canal, W 20th Avenue West from Little River Canal to NW 122nd Street/W 68th Street, including W 67th Place from west of W 21st Court.

Thanks.

Emilio Corrales, PE
HDR
15450 New Barn Road, Suite 304
Miami Lakes, FL 33014
D 305.728.7428 **M** 954.258.4845
emilio.corrales@hdrinc.com

hdrinc.com/follow-us

APPENDIX P
Base Clearance Calcs



METROPOLITAN DADE COUNTY PUBLIC WORKS DEPARTMENT	APPROVED 4/5/72	REVISED 2/19/75 4/14/77	DESIGN STANDARDS AVERAGE YEARLY HIGHEST GROUND WATER LEVEL 1960-75	W.C. 2.1 SHEET 1 OF 1

BASE CLEARANCE CALCULATIONS

BASIN	STA.	EXIST. EOP (FT)	DISTANCE EXIST. TO PROPOSED EOP (FT)	PROPOSED EOP (FT)	BOTTOM OF BASE (FT)	AVERAGE YEARLY HIGHEST GROUND WATER LEVEL (FT-NGVD)	DATUM SHIFT (NGVD TO NAVD)	AVERAGE YEARLY HIGHEST GROUND WATER LEVEL (FT-NAVD)	BASE CLEARANCE (FT)	MINIMUM REQUIRED BASE CLEARANCE (FT)	REMARK
BASIN B-13	454+44	19.6	6	19.42	18.59	4	1.56	2.44	16.15	3	OK
BASIN B-15	499+00	5.36	7.9	5.12	4.29	4	1.56	2.44	1.85	3	NOT OK
BASIN B-17	514+00	5.47	6	5.29	4.46	4	1.56	2.44	2.02	3	NOT OK
B-15_FRONTAGE	708+66	6.24	0	6.24	5.41	4	1.56	2.44	2.97	3	NOT OK
B-16_FRONTAGE	213+58	5.59	0	5.59	4.76	4	1.56	2.44	2.32	3	NOT OK
B-17_FRONTAGE	720+16	5.25	0	5.25	4.42	4	1.56	2.44	1.98	3	NOT OK
B-18_FRONTAGE	322+17	6.14	0	6.14	5.31	4	1.56	2.44	2.87	3	NOT OK
B-19_FRONTAGE	356+19	4.93	0	4.93	4.10	4	1.56	2.44	1.66	3	NOT OK

APPENDIX Q
Existing Permit Information

FORM #0157
Rev. 07/09

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
ENVIRONMENTAL RESOURCE
PERMIT MODIFICATION NO. 13-01378-P
DATE ISSUED: OCTOBER 21, 2013

PERMITTEE: FLORIDA DEPARTMENT OF TRANSPORTATION
(S R 826/PALMETTO EXPRESSWAY AND S R 93/I-75 EXPRESS LANES)
1000 N W 111TH AVENUE ROOM 6211,
MIAMI, FL 33172

ORIGINAL PERMIT ISSUED: APRIL 13, 2000

ORIGINAL PROJECT DESCRIPTION: AUTHORIZATION FOR THE CONSTRUCTION AND OPERATION OF A SURFACE WATER MANAGEMENT SYSTEM TO SERVE PROPOSED IMPROVEMENTS TO SECTION 10 OF THE PALMETTO EXPRESSWAY (S.R. 826) AT THE OKEECHOBEE ROAD (US-27) AND SOUTH RIVER DRIVE INTERCHANGE. THIS PROJECT ENCOMPASSES A TOTAL AREA OF 64.29 ACRES.

APPROVED MODIFICATION: CONCEPTUAL APPROVAL OF A STORMWATER MANAGEMENT SYSTEM TO SERVE A 634.13 ACRE ROADWAY PROJECT KNOWN AS SR 826/PALMETTO EXPRESSWAY AND SR 93/I-75 EXPRESS LANES.(NO CONSTRUCTION IS AUTHORIZED BY THIS PERMIT.)

PROJECT LOCATION: MIAMI-DADE COUNTY , SECTION 4,9,16,21-23,26-28,30,34,35 TWP 52S RGE 40E
SECTION 2,3,10,11,14,15,22,23,26,27,34,35 TWP 53S RGE 40E

PERMIT DURATION: See Special Condition No:1.

This is to notify you of the District's agency action concerning Permit Application No. 130812-1, dated August 9, 2013. This action is taken pursuant to the provisions of Chapter 373, Part IV, Florida Statutes (F.S.).

Based on the information provided, District rules have been adhered to and an Environmental Resource Permit Modification is in effect for this project subject to:

1. Not receiving a filed request for an administrative hearing pursuant to Section 120.57 and Section 120.569, or request a judicial review pursuant Section 120.68, Florida Statutes.
2. The attached 19 General Conditions.
3. The attached 20 Special Conditions.
4. The attached 3 Exhibits.

Should you object to these conditions, please refer to the attached "Notice of Rights" which addresses the procedures to be followed if you desire a public hearing or other review of the proposed agency action. Should you wish to object to the proposed agency action or file a petition, please provide written objections, petitions and/or waivers to:

Juanita Addie, Deputy Clerk, MSC9610
South Florida Water Management District
Post Office Box 24680
West Palm Beach, FL 33416-4680

Please contact this office if you have any questions concerning this matter. If we do not hear from you in accordance with the "Notice of Rights", we will assume that you concur with the District's action.

CERTIFICATION OF SERVICE

I HEREBY CERTIFY that the Staff Report, Conditions and Notice of Rights have been mailed or electronically submitted to the Permittee (and the persons listed on the attached staff report distribution list) no later than 5:00 p.m. on this 22nd day of October, 2013, in accordance with Section 120.60(3), Florida Statutes, and a copy has been filed and acknowledged with the Deputy District Clerk.

By _____
DEPUTY CLERK
SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Attachments

SPECIAL CONDITIONS

1. The conceptual phase of this permit shall expire on October 21, 2018.

2. Operation of the stormwater management system shall be the responsibility of PERMITTEE.

3. The permittee shall be responsible for the correction of any erosion, shoaling or water quality problems that result from the construction or operation of the stormwater management system.

4. Measures shall be taken during construction to insure that sedimentation and/or turbidity violations do not occur in the receiving water.

5. The District reserves the right to require that additional water quality treatment methods be incorporated into the drainage system if such measures are shown to be necessary.

6. Facilities other than those stated herein shall not be constructed without an approved modification of this permit.

7. A stable, permanent and accessible elevation reference shall be established on or within one hundred (100) feet of all permitted discharge structures no later than the submission of the certification report. The location of the elevation reference must be noted on or with the certification report.

8. The permittee shall provide routine maintenance of all of the components of the stormwater management system in order to remove all trapped sediments/debris. All materials shall be properly disposed of as required by law. Failure to properly maintain the system may result in adverse flooding conditions.

9. This permit is issued based on the applicant's submitted information which reasonably demonstrates that adverse water resource related impacts will not be caused by the completed permit activity. Should any adverse impacts caused by the completed stormwater management system occur, the District will require the permittee to provide appropriate mitigation to the District or other impacted party. The District will require the permittee to modify the stormwater management system, if necessary, to eliminate the cause of the adverse impacts.

10. The permittee acknowledges that, pursuant to Rule 40E-4.101(2), F.A.C., a notice of Environmental Resource or Surface Water Management Permit may be recorded in the county public records. Pursuant to the specific language of the rule, this notice shall not be considered an encumbrance upon the property.

11. If prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, the permitted project should cease all activities involving subsurface disturbance in the immediate vicinity of such discoveries. The permittee, or other designee, should contact the Florida Department of State, Division of Historical Resources, Review and Compliance Section at (850) 245-6333 or (800) 847-7278, as well as the appropriate permitting agency office. Project activities should not resume without verbal and/or written authorization from the Division of Historical Resources. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, Florida Statutes.

12. Reference is made to Exhibit No. 2.1 titled Contract Plans, and Exhibit No. 2.2 titled Roadway Plans. The plan sets consisting of drainage maps, roadway plans, typical sections and detail plans have been signed and sealed by a Florida registered professional and are hereby incorporated in this permit by reference (please see permit file).

13. This permit does not eliminate the need to obtain any and all necessary easements and rights of way prior to the start of any activity approved herein. This permit does not convey to the permittee, or create for the permittee, any property right, or any interest in real property; nor does it authorize any entrance upon, or activities on, property which is not owned or controlled by the permittee; or convey any rights or privileges other than those specified in the permit and Chapter 40E-4 or Chapter 40E-40, F.A.C..

14. All contractors must be provided with a copy of the staff report and permit conditions prior to the commencement of construction. The permittee is responsible for ensuring that all contractors adhere to the project construction details and methods indicated on the attached permit Exhibits and described herein.

15. The District reserves the right to require remedial measures to be taken by the permittee if monitoring or other information demonstrates that adverse impacts to onsite or offsite wetlands, upland conservation areas or buffers, or other surface waters have occurred due to project related activities.

16. Endangered species, threatened species and/or species of special concern have been observed onsite and/or the project contains suitable habitat for these species. It shall be the permittee's responsibility to coordinate with the Florida Fish and Wildlife Conservation Commission and/or the U.S. Fish and Wildlife Service for appropriate guidance, recommendations and/or necessary permits to avoid impacts to listed species.

17. Manatee exclusion grates shall be placed across the openings of existing or proposed culverts or pipes that are greater than eight inches but smaller than eight feet in diameter in accordance with Exhibit No. 2. The installation of grates applies to any submerged or partially submerged pipes and culverts accessible to manatees during any tidal phase. Permittee shall keep all grates free and clear of debris.

18. The Standard Manatee Construction Conditions for In-water Work (2011) must be followed for all in-water activity.

    To reduce the risk of entrapment and drowning of manatees, grating shall be installed and maintained over existing or proposed pipes or culverts greater than 8 inches, but smaller than 8 feet in diameter that are submerged or partially submerged and accessible to manatees as detailed on project plans dated 9/4/2013. Bars or grates no more than 8 inches apart shall be placed on the accessible end(s) during all phases of the construction process and as a final design element to restrict manatee access.

    To prevent manatee access into the construction area on the Peter's Pike Canal, temporary barriers as designed in URS September 6, 2012 Sheet No. 38, attached as part of this permit shall be constructed across the north and south end of the Peter's Pike Canal between NW 106th Street and West 68th Street prior to commencement of construction related to installation of the 13.5-ft x 12.0-ft concrete box culvert and 84" diameter pipe at that location. The temporary barriers shall be installed only after the permittee has thoroughly inspected the canal between NW 106th Street and West 68th Street, and no manatees are present that could be entrapped between the temporary barriers.

    The temporary barriers across the Peter's Pike Canal shall be removed upon completion of construction, but not until that time. To prevent manatee access into the construction area, the permittee shall maintain the temporary barriers and repair any damage that may occur to the barriers, until construction is completed. The temporary barriers shall be monitored weekly for damage to or possible breach of the barrier by manatees into the construction area. If a manatee becomes entangled in the barrier, or breaches the barrier into the construction area, the Florida Fish and Wildlife Conservation Commission should be notified immediately at 1-888-404-FWCC.

19. A turbidity control plan shall be implemented in accordance with Exhibit No. 3. Prior to the commencement of construction, floating turbidity curtains with weighted skirts that extend to the bottom of the water body shall be properly installed to isolate adjacent waters from the work area. The floating turbidity curtains shall be maintained and shall remain in place until all construction is complete and turbidity levels in the project area are within 29 NTUs of background levels. The permittee shall be responsible for ensuring that turbidity control devices are inspected daily and maintained in good working order so that there are no violations of state water quality standards outside of the turbidity screens.

20. A water quality monitoring program shall be implemented as outlined below:

    Turbidity expressed in nephelometric turbidity units (ntu). Background samples shall be taken 200 feet upstream of any construction activity within adjacent surface waters. Compliance samples shall be taken 200 feet downstream. Samples shall be taken twice daily, with at least a four-hour interval, during all work authorized by this permit.

Monitoring shall begin on the first day of construction for all activities within or adjacent to surface waters. The monitoring data must demonstrate that turbidity 200 feet downstream of all proposed activities is less than or equal to 29 NTU's above natural background turbidity (or meets OFW standards) and 200 feet upstream of each proposed activity for a period of 7 consecutive days after completion of construction. If monitoring shows such levels to be exceeded, construction shall cease and District compliance staff shall be notified immediately. Work shall not resume until District staff is satisfied that adequate corrective measures have been taken and turbidity has returned to acceptable levels.

All monitoring data shall be maintained on site and be available to District staff during regular business hours. The content of the data shall include:

1) permit and application number; (2) dates of sampling and analysis; (3) statement describing the methods used in collection, handling, storage and analysis of the samples; (4) a map indicating the sampling locations and (5) a statement by the individual responsible for implementation of the sampling program concerning the authenticity, precision, limits of detection and accuracy of the data.

Monitoring reports shall also include the following information for each sample that is taken:
(a) time of day samples taken;
(b) depth of water body;
(c) depth of samples;
(d) antecedent weather conditions;
(e) wind direction and velocity;
(f) direction of tide.

GENERAL CONDITIONS

1. All activities authorized by this permit shall be implemented as set forth in the plans, specifications and performance criteria as approved by this permit. Any deviation from the permitted activity and the conditions for undertaking that activity shall constitute a violation of this permit and Part IV, Chapter 373. F.S.

2. This permit or a copy thereof, complete with all conditions, attachments, exhibits, and modifications shall be kept at the work site of the permitted activity. The complete permit shall be available for review at the work site upon request by District staff. The permittee shall require the contractor to review the complete permit prior to commencement of the activity authorized by this permit.

3. Activities approved by this permit shall be conducted in a manner which does not cause violations of State water quality standards. The permittee shall implement best management practices for erosion and pollution control to prevent violation of State water quality standards. Temporary erosion control shall be implemented prior to and during construction, and permanent control measures shall be completed within 7 days of any construction activity. Turbidity barriers shall be installed and maintained at all locations where the possibility of transferring suspended solids into the receiving waterbody exists due to the permitted work. Turbidity barriers shall remain in place at all locations until construction is completed and soils are stabilized and vegetation has been established. All practices shall be in accordance with the guidelines and specifications described in Chapter 6 of the Florida Land Development Manual; A Guide to Sound Land and Water Management (Department of Environmental Regulation, 1988), incorporated by reference in Rule 40E-4.091, F.A.C. unless a project-specific erosion and sediment control plan is approved as part of the permit. Thereafter the permittee shall be responsible for the removal of the barriers. The permittee shall correct any erosion or shoaling that causes adverse impacts to the water resources.

4. The permittee shall notify the District of the anticipated construction start date within 30 days of the date that this permit is issued. At least 48 hours prior to commencement of activity authorized by this permit, the permittee shall submit to the District an Environmental Resource Permit Construction Commencement Notice Form Number 0960 indicating the actual start date and the expected construction completion date.

5. When the duration of construction will exceed one year, the permittee shall submit construction status reports to the District on an annual basis utilizing an annual status report form. Status report forms shall be submitted the following June of each year.

6. Within 30 days after completion of construction of the permitted activity, the permitee shall submit a written statement of completion and certification by a professional engineer or other individual authorized by law, utilizing the supplied Environmental Resource/Surface Water Management Permit Construction Completion/Certification Form Number 0881A, or Environmental Resource/Surface Water Management Permit Construction Completion Certification - For Projects Permitted prior to October 3, 1995 Form No. 0881B, incorporated by reference in Rule 40E-1.659, F.A.C. The statement of completion and certification shall be based on onsite observation of construction or review of as-built drawings for the purpose of determining if the work was completed in compliance with permitted plans and specifications. This submittal shall serve to notify the District that the system is ready for inspection. Additionally, if deviation from the approved drawings are discovered during the certification process, the certification must be accompanied by a copy of the approved permit drawings with deviations noted. Both the original and revised specifications must be clearly shown. The plans must be clearly labeled as "as-built" or "record" drawings. All surveyed dimensions and elevations shall be certified by a registered surveyor.

7. The operation phase of this permit shall not become effective: until the permittee has complied with the requirements of condition (6) above, and submitted a request for conversion of Environmental Resource Permit from Construction Phase to Operation Phase, Form No. 0920; the District determines the system to be in compliance with the permitted plans and specifications; and the entity approved by the District in accordance with Sections 9.0 and 10.0 of the Basis of Review for Environmental Resource Permit Applications within the South Florida Water Management District, accepts responsibility for operation and maintenance of the system. The permit shall not be transferred to such approved operation and maintenance entity until the operation phase of the permit becomes effective. Following inspection and approval of the permitted system by the District, the permittee shall initiate transfer of the permit to the approved

responsible operating entity if different from the permittee. Until the permit is transferred pursuant to Section 40E-1.6107, F.A.C., the permittee shall be liable for compliance with the terms of the permit.

8. Each phase or independent portion of the permitted system must be completed in accordance with the permitted plans and permit conditions prior to the initiation of the permitted use of site infrastructure located within the area served by that portion or phase of the system. Each phase or independent portion of the system must be completed in accordance with the permitted plans and permit conditions prior to transfer of responsibility for operation and maintenance of the phase or portion of the system to a local government or other responsible entity.

9. For those systems that will be operated or maintained by an entity that will require an easement or deed restriction in order to enable that entity to operate or maintain the system in conformance with this permit, such easement or deed restriction must be recorded in the public records and submitted to the District along with any other final operation and maintenance documents required by Sections 9.0 and 10.0 of the Basis of Review for Environmental Resource Permit applications within the South Florida Water Management District, prior to lot or units sales or prior to the completion of the system, whichever comes first. Other documents concerning the establishment and authority of the operating entity must be filed with the Secretary of State, county or municipal entities. Final operation and maintenance documents must be received by the District when maintenance and operation of the system is accepted by the local government entity. Failure to submit the appropriate final documents will result in the permittee remaining liable for carrying out maintenance and operation of the permitted system and any other permit conditions.

10. Should any other regulatory agency require changes to the permitted system, the permittee shall notify the District in writing of the changes prior to implementation so that a determination can be made whether a permit modification is required.

11. This permit does not eliminate the necessity to obtain any required federal, state, local and special district authorizations prior to the start of any activity approved by this permit. This permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the permit and Chapter 40E-4 or Chapter 40E-40, F.A.C..

12. The permittee is hereby advised that Section 253.77, F.S. states that a person may not commence any excavation, construction, or other activity involving the use of sovereign or other lands of the State, the title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund without obtaining the required lease, license, easement, or other form of consent authorizing the proposed use. Therefore, the permittee is responsible for obtaining any necessary authorizations from the Board of Trustees prior to commencing activity on sovereignty lands or other state-owned lands.

13. The permittee must obtain a Water Use permit prior to construction dewatering, unless the work qualifies for a general permit pursuant to Subsection 40E-20.302(3), F.A.C., also known as the "No Notice" Rule.

14. The permittee shall hold and save the District harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any system authorized by the permit.

15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding, unless a specific condition of this permit or a formal determination under Section 373.421(2), F.S., provides otherwise.

16. The permittee shall notify the District in writing within 30 days of any sale, conveyance, or other transfer of ownership or control of a permitted system or the real property on which the permitted system is located. All transfers of ownership or transfers of a permit are subject to the requirements of Rules 40E-1.6105 and 40E-1.6107, F.A.C.. The permittee transferring the permit shall remain liable for corrective actions that may be required as a result of any violations prior to the sale, conveyance or other transfer of the system.

17. Upon reasonable notice to the permittee, District authorized staff with proper identification shall have permission to enter, inspect, sample and test the system to insure conformity with the plans and specifications approved by the permit.

18. If historical or archaeological artifacts are discovered at any time on the project site, the permittee shall immediately notify the appropriate District service center.

19. The permittee shall immediately notify the District in writing of any previously submitted information that is later discovered to be inaccurate.

NOTICE OF RIGHTS

As required by Sections 120.569(1), and 120.60(3), Fla. Stat., following is notice of the opportunities which may be available for administrative hearing or judicial review when the substantial interests of a party are determined by an agency. Please note that this Notice of Rights is not intended to provide legal advice. Not all the legal proceedings detailed below may be an applicable or appropriate remedy. You may wish to consult an attorney regarding your legal rights.

RIGHT TO REQUEST ADMINISTRATIVE HEARING

A person whose substantial interests are or may be affected by the South Florida Water Management District's (SFWMD or District) action has the right to request an administrative hearing on that action pursuant to Sections 120.569 and 120.57, Fla. Stat. Persons seeking a hearing on a District decision which does or may determine their substantial interests shall file a petition for hearing with the District Clerk within 21 days of receipt of written notice of the decision, unless one of the following shorter time periods apply: 1) within 14 days of the notice of consolidated intent to grant or deny concurrently reviewed applications for environmental resource permits and use of sovereign submerged lands pursuant to Section 373.427, Fla. Stat.; or 2) within 14 days of service of an Administrative Order pursuant to Subsection 373.119(1), Fla. Stat. "Receipt of written notice of agency decision" means receipt of either written notice through mail, or electronic mail, or posting that the District has or intends to take final agency action, or publication of notice that the District has or intends to take final agency action. Any person who receives written notice of a SFWMD decision and fails to file a written request for hearing within the timeframe described above waives the right to request a hearing on that decision.

Filing Instructions

The Petition must be filed with the Office of the District Clerk of the SFWMD. Filings with the District Clerk may be made by mail, hand-delivery or facsimile. **Filings by e-mail will not be accepted.** Any person wishing to receive a clerked copy with the date and time stamped must provide an additional copy. A petition for administrative hearing is deemed filed upon receipt during normal business hours by the District Clerk at SFWMD headquarters in West Palm Beach, Florida. Any document received by the office of the SFWMD Clerk after 5:00 p.m. shall be filed as of 8:00 a.m. on the next regular business day. Additional filing instructions are as follows:

- Filings by mail must be addressed to the Office of the SFWMD Clerk, P.O. Box 24680, West Palm Beach, Florida 33416.
- Filings by hand-delivery must be delivered to the Office of the SFWMD Clerk. **Delivery of a petition to the SFWMD's security desk does not constitute filing. To ensure proper filing, it will be necessary to request the SFWMD's security officer to contact the Clerk's office.** An employee of the SFWMD's Clerk's office will receive and file the petition.
- Filings by facsimile must be transmitted to the SFWMD Clerk's Office at (561) 682-6010. Pursuant to Subsections 28-106.104(7), (8) and (9), Fla. Admin. Code, a party who files a document by facsimile represents that the original physically signed document will be retained by that party for the duration of that proceeding and of any subsequent appeal or subsequent proceeding in that cause. Any party who elects to file any document by facsimile shall be responsible for any delay, disruption, or interruption of the electronic signals and accepts the full risk that the document may not be properly filed with the clerk as a result. The filing date for a document filed by facsimile shall be the date the SFWMD Clerk receives the complete document.

Initiation of an Administrative Hearing

Pursuant to Rules 28-106.201 and 28-106.301, Fla. Admin. Code, initiation of an administrative hearing shall be made by written petition to the SFWMD in legible form and on 8 and 1/2 by 11 inch white paper. All petitions shall contain:

1. Identification of the action being contested, including the permit number, application number, District file number or any other SFWMD identification number, if known.
2. The name, address and telephone number of the petitioner and petitioner's representative, if any.
3. An explanation of how the petitioner's substantial interests will be affected by the agency determination.
4. A statement of when and how the petitioner received notice of the SFWMD's decision.
5. A statement of all disputed issues of material fact. If there are none, the petition must so indicate.
6. A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the SFWMD's proposed action.
7. A statement of the specific rules or statutes the petitioner contends require reversal or modification of the SFWMD's proposed action.
8. If disputed issues of material fact exist, the statement must also include an explanation of how the alleged facts relate to the specific rules or statutes.
9. A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the SFWMD to take with respect to the SFWMD's proposed action.

A person may file a request for an extension of time for filing a petition. The SFWMD may, for good cause, grant the request. Requests for extension of time must be filed with the SFWMD prior to the deadline for filing a petition for hearing. Such requests for extension shall contain a certificate that the moving party has consulted with all other parties concerning the extension and that the SFWMD and any other parties agree to or oppose the extension. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

If the District takes action with substantially different impacts on water resources from the notice of intended agency decision, the persons who may be substantially affected shall have an additional point of entry pursuant to Rule 28-106.111, Fla. Admin. Code, unless otherwise provided by law.

Mediation

The procedures for pursuing mediation are set forth in Section 120.573, Fla. Stat., and Rules 28-106.111 and 28-106.401-.405, Fla. Admin. Code. The SFWMD is not proposing mediation for this agency action under Section 120.573, Fla. Stat., at this time.

RIGHT TO SEEK JUDICIAL REVIEW

Pursuant to Sections 120.60(3) and 120.68, Fla. Stat., a party who is adversely affected by final SFWMD action may seek judicial review of the SFWMD's final decision by filing a notice of appeal pursuant to Florida Rule of Appellate Procedure 9.110 in the Fourth District Court of Appeal or in the appellate district where a party resides and filing a second copy of the notice with the SFWMD Clerk within 30 days of rendering of the final SFWMD action.

FINAL APPROVED BY
EXECUTIVE DIRECTOR
OCTOBER 21, 2013

Last Date For Agency Action: November 5, 2013

INDIVIDUAL ENVIRONMENTAL RESOURCE PERMIT STAFF REPORT

Project Name: S R 826/Palmetto Expressway And S R 93/I-75 Express Lanes

Permit No.: 13-01378-P

Application No.: 130812-1

Application Type: Environmental Resource (Conceptual Approval Modification)

Location: Miami-Dade County, S4,9,16,21-23,26-28,30,34,35/T52S/R40E
S2,3,10,11,14,15,22,23,26,27,34,35/T53S/R40E

Permittee : Florida Department Of Transportation

Operating Entity : Permittee

Project Area: 634.13 acres

Permit Area: 634.13 acres

Project Land Use: Roadway

Drainage Basin: C-6

Drainage Basin: AREA B

Receiving Body: C-6 Canal, Miami-Dade County canals **Class:** CLASS III

Special Drainage District: NA

Conservation Easement To District : No

Sovereign Submerged Lands: No

PROJECT PURPOSE:

This application is a request for an Environmental Resource Permit for conceptual approval of a stormwater management system to serve a 634.13 acre roadway project known as SR 826/Palmetto Expressway and SR 93/I-75 Express Lanes.

PROJECT EVALUATION:

PROJECT SITE DESCRIPTION:

The project area is located in northwestern Miami-Dade County and is approximately 13.1 miles in length. The project limits extend along SR 826 (Palmetto Expressway) from Flagler Street to NW 154th Street, and along I-75 from SR 826 to NW 170th Street. The project consists of the addition of managed lanes within the SR 826 and I-75 corridors.

PROPOSED PROJECT:

The application is a request for the conceptual approval of a stormwater management system to serve a 634.13 acre roadway project known as SR 826/Palmetto Expressway and SR 93/I-75 Express Lanes. The proposed project is for the addition of dual express lanes within the median of SR 826, one express lane along the flyover to I-75, and the addition of two express lanes within the median of I-75. The proposed stormwater management system has been divided into thirty six drainage basins. Each basin will utilize a combination of existing and proposed exfiltration trench and dry retention areas for water quality treatment and attenuation prior to discharging into the C-6 Canal and Miami-Dade County canals. Discharge to both the C-6 and the Miami-Dade County canals will be through existing outfalls. Existing weirs at the outfall locations will be modified to provide the additional water quality treatment and attenuation requirements as a result of the additional impervious area. Miami-Dade County Department of Regulatory and Economic Resources has issued a permit for this project.

LAND USE:

Construction Project:

	This Phase	Total Project	
Impervious	.00	358.80	acres
Pervious	.00	275.33	acres
Total:	**.00**	**634.13**	

WATER QUANTITY :

Discharge Rate :

The applicant's engineer submitted calculations to demonstrate that post-development discharges for the 25-year 3-day design event will be less than existing conditions.

WATER QUALITY :

Water quality treatment will be provided in excess of 2.5 inches times the impervious area in a combination of existing and proposed exfiltration trench and dry retention areas.

Saddle risers spaced 75 feet on center have also been included as part of the proposed canal culverting system at the Peter's Pike Canal to ensure state water quality standards will be maintained.

Fill activities within other surface waters, related to culvert construction, will be performed after temporary sheet pile or earthen cofferdam has been installed to segregate the work area and prevent

unnecessary turbidity in adjacent waters. Fill activities within other surface waters, related to cross-drain extensions, outfall pipe and headwall construction, and bridge construction will be performed after floating turbidity barrier is installed adjacent to the immediate work zone. All dredging activities within other surface waters, primarily immediately adjacent to outfall pipes and within the limits of the bridge construction work zones, will be cordoned off with floating turbidity barrier and will be monitored to ensure that NTU levels do not exceed maximum, authorized levels. Such erosion and sediment control BMPs will be installed in a manner that maintains the conveyance within the canal and that is safe for manatees. All erosion control devices will be limited to those approved by the State of Florida Department of Transportation Qualified Products List (QPL). See Exhibit 3 for the locations of these measure and for relevant FDOT Standard Specifications.

WETLANDS:

The project proposes to modify an existing multi-lane highway system that serves as a major transportation corridor within Miami-Dade County. While no wetlands are present within the project site, other surface water features have been constructed in conjunction with prior transportation projects. While some native plant species are present in these areas, existing stormwater management swales and dry retention areas typically contain numerous exotic invasive plant species ranging from torpedo grass to dense melaleuca. In addition, portions of the C-6 Canal, C-7 Canal, and Peter's Pike Canal will be affected by project construction. An environmental summary containing additional information regarding existing field conditions is included as Exhibit 3.

Wetland Impacts:

Based on a review of existing field conditions, the project site does not contain wetland resources as defined by Chapter 62-340 F.A.C. and no mitigation will be required by the District.

However, both water quality treatment features associated with the existing roadway infrastructure (swales) and other surface water features (canals) will be affected by the proposed project. Impact minimization efforts were implemented during the design process to reduce potential impacts while maintaining safe and sound engineering and construction practices.

Based on the conceptual environmental project plans included as Exhibit 3, a total of 15.104 acres of existing water quality swales will be filled and 5.846 acres of water quality swales will be temporarily impacted as a result of the proposed construction. A total of 4.010 acres of Peter's Pike Canal will be filled and 0.472 acre will also be dredged. In addition, a total of 0.119 acre of additional shading resultling from bridge modifications will occur to the C-6 and C-7 Canals.

Wildlife Issues:

Portions of the project area are located within the Peter's Pike Canal which is used as travel corridor by manatees. District staff has coordinated with the Florida Fish and Wildlife Conservation Commission (FFWCC), Bureau of Protected Species Management, for guidance and recommendations regarding the proposed project activities and measures necessary to ensure manatee protection.

The FFWCC has recommended that manatee protection measures be made conditions of the District permit (Exhibit 3). These measures include:

The Standard Manatee Construction Conditions for In-water Work (2011) must be followed for all in-water activity.

To reduce the risk of entrapment and drowning of manatees, grating shall be installed and maintained over existing or proposed pipes or culverts greater than 8 inches, but smaller than 8 feet in diameter that are submerged or partially submerged and accessible to manatees as detailed on project plans dated 9/4/2013. Bars or grates no more than 8 inches apart shall be placed on the accessible end(s) during all phases of the construction process and as a final design element to restrict manatee access.

To prevent manatee access into the construction area on the Peter's Pike Canal, temporary barriers as designed in URS September 6, 2012 Sheet No. 38, attached as part of this permit shall be constructed across the north and south end of the Peter's Pike Canal between NW 106th Street and West 68th Street prior to commencement of construction related to installation of the 13.5-ft x 12.0-ft concrete box culvert and 84" diameter pipe at that location. The temporary barriers shall be installed only after the permittee has thoroughly inspected the canal between NW 106th Street and West 68th Street, and no manatees are present that could be entrapped between the temporary barriers.

The temporary barriers across the Peter's Pike Canal shall be removed upon completion of construction, but not until that time. To prevent manatee access into the construction area, the permittee shall maintain the temporary barriers and repair any damage that may occur to the barriers, until construction is completed. The temporary barriers shall be monitored weekly for damage to or possible breach of the barrier by manatees into the construction area. If a manatee becomes entangled in the barrier, or breaches the barrier into the construction area, the Florida Fish and Wildlife Conservation Commission should be notified immediately at 1-888-404-FWCC.

As provided in the enclosed Special Conditions and Exhibits, necessary precautions shall be taken during in-water project-related construction conditions to ensure protection of manatees.

Species	Potential Occurence	Use Types
Manatee	Known Use	Corridor

SOVEREIGN/SUBMERGED LANDS:

The proposed work is not located within and is not anticipated to adversely affect sovereign submerged lands.

RELATED CONCERNS:

Water Use Permit Status:

No construction is proposed as part of this application. This permit does not release the permittee from obtaining all necessary Water Use authorization(s) prior to the commencement of activities which will require such authorization, including construction dewatering and irrigation.

CERP:

The proposed project is not located within or adjacent to a Comprehensive Everglades Restoration Project component.

Potable Water Supplier:

N/A

Waste Water System/Supplier:

N/A

Right-Of-Way Permit Status:

The applicant has indicated that no modification to previously issued District Right of Way Permits No. Mod. 6246 (C-6 Canal) or No. Mod. 664 (C-7Canal) is required.

DRI Status:

This project is not a DRI.

Historical/Archeological Resources:

The District has received correspondence on August 21, 2013, from the Florida Department of State, Division of Historical Resources indicating that no significant archaeological or historical resources are recorded in the project area and therefore is unlikely to have an effect upon any such properties.

DEO/CZM Consistency Review:

The issuance of this permit constitutes a finding of consistency with the Florida Coastal Management Program.

Third Party Interest:

No third party has contacted the District with concerns about this application.

Enforcement:

There has been no enforce ment activity associated with this application.

STAFF RECOMMENDATION TO EXECUTIVE DIRECTOR:

The Staff recommends that the following be issued :

Conceptual approval of a stormwater management system to serve a 634.13 acre roadway project known as SR 826/Palmetto Expressway and SR 93/I-75 Express Lanes.

Based on the information provided, District rules have been adhered to.

Staff recommendation is for approval subject to the attached
General and Special Conditions.

STAFF REVIEW:

NATURAL RESOURCE MANAGEMENT APPROVAL

ENVIRONMENTAL EVALUATION

Robert F. Hopper

SUPERVISOR

Barbara J. Conmy

SURFACE WATER MANAGEMENT APPROVAL

ENGINEERING EVALUATION

Jeffrey Greenfield, Ph.D, P.E.

SUPERVISOR

Carlos A. de Rojas, P.E.

ENVIRONMENTAL RESOURCE PERMITTING BUREAU CHIEF :

Anita R. Bain

DATE: 10/17/13

REGULATION DIVISION ASSISTANT DIRECTOR :

Anthony M. Waterhouse, P.E.

DATE: 10/17/13

GENERAL CONDITIONS

1. All activities authorized by this permit shall be implemented as set forth in the plans, specifications and performance criteria as approved by this permit. Any deviation from the permitted activity and the conditions for undertaking that activity shall constitute a violation of this permit and Part IV, Chapter 373. F.S.

2. This permit or a copy thereof, complete with all conditions, attachments, exhibits, and modifications shall be kept at the work site of the permitted activity. The complete permit shall be available for review at the work site upon request by District staff. The permittee shall require the contractor to review the complete permit prior to commencement of the activity authorized by this permit.

3. Activities approved by this permit shall be conducted in a manner which does not cause violations of State water quality standards. The permittee shall implement best management practices for erosion and pollution control to prevent violation of State water quality standards. Temporary erosion control shall be implemented prior to and during construction, and permanent control measures shall be completed within 7 days of any construction activity. Turbidity barriers shall be installed and maintained at all locations where the possibility of transferring suspended solids into the receiving waterbody exists due to the permitted work. Turbidity barriers shall remain in place at all locations until construction is completed and soils are stabilized and vegetation has been established. All practices shall be in accordance with the guidelines and specifications described in Chapter 6 of the Florida Land Development Manual; A Guide to Sound Land and Water Management (Department of Environmental Regulation, 1988), incorporated by reference in Rule 40E-4.091, F.A.C. unless a project-specific erosion and sediment control plan is approved as part of the permit. Thereafter the permittee shall be responsible for the removal of the barriers. The permittee shall correct any erosion or shoaling that causes adverse impacts to the water resources.

4. The permittee shall notify the District of the anticipated construction start date within 30 days of the date that this permit is issued. At least 48 hours prior to commencement of activity authorized by this permit, the permittee shall submit to the District an Environmental Resource Permit Construction Commencement Notice Form Number 0960 indicating the actual start date and the expected construction completion date.

5. When the duration of construction will exceed one year, the permittee shall submit construction status reports to the District on an annual basis utilizing an annual status report form. Status report forms shall be submitted the following June of each year.

6. Within 30 days after completion of construction of the permitted activity, the permitee shall submit a written statement of completion and certification by a professional engineer or other individual authorized by law, utilizing the supplied Environmental Resource/Surface Water Management Permit Construction Completion/Certification Form Number 0881A, or Environmental Resource/Surface Water Management Permit Construction Completion Certification - For Projects Permitted prior to October 3, 1995 Form No. 0881B, incorporated by reference in Rule 40E-1.659, F.A.C. The statement of completion and certification shall be based on onsite observation of construction or review of as-built drawings for the purpose of determining if the work was completed in compliance with permitted plans and specifications. This submittal shall serve to notify the District that the system is ready for inspection. Additionally, if deviation from the approved drawings are discovered during the certification process, the certification must be accompanied by a copy of the approved permit drawings with deviations noted. Both the original and revised specifications must be clearly shown. The plans must be clearly labeled as "as-built" or "record" drawings. All surveyed dimensions and elevations shall be certified by a registered surveyor.

7. The operation phase of this permit shall not become effective: until the permittee has complied with the requirements of condition (6) above, and submitted a request for conversion of Environmental

GENERAL CONDITIONS

Resource Permit from Construction Phase to Operation Phase, Form No. 0920; the District determines the system to be in compliance with the permitted plans and specifications; and the entity approved by the District in accordance with Sections 9.0 and 10.0 of the Basis of Review for Environmental Resource Permit Applications within the South Florida Water Management District, accepts responsibility for operation and maintenance of the system. The permit shall not be transferred to such approved operation and maintenance entity until the operation phase of the permit becomes effective. Following inspection and approval of the permitted system by the District, the permittee shall initiate transfer of the permit to the approved responsible operating entity if different from the permittee. Until the permit is transferred pursuant to Section 40E-1.6107, F.A.C., the permittee shall be liable for compliance with the terms of the permit.

8. Each phase or independent portion of the permitted system must be completed in accordance with the permitted plans and permit conditions prior to the initiation of the permitted use of site infrastructure located within the area served by that portion or phase of the system. Each phase or independent portion of the system must be completed in accordance with the permitted plans and permit conditions prior to transfer of responsibility for operation and maintenance of the phase or portion of the system to a local government or other responsible entity.

9. For those systems that will be operated or maintained by an entity that will require an easement or deed restriction in order to enable that entity to operate or maintain the system in conformance with this permit, such easement or deed restriction must be recorded in the public records and submitted to the District along with any other final operation and maintenance documents required by Sections 9.0 and 10.0 of the Basis of Review for Environmental Resource Permit applications within the South Florida Water Management District, prior to lot or units sales or prior to the completion of the system, whichever comes first. Other documents concerning the establishment and authority of the operating entity must be filed with the Secretary of State, county or municipal entities. Final operation and maintenance documents must be received by the District when maintenance and operation of the system is accepted by the local government entity. Failure to submit the appropriate final documents will result in the permittee remaining liable for carrying out maintenance and operation of the permitted system and any other permit conditions.

10. Should any other regulatory agency require changes to the permitted system, the permittee shall notify the District in writing of the changes prior to implementation so that a determination can be made whether a permit modification is required.

11. This permit does not eliminate the necessity to obtain any required federal, state, local and special district authorizations prior to the start of any activity approved by this permit. This permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the permit and Chapter 40E-4 or Chapter 40E-40, F.A.C..

12. The permittee is hereby advised that Section 253.77, F.S. states that a person may not commence any excavation, construction, or other activity involving the use of sovereign or other lands of the State, the title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund without obtaining the required lease, license, easement, or other form of consent authorizing the proposed use. Therefore, the permittee is responsible for obtaining any necessary authorizations from the Board of Trustees prior to commencing activity on sovereignty lands or other state-owned lands.

13. The permittee must obtain a Water Use permit prior to construction dewatering, unless the work qualifies for a general permit pursuant to Subsection 40E-20.302(3), F.A.C., also known as the "No

GENERAL CONDITIONS

Notice" Rule.

14. The permittee shall hold and save the District harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any system authorized by the permit.

15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding, unless a specific condition of this permit or a formal determination under Section 373.421(2), F.S., provides otherwise.

16. The permittee shall notify the District in writing within 30 days of any sale, conveyance, or other transfer of ownership or control of a permitted system or the real property on which the permitted system is located. All transfers of ownership or transfers of a permit are subject to the requirements of Rules 40E-1.6105 and 40E-1.6107, F.A.C.. The permittee transferring the permit shall remain liable for corrective actions that may be required as a result of any violations prior to the sale, conveyance or other transfer of the system.

17. Upon reasonable notice to the permittee, District authorized staff with proper identification shall have permission to enter, inspect, sample and test the system to insure conformity with the plans and specifications approved by the permit.

18. If historical or archaeological artifacts are discovered at any time on the project site, the permittee shall immediately notify the appropriate District service center.

19. The permittee shall immediately notify the District in writing of any previously submitted information that is later discovered to be inaccurate.

SPECIAL CONDITIONS

1. The conceptual phase of this permit shall expire on October 21, 2018.
2. Operation of the stormwater management system shall be the responsibility of PERMITTEE.
3. The permittee shall be responsible for the correction of any erosion, shoaling or water quality problems that result from the construction or operation of the stormwater management system.
4. Measures shall be taken during construction to insure that sedimentation and/or turbidity violations do not occur in the receiving water.
5. The District reserves the right to require that additional water quality treatment methods be incorporated into the drainage system if such measures are shown to be necessary.
6. Facilities other than those stated herein shall not be constructed without an approved modification of this permit.
7. A stable, permanent and accessible elevation reference shall be established on or within one hundred (100) feet of all permitted discharge structures no later than the submission of the certification report. The location of the elevation reference must be noted on or with the certification report.
8. The permittee shall provide routine maintenance of all of the components of the stormwater management system in order to remove all trapped sediments/debris. All materials shall be properly disposed of as required by law. Failure to properly maintain the system may result in adverse flooding conditions.
9. This permit is issued based on the applicant's submitted information which reasonably demonstrates that adverse water resource related impacts will not be caused by the completed permit activity. Should any adverse impacts caused by the completed stormwater management system occur, the District will require the permittee to provide appropriate mitigation to the District or other impacted party. The District will require the permittee to modify the stormwater management system, if necessary, to eliminate the cause of the adverse impacts.
10. The permittee acknowledges that, pursuant to Rule 40E-4.101(2), F.A.C., a notice of Environmental Resource or Surface Water Management Permit may be recorded in the county public records. Pursuant to the specific language of the rule, this notice shall not be considered an encumbrance upon the property.
11. If prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, the permitted project should cease all activities involving subsurface disturbance in the immediate vicinity of such discoveries. The permittee, or other designee, should contact the Florida Department of State, Division of Historical Resources, Review and Compliance Section at (850) 245-6333 or (800) 847-7278, as well as the appropriate permitting agency office. Project activities should not resume without verbal and/or written authorization from the Division of Historical Resources. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, Florida Statutes.
12. Reference is made to Exhibit No. 2.1 titled Contract Plans, and Exhibit No. 2.2 titled Roadway Plans. The plan sets consisting of drainage maps, roadway plans, typical sections and detail plans have been signed and sealed by a Florida registered professional and are hereby incorporated in this permit by reference (please see permit file).
13. This permit does not eliminate the need to obtain any and all necessary easements and rights of way prior to the start of any activity approved herein. This permit does not convey to the permittee, or create for the permittee, any property right, or any interest in real property; nor does it authorize any

SPECIAL CONDITIONS

entrance upon, or activities on, property which is not owned or controlled by the permittee; or convey any rights or privileges other than those specified in the permit and Chapter 40E-4 or Chapter 40E-40, F.A.C..

14. All contractors must be provided with a copy of the staff report and permit conditions prior to the commencement of construction. The permittee is responsible for ensuring that all contractors adhere to the project construction details and methods indicated on the attached permit Exhibits and described herein.

15. The District reserves the right to require remedial measures to be taken by the permittee if monitoring or other information demonstrates that adverse impacts to onsite or offsite wetlands, upland conservation areas or buffers, or other surface waters have occurred due to project related activities.

16. Endangered species, threatened species and/or species of special concern have been observed onsite and/or the project contains suitable habitat for these species. It shall be the permittee's responsibility to coordinate with the Florida Fish and Wildlife Conservation Commission and/or the U.S. Fish and Wildlife Service for appropriate guidance, recommendations and/or necessary permits to avoid impacts to listed species.

17. Manatee exclusion grates shall be placed across the openings of existing or proposed culverts or pipes that are greater than eight inches but smaller than eight feet in diameter in accordance with Exhibit No. 2. The installation of grates applies to any submerged or partially submerged pipes and culverts accessible to manatees during any tidal phase. Permittee shall keep all grates free and clear of debris.

18. The Standard Manatee Construction Conditions for In-water Work (2011) must be followed for all in-water activity.

    To reduce the risk of entrapment and drowning of manatees, grating shall be installed and maintained over existing or proposed pipes or culverts greater than 8 inches, but smaller than 8 feet in diameter that are submerged or partially submerged and accessible to manatees as detailed on project plans dated 9/4/2013. Bars or grates no more than 8 inches apart shall be placed on the accessible end(s) during all phases of the construction process and as a final design element to restrict manatee access.

    To prevent manatee access into the construction area on the Peter's Pike Canal, temporary barriers as designed in URS September 6, 2012 Sheet No. 38, attached as part of this permit shall be constructed across the north and south end of the Peter's Pike Canal between NW 106th Street and West 68th Street prior to commencement of construction related to installation of the 13.5-ft x 12.0-ft concrete box culvert and 84" diameter pipe at that location. The temporary barriers shall be installed only after the permittee has thoroughly inspected the canal between NW 106th Street and West 68th Street, and no manatees are present that could be entrapped between the temporary barriers.

    The temporary barriers across the Peter's Pike Canal shall be removed upon completion of construction, but not until that time. To prevent manatee access into the construction area, the permittee shall maintain the temporary barriers and repair any damage that may occur to the barriers, until construction is completed. The temporary barriers shall be monitored weekly for damage to or possible breach of the barrier by manatees into the construction area. If a manatee becomes entangled in the barrier, or breaches the barrier into the construction area, the Florida Fish and Wildlife Conservation Commission should be notified immediately at 1-888-404-FWCC.

19. A turbidity control plan shall be implemented in accordance with Exhibit No. 3. Prior to the commencement of construction, floating turbidity curtains with weighted skirts that extend to the bottom of the water body shall be properly installed to isolate adjacent waters from the work area.

SPECIAL CONDITIONS

The floating turbidity curtains shall be maintained and shall remain in place until all construction is complete and turbidity levels in the project area are within 29 NTUs of background levels. The permittee shall be responsible for ensuring that turbidity control devices are inspected daily and maintained in good working order so that there are no violations of state water quality standards outside of the turbidity screens.

20. A water quality monitoring program shall be implemented as outlined below:

Turbidity expressed in nephelometric turbidity units (ntu). Background samples shall be taken 200 feet upstream of any construction activity within adjacent surface waters. Compliance samples shall be taken 200 feet downstream. Samples shall be taken twice daily, with at least a four-hour interval, during all work authorized by this permit.

Monitoring shall begin on the first day of construction for all activities within or adjacent to surface waters. The monitoring data must demonstrate that turbidity 200 feet downstream of all proposed activities is less than or equal to 29 NTU's above natural background turbidity (or meets OFW standards) and 200 feet upstream of each proposed activity for a period of 7 consecutive days after completion of construction. If monitoring shows such levels to be exceeded, construction shall cease and District compliance staff shall be notified immediately. Work shall not resume until District staff is satisfied that adequate corrective measures have been taken and turbidity has returned to acceptable levels.

All monitoring data shall be maintained on site and be available to District staff during regular business hours. The content of the data shall include:

1) permit and application number; (2) dates of sampling and analysis; (3) statement describing the methods used in collection, handling, storage and analysis of the samples; (4) a map indicating the sampling locations and (5) a statement by the individual responsible for implementation of the sampling program concerning the authenticity, precision, limits of detection and accuracy of the data.

Monitoring reports shall also include the following information for each sample that is taken:
(a) time of day samples taken;
(b) depth of water body;
(c) depth of samples;
(d) antecedent weather conditions;
(e) wind direction and velocity;
(f) direction of tide.

Table of Contents for Staff Report Exhibits

Application 130812-1

SR 826/PALMETTO EXPRESSWAY and SR 93/I-75 EXPRESS LANES

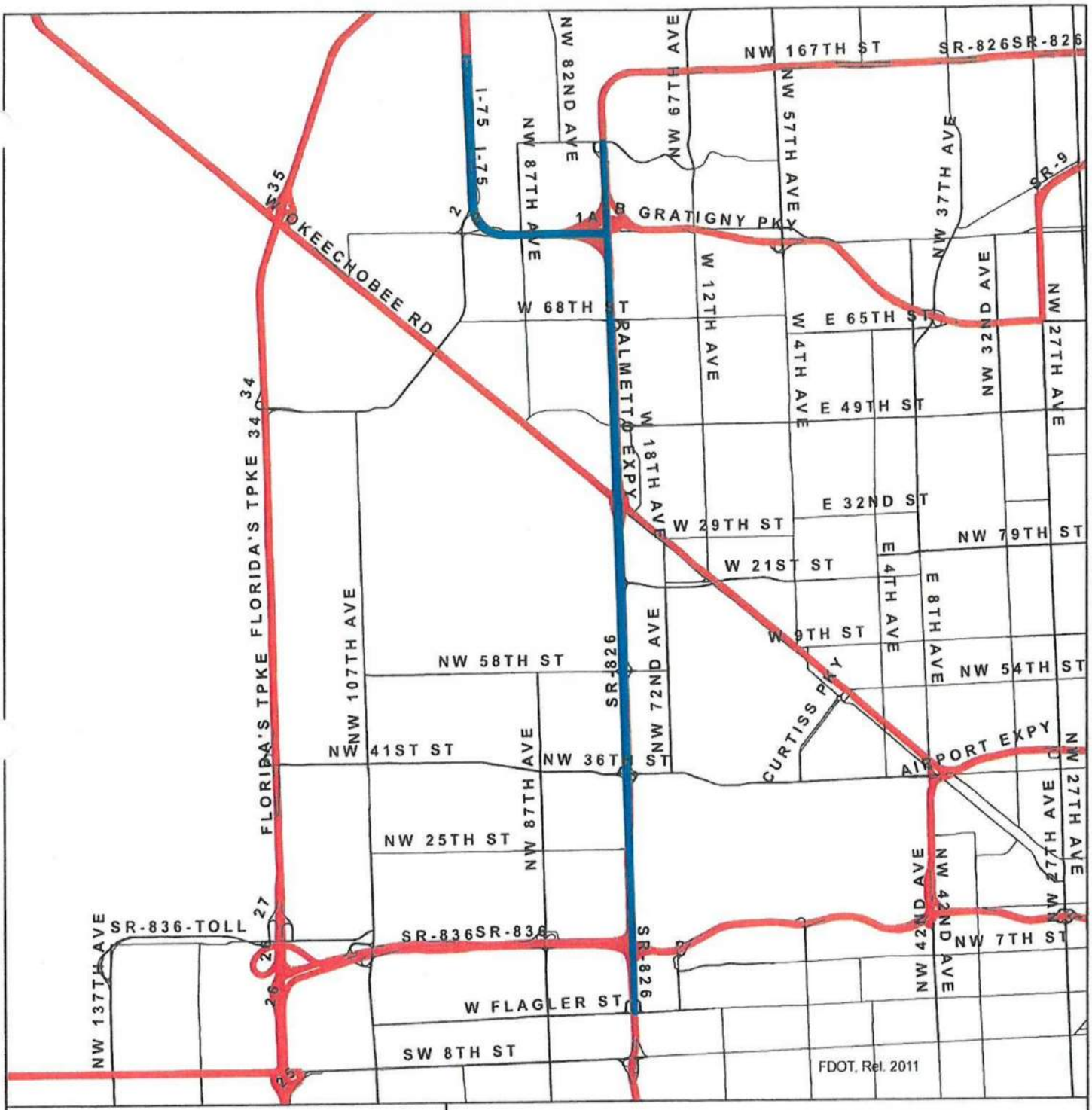
SFWMD Permit No. 13-01378-P

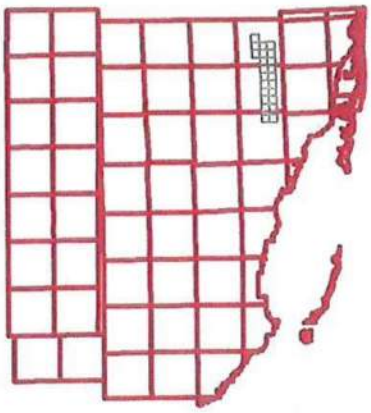
Exhibit 1 Location Map
(Page 1)

Exhibit 2.1 Permit Plans
(By Reference, Pages 1-256)

Exhibit 2.2 Roadway Plans
(By Reference, Pages 1-51)

Exhibit 3 Environmental Documents
(By Reference, Pages 1-79)





MIAMI-DADE COUNTY, FLORIDA

N

Legend

Application

Map Date: 2013-09-09

Application No: 130812-1

Permit No: 13-01378-P

Sec 4,9,16,21-23,26-28,30,34,35 / Twp 52 / Rge 40

Project Name: S R 826/PALMETTO EXPRESSWAY AND SR 93/I-75 EXPRESS LANES

0 9,000 18,000 Feet

Exhibit Number: 1

APPLICATION 130812-1
PERMIT NO. 13-01378-P

EXHIBIT NUMBER 2.1
Consisting of the following plan sheets

TYPICAL SECTIONS
PROJECT LAYOUT
ROADWAY PLANS
MISCELLANEOUS DRAINAGE DETAILS

and

EXHIBIT NUMBER 2.2
Consisting of the following plan sheets

POST-DEVELOPMENT DRAINAGE MAPS
FRENCH DRAIN DETAILS
WEIR DESCRIPTION AND TABULATION

INCORPORATED BY REFERENCE

Table of Contents for Staff Report Exhibits

Application 130812-1

SR 826/PALMETTO EXPRESSWAY and SR 93/I-75 EXPRESS LANES

SFWMD Permit No. 13-01378-P

Exhibit 3

Environmental Documents

Incorporated By Reference

STAFF REPORT DISTRIBUTION LIST

S R 826/PALMETTO EXPRESSWAY AND S R 93/I-75 EXPRESS LANES

Application No: 130812-1

Permit No: 13-01378-P

INTERNAL DISTRIBUTION

X Jeffrey Greenfield, Ph.D, P.E.
X Robert F. Hopper
X Carlos A. de Rojas, P.E.
X Barbara J. Conmy
X A. Bain
X A. Waterhouse
X ERC Environmental
X R. Karafel

EXTERNAL DISTRIBUTION

X Permittee - Florida Department Of Transportation
X Engr Consultant - U R S

GOVERNMENT AGENCIES

X Department of Regulatory and Economic Resources Lisa Spadafina
X Department of Regulatory and Economic Resources Matt Davis-
X Department of Regulatory and Economic Resources Mike Spinelli
X Florida Fish and Wildlife Conservation Commission - Kellie Youmans
X Miami-Dade County - RER (Maria D. Molina, PE)
X Miami-Dade County Engineer Public Works Department

This is NOT an official document.

MIAMI-DADE COUNTY
Carlos A. Gimenez, Mayor

Department of Regulatory and Economic Resources
Environmental Resources Management
701 NW 1st Court, 6th Floor
Miami, Florida 33136-3912
T 305-372-6567 F 305-372-6407
miamidade.gov

DRAFT

Class III Drainage Construction Permit

Permit Number: CLIII-20120012
Project Manager: ARIADNA BERMUDEZ

Issue Date: 02/14/2013
Expiration Date: 02/14/2015

Permittee:
FDOT, DISTRICT VI
Mr. John Palenchar
1000 N.W. 111 Ave, Room 6101
Miami, FL 33172-

Professional Engineer:
URS Corporation
Mr. Juan C Garcia, P.E.
7650 Corporate Center Drive, Suite 400
Miami, FL 33126-

Application Name: MANAGED LANES IMPROVEMENTS.SR 826/I-75
Project Location:
ALONG SR 826 FROM SR 836 TO SR 93/I-75 AND ALONG I-75 FROM SR 826 TO NW 170 ST HIALEAH, FL 33014-

Project Description:
Road widening associated to the proposed addition of one managed lane along the SR 836(Palmetto Expressway) in each direction and the proposed flyover of the managed lanes onto I-75. The existing section of the Peter Pike Canal from just north of NW 103rd Street to I-75 will need to be modified. These modifications will involve the use of sheet pile walls along portions of the canal banks, and the replacement of a portion of the canal with a proposed 13.5' x 12.0' and approximately 840 LF length concrete box culvert. Project also includes reconstructing (dredge/fill) portions of the canal to maintain its flow capacity.

Specific Conditions:

1. Construction activity shall not interfere with the drainage conveyance flow in the Peter Pike Canal and shall remove any obstruction in the canal in the event of heavy rainfalls or large tropical storm events upon notification by this department.

2. FDOT will dedicate the Peter's Pike Canal right of way upon completion of the roadway improvement as approved under this permit. FDOT will start the dedication process within one year of this permit issuance.

General Conditions:

THE ABOVE NAMED PERMITTEE IS HEREBY AUTHORIZED TO PERFORM THE WORK SHOWN ON THE APPLICATION AND APPROVED DRAWINGS, PLANS, AND OTHER DOCUMENTS ATTACHED HERETO OR ON FILE WITH THE DEPARTMENT AND MADE PART HEREOF, SUBJECT TO THE ATTACHED GENERAL AND SPECIAL CONDITIONS.

THIS PERMIT AND PLANS SHALL BE KEPT ON SITE DURING ALL PHASES OF CONSTRUCTION

Date Stamp Every Day

This is NOT an official document.

3. The department shall be notified no later than forty-eight (48) hours and no earlier than five (5) days prior to the commencement of the work authorized by this permit, unless otherwise noted herein. The permittee and/or contractor may notify the department by calling (305) 372-6681 or by submitting the attached Notice of Commencement of Construction via hand delivery, U.S. Mail, or facsimile at (305) 372-6489.

4. This permit or a copy thereof, complete with all conditions, attachments, exhibits and modifications shall be kept at the work site of the permitted activity. The complete permit shall be available for review at the work site upon request by the department staff. The permittee shall require the contractor to review the complete permit prior to the commencement of the activity authorized by this permit.

5. All of the plans and documents referenced on page 1 of this permit are part of the conditions of this permit. In the case of a conflict between any of the approved plans and any condition of this permit, a determination as to which plan or condition to be followed will be made by the department.

6. This permit only authorizes the grading and drainage work summarized in page 1 of this permit. Any additional work not shown in this permit or on the approved plans shall require additional Class III permit approval.

7. This class III Permit does not authorize any dewatering activities on the subject property. A separate Class V Permit from Water Control Section, (305) 372-6681, is required for this activity.

8. The time allotted to complete the work for which this permit has been issued shall be limited to the period stipulated on the permit unless the permittee requests an extension of time from the Department. The time extension request form must be submitted at least thirty (30) calendar days prior to the time of expiration of the time period set forth in the permit or in a prior extension of time. Applications for extensions of time that are not timely filed pursuant to Section 24-48.9(2)(b), of the Code of Miami-Dade County will be returned to the applicant.

9. The permittee must allow the department representatives to inspect the authorized activity during normal business hours to ensure that the work authorized through this permit is being, or has been accomplished in accordance with the terms and conditions of this permit.

10. Compliance with Chapter 24 of the Code of Miami-Dade County as well as all General and Specific Conditions contained in this permit, is required. If the department determines that the permittee and/or contractor is not performing the construction in accordance with the conditions of the permit, the Code, or the approved plans upon which the permit was issued, the department may order suspension of the permit or the stopping of work until such time as the permittee and/or the contractor has complied with the permit, plans or standards. In such case, the permittee or the contractor or both shall take all necessary precautions to leave the work area in a safe and secure condition.

11. If any contamination is encountered on site during construction, the contractor shall immediately cease all subsurface disturbances and notify the department by calling (305) 372-6955, (305) 372-6700, or (305) 372-6681.

12. The permittee shall be responsible for establishing adequate measures and engineering controls during construction to ensure compliance with the water quality standards stipulated in Section 24-42(3), of the Code of Miami-Dade County.

13. The permittee shall apply sediment and erosion control measures along the perimeter of the construction site to protect the adjacent properties from sediment and turbidity discharge and erosion damage.

14. Turbidity may not exceed twenty-nine (29) Nephelometric Turbidity Units (NTU's) above background within surrounding surface waters, and within Outstanding Florida Waters, the standards is no degredation above background levels. If the turbidity levels

This is NOT an official document.

MIAMI-DADE COUNTY
Carlos A. Gimenez, Mayor

Department of Regulatory and Economic Resources
Environmental Resources Management
701 NW 1st Court, 6th Floor
Miami, Florida 33136-3912
T 305-372-6567 F 305-372-6407
miamidade.gov

exceed the above standard, all construction activity shall stop and additional turbidity controls shall be implemented. The construction activity shall not resume until the contractor has received authorization from the department. At the department's discretion, turbidity samples may be required and shall be collected in accordance with Section 24-44.2(3), of the Code of Miami-Dade County, or as specified by the department's, and the results sent directly to the section.

15. The permittee shall hold and save Miami-Dade County harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, alteration, operations, maintenance, removal, abandonment or use of any system authorized by this permit.

16. The permittee shall take all necessary precautions to prevent construction or demolition debris from falling into adjacent water bodies or wetlands. Any debris that falls into the adjacent water bodies or wetlands shall be removed immediately via a methodology approved by the department. Construction and demolition debris shall be disposed of in accordance with all Federal, State and Local regulations.

17. Any water body affected by the construction activity should be restored to its pre-existing condition prior to the commencement of the work covered by this permit. The permittee shall also be responsible for ensuring complete removal of accumulated sediments, turbidity curtains, and other devices in a water body that would reduce its conveyance or storage capacity. The permittee is responsible in securing any permits required for this restoration work.

18. The permittee shall comply with the provisions of Chapter 16A of the Code of Miami-Dade County related to Historic Preservation to preserve known and potential archeological resources in the area that are subject to this permit.

19. A NPDES (National Pollutant Discharge Elimination System) Stormwater Permit may be required as per Rule 62-621.300(4), F.A.C. for the proposed construction activity. Please contact the Florida Department of Environmental Protection NPDES Stormwater Section at (850) 245-7522 or www.dep.state.fl.us/water/stormwater/NPDES.

20. If any work or activity associated with this project is to take place in-water:

a. All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.

b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.

c. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.

d. All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including

This is NOT an official document.
vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.

e. Any collision with or injury to a manatee shall be reported immediately to the FWC Hotline at 1-888-404-3922 and RER at 305.372.6452. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service (1-772-562-3909) for south Florida, and to FWC at ImperiledSpecies@myFWC.com

f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the Florida Fish and Wildlife Conservation Commission (FWC) must be used (see MyFWC.com/manatee). One sign which reads Caution: Boaters must be posted. A second sign measuring at least 81/2" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. Questions concerning these signs can be sent to the email address listed above.

21. All work authorized by this permit shall be performed by the contractor and/or subcontractor holding an applicable certificate of competency and shall be licensed in Miami-Dade County to perform such work. Any work that is subcontracted shall require that the permittee and contractor (i.e. the contractor listed on this permit) notify the project manager at (305) 372-6681 or by facsimile at (305) 372-6489 a minimum of seventy-two hours prior to the subcontractor performing any work. Notification shall include the name of the subcontractor performing the work, the subcontractor's Miami-Dade County license number or state general contractor license number and scope of work.

22. It is a violation of the Code to perform any work authorized pursuant to this permit if the permittee(s) sell or otherwise transfer ownership of the property unless the department has approved an Application for Transfer. An Application for Transfer may be filed with the department at any time prior to the transfer of property ownership and, for a limited time, after the transfer of property ownership and must be signed by both the proposed transferee and transferor. Applications for Transfer shall be filed in the form prescribed by the department and shall not be processed if the filed Application for Transfer is not fully complete in all respects pursuant to Section 24-48.18 of the Code within 120 days of the date of transfer of property ownership. The project must be in compliance with all the restrictions, limitations, and conditions of this permit at the time of submittal of the Application for Transfer and continuously throughout the time period during which the application is being processed.

23. A performance and/or mitigation bond may be held to ensure compliance with the aforementioned conditions and the completion of any required mitigation. Failure to comply with any of these conditions may result in the revocation by Miami-Dade County of all or a portion of the bond without further notice. The bond shall remain in force for up to six (6) months after the approved completion date if the work covered by the bond.

24. If the engineer who provided certification pursuant to Section 24-48.2(I)(B)(2) or pursuant to Section 24-48.2(II)(A)(4) is discharged by the property owner or his agent, or if said engineer ceases to work on the proposed or approved work, all work allowed by this permit shall immediately cease and shall not be resumed until a new engineer is obtained. The property owner shall also be required to obtain a new engineer who shall meet all the requirements of this permit.

25. Issuance of this permit does not relieve the applicant from obtaining all required federal, State and local permits.

26. By issuance of this permit, the Miami-Dade County does not purport to convey, lessen

THIS PERMIT AND PLANS SHALL BE KEPT ON SITE DURING ALL PHASES OF CONSTRUCTION

This is NOT an official document.

MIAMI-DADE COUNTY
Carlos A. Gimenez, Mayor

Department of Regulatory and Economic Resources
Environmental Resources Management
701 NW 1st Court, 6th Floor
Miami, Florida 33136-3912
T 305-372-6567 F 305-372-6407

miamidade.gov

or diminish any existing canal right-of-way, canal maintenance easement, or canal reservation. Furthermore, Miami-Dade County reserves the right to revoke this permit at any time if deemed necessary.

27. Within thirty (30) days after completion of the work, the permittee or contractor shall file record drawings or as-built certified by the engineer of record with the Department.

28. FOR CONSTRUCTION ACTIVITIES THAT DISTURB ONE (1) ACRE OR GREATER, A NPDES GENERIC PERMIT IS REQUIRED. To apply for this permit call FDEP Stormwater Program: (850) 245-7522 or visit Florida DEP NPDES website at: http://www.dep.state.fl.us/water/stormwater/npdes/construction3.htm, to apply on-line.

29. The permittee shall retain a copy of the stormwater pollution prevention plan (SWPP) and all reports, records and documentation required by this permit at the construction site, or an appropriate alternative location as specified in the Notice of Intent (NOI), from the date of project initiation to the date of final stabilization . Please refer to DEP Document No. 62-621.3000 (4) (a): http://www.dep.state.fl.us/water/stormwater/npdes/docs/cgp.pdf

Delivering Excellence Every Day

THIS PERMIT AND PLANS SHALL BE KEPT ON SITE DURING ALL PHASES OF CONSTRUCTION