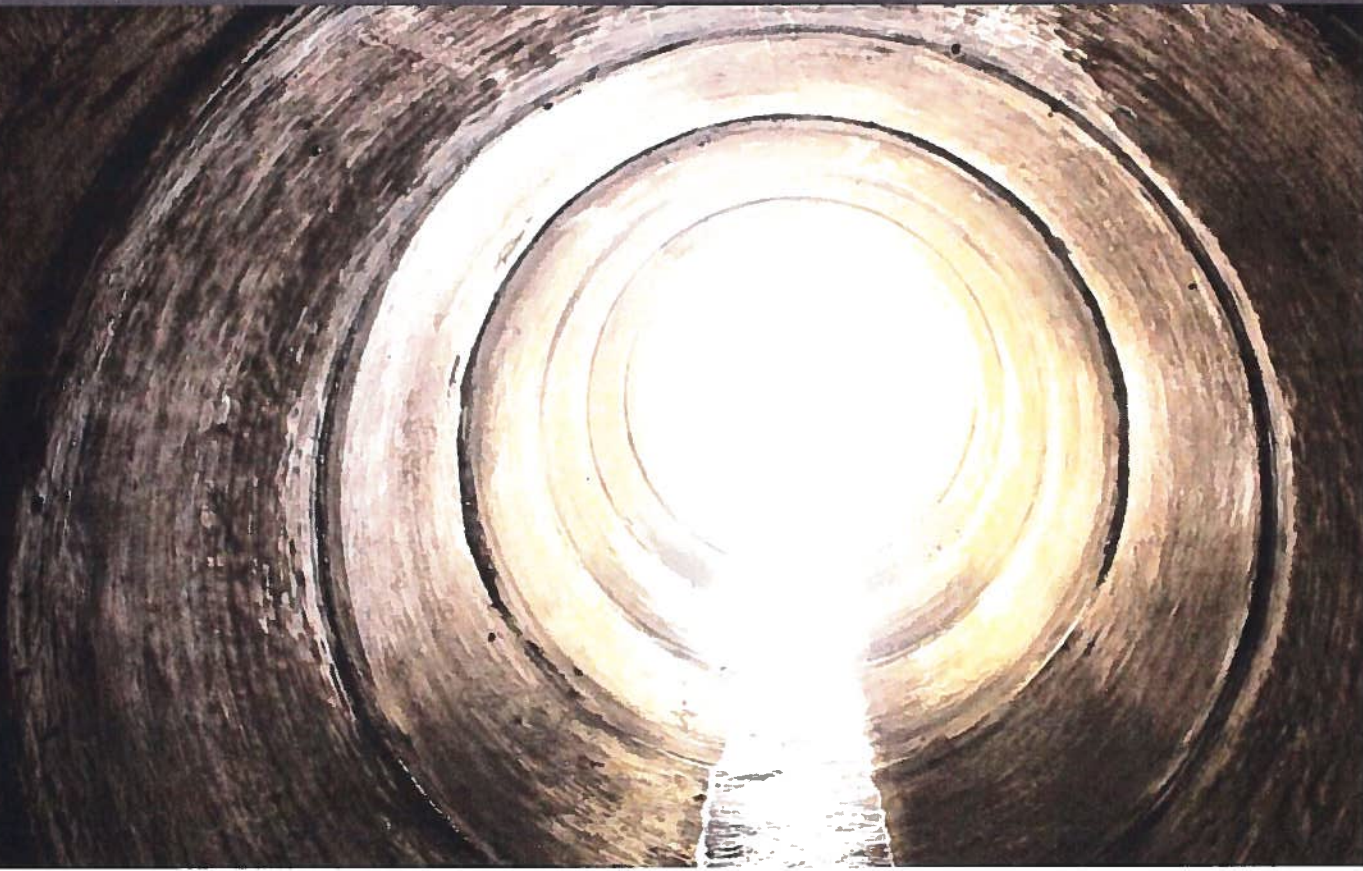


Stormwater Management System Report

Commercial Retail Store - Lake Jeffery Road



Prepared For: Concept Development, Inc.

Submitted To: Columbia County, Suwannee River Water Management District

Date: 02/22/2019
PN# 18-0456
PM: Travis J. Hastay

CHW
11801 Research Drive
Alachua, FL 32615



www.chw-inc.com

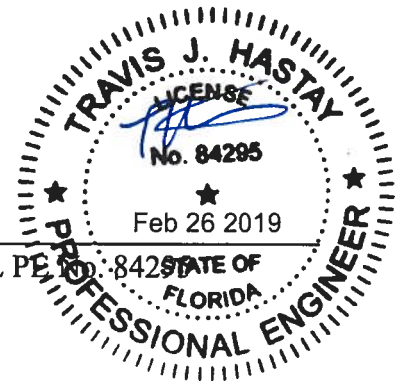
CHW
Professional Consultants

Engineer's Certification Statement

I hereby certify that the design of the stormwater management systems for the project known as Commercial Retail Store – Lake Jeffery Road has been designed substantially in accordance with the Columbia County and Suwannee River Water Management District requirements.

Travis J. Hastay, FL PE No. 84295

Date



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Introduction

The Commercial Retail Store – Lake Jeffrey Road project is located on the northeast corner of the intersection of NW Lake Jeffrey Road and NW Bascom Norris Road in the City of Lake City. The project site is located on tax parcel #25-3S-16-02284-101. Figure 1 provides a location map and Figure 2 depicts the site on a portion of the Lake City quadrangle map. The site is in Section 25, Township 3 South, and Range 16 East, Columbia County. Refer to the accompanying engineering plans for details about the proposed construction and demolition regarding this project.

The project consists of a new $\pm 9,100$ SF Commercial Retail Store with associated parking area, a new stormwater management facility (SMF-1) and utility infrastructure. The proposed site area is ± 2.26 acres. The site is currently undeveloped with dense pasture and several trees within the property.

Refer to the accompanying engineering plans for details about the proposed construction and demolition with regards to this project.

Design Criteria

The design criteria for the proposed dry retention stormwater management systems are based upon the criteria set forth by Columbia County and the Suwannee River Water Management District (SRWMD). The criteria are as follows:

1. Design Storms
 - SRWMD - Applicant shall analyze the 100-year frequency (one percent annual chance) analysis of the 1-, 2-, 4-, 8-, 24-hour, 3-, 7-, and 10-day durations for all stormwater systems.
2. Provide Water Quality Treatment Volume (WQTV)
 - SRWMD - The minimum stormwater treatment volume shall be the runoff from the first 2.0 inches of rainfall from the design storm;
3. Discharge Rate Attenuation
 - SRWMD - The post-developed peak discharge rate and volume must not exceed the pre-developed peak discharge rate and volume for any event. The discharge structure of the system shall be designed to provide for the release of water at rates similar to pre-development conditions for storm events up through and including the design storm. The required retention volume is the post-developed runoff volume less the pre-developed runoff volume for the 100-year critical event with a maximum duration of 10 days.
4. Discharge Volume Attenuation
 - SRWMD - The post-developed peak discharge rate and volume must not exceed the pre-developed peak discharge rate and volume for any event. The discharge structure of the system shall be designed to provide for the release of water at rates similar to pre-development conditions for storm events up through and including the design storm. The required retention volume is the post-developed runoff volume less the pre-developed runoff volume for the 100-year critical event with a maximum duration of 10 days.

5. Volume Recovery

- SRWMD - One-half of the total volume within seven days following the end of the design storm event, and the total volume within 30 days following the end of the design storm event. Detention and retention systems must be designed to provide treatment volumes specified above within 72 hours following the end of the design storm event.

6. Side Slope

- SRWMD – Side slopes shall be designed with a horizontal to vertical ratio no steeper than 4:1 to a depth at least two feet below the control elevation.

7. Freeboard

- SRWMD requires stormwater ponds to have 1.0-foot of freeboard above the maximum pond stage in order to function properly during storms greater than the design storm.

Site Characteristics

Physical characteristics of the site are described in the following sections. Additional details are provided in the accompanying Engineering plans.

Topography and Drainage

The site is presently undeveloped and consists of dense pasture and several trees. In pre-development condition, the site is delineated into a single watershed - PRE-1.

The pre-development project site discharges runoff offsite, with runoff consisting of sheet flow and shallow concentrated flow. PRE-1 consists of the entire site, and discharges into the adjacent ditch west of the property from a high point at EL 176.1' to a low point at EL 173.8'.

For Post-Development conditions, the project site is delineated into a single watershed; POST-1. POST-1 consists of ±1.61 acres, which includes all future development associated with the project. The total impervious area drainage to SMF 1 is ±0.69 acres. Stormwater runoff from POST-1 will flow via sheet and shallow concentrated flow to the stormwater pipe conveyance system and into SMF-1. Runoff from the adjacent lot to the east of the property will be routed along the perimeter of the site via a swale and will not be included in the runoff analyzed for SMF-1.

SMF-1 consists of one dry retention pond with 4:1 side slope located in the northern area of the parcel, and directly north of the proposed building. The bottom of SMF-1 is set at EL. 174.50' and the top of bank is set at EL. 176.30'. The outfall structure has a 5" orifice at EL. 175.38' that will discharge into the proposed swale on the north side of SMF-1, which ultimately discharges to the existing ditch in the west portion of the parcel as in pre-development conditions.

Refer to Figure 7 for more information on the post-development watershed.

Soils Information

The site soil types, as determined by the Natural Resources Conservation Service (NRCS), consists of “ChIPLEY Fine sand, 0 to 5 percent slopes” with a hydrologic soil group of ‘A’. Refer to Figure 4 for the NRCS Soils Map.

A site-specific soils investigation was conducted by GSE Engineering & Consulting, Inc., dated January 2019. Based on the Summary Report of a Geotechnical Site Exploration, the following design parameters were determined and applied for the stormwater management facility calculations. Refer to Appendix C for further details.

Basin 1 (SMF 1)

- Natural ground elevation = ± 175.05 ft. (Taken at average grade elevation at boring locations)
- Base elevation of effective aquifer: 15 feet below the surface ($175.05 \text{ ft.} - 15 \text{ ft.} = 160.05 \text{ ft.}$)
- Seasonal high groundwater table depth: 1.5 feet below the surface ($175.05 \text{ ft.} - 1.5 \text{ ft.} = 173.55 \text{ ft.}$)
- Unsaturated vertical infiltration rate: 5.0 feet/day (2.5 feet/day used in calculations)
- Horizontal hydraulic conductivity: 7.0 feet/day (3.5 feet/day used in calculations)
- Specific yield (fillable porosity): 25%

Drainage Analysis

The existing Stormwater Management Facility 1 (SMF-1) is designed to provide attenuation of the discharge rate and volume for the 100 year frequency storm events with durations of 1-, 2-, 4-, 8-, 24-hours, 3-, 7-, and 10 days, as well as recover the water quality treatment volume within 72 hours, one-half of the storage volume within 7 days and the total volume within 30 days following each event.

Pre-development calculations were completed to determine the runoff rates and volumes for the existing conditions of PRE-1. Calculations for SMF-1 were completed to demonstrate that the required water quality treatment volume, discharge rate and volume attenuation, and peak stage criteria were met.

Appendix A contains details and calculations, as well as a section for routing results, recovery analysis, hydraulic calculations, and general drainage calculations.

Analysis Methodology

The drainage analysis was conducted utilizing Interconnected Channel and Pond Routing Model (ICPR) to model and route run-off hydrographs through the proposed stormwater system.

Unit Hydrograph Parameters

Unit hydrograph parameters required for the drainage analysis include run-off curve number (CN), time of concentration (T_c), and drainage area. Since the site is covered in dense pasture and entirely comprised of Type 'A' soils, pre-development conditions had a composite CN number less than 40; therefore, based on TR-55 a different procedure was used to determine runoff and a CN of 40 was used. Values used in the analysis are summarized as follows:

Pre-Development Watershed #1

Watershed Area =	70,342 s.f.	1.61 AC	(100.00%)
Open Area ('A' Soils) =	70,342 s.f.	1.61 AC	(100.00%)

CN = 40 T_c = 54 minutes

Post-Development Watershed 1 (SMF-1)

Watershed Area =	70,342 s.f.	1.61 AC	(100.00%)
Total Impervious=	29,981 s.f.	0.69 AC	(42.86%)
Open Area ('A' Soils) =	14,921 s.f.	0.34 AC	(21.12%)
SMF =	25,440 s.f.	0.58 AC	(36.02%)

CN = 86 T_c = 10 minutes

Basin Storage

Stage-storage data for the proposed stormwater management systems are summarized in Appendix A.

Water Quality Treatment Volume (WQTV)

The required water quality treatment volume (WQTV) for the stormwater management facility was calculated as the runoff from the first 2.0 inches of rainfall from the design storm, per Suwannee River Water Management District. The SMF's are designed to recover the required WQTV within 72 hours. The results are summarized in Table 1 below. Refer to Appendix A for details on the calculations.

Table 1: WQTV with Associated Recovery Times and Peak Stages

Watersheds	Required Treatment Volume (c.f.)	Recovery Time (hours)	Peak Elevation (ft)
SMF-1	9,484	26	174.85

Run-off and Facility Routing Results

The routing results for Pre-Development Watershed 1 and Post-Development Watershed 1 (SMF-1) are summarized in Tables 2A. The tables display the discharge rates, discharge volumes and peak stage for the analyzed storm events. For details on the calculations and results, please refer to Appendix A.

In all cases, total post-development discharge rates or volumes did not exceed the pre-development conditions. Detailed results can be found in Appendix A.

Table 2A begins on the following page.

Table 2A: Discharge Rates and Discharge Volumes

Storm Event	Discharge Volumes (cf)			Discharge Rates (cf/s)		
	Pre	Post	Change	Pre	Post	Change
100 Yr – 1 Hr	0.01	0.00	-0.01	0.16	0.00	-0.16
100 Yr – 2 Hr	0.04	0.00	-0.04	0.30	0.00	-0.30
100 Yr – 4 Hr	0.10	0.00	-0.10	0.59	0.00	-0.59
100 Yr – 8 Hr	0.17	0.01	-0.16	0.61	0.03	-0.58
100 Yr – 24 Hr	0.38	0.31	-0.07	0.44	0.23	-0.21
100 Yr – 72 Hr	0.61	0.59	-0.02	0.62	0.39	-0.23
100 Yr – 168 Hr	0.81	0.78	-0.03	0.52	0.44	-0.08
100 Yr – 240 Hr	1.01	0.99	-0.02	0.67	0.56	-0.11

Table 2B: Peak Stages

Storm Event	SMF 1	
	Design High Water (FT)	Freeboard (FT)
100 Yr – 1 Hr	175.05	1.25
100 Yr – 2 Hr	175.14	1.16
100 Yr – 4 Hr	175.31	0.99
100 Yr – 8 Hr	175.51	0.79
100 Yr – 24 Hr	175.85	0.45
100 Yr – 72 Hr	176.02	0.28
100 Yr – 168 Hr	176.07	0.23
100 Yr – 240 Hr	176.12	0.18

Summary and Conclusions

The proposed drainage system meets the Columbia County (CC), SRWMD, and City of Lake City criteria for permitting as follows:

1. Provide Water Quality Treatment Volume (WQTV)
 - SRWMD– The system provides treatment for the first two inches of runoff from the contributing drainage area.
2. Discharge Rate Attenuation
 - SRWMD/CC – The post development peak discharge rate and volume did not exceed the pre-developed peak discharge rate and volume for any event.
3. Discharge Volume Attenuation
 - SRWMD/CC – The system provides attenuation so that the post-developed volume does not exceed the pre-developed peak discharge volume for any event.
4. Volume Recovery
 - SRWMD/CC – The stormwater management facility does not recover such that one-half of the total storage volume is available within 7 days and the total volume is available within 30 days following the design storm event. Although the system does not recover the volume, and 0.283 feet of water remain in the pond at the end of the design storm, back to back critical duration storms were ran and the runoff remains within the pond, which should not pose any problems. If the system is to fail, the runoff will flow west towards the roadway and does not impact the proposed building.
5. Side Slope
 - SMF-1 is designed with 4:1 side slopes; therefore, fencing is not required.
6. Freeboard
 - Total freeboard from the design high water to the finished floor elevation of the building is 1.9 feet. Should the system fail, an overflow structure has been provided to prevent water from overtopping the basin. If flooding does occur, the runoff will flow towards the existing roadway, not the proposed building.

Based on the information provided, the project is eligible for approval by the SRWMD, and Columbia County.

Figure 1

Project Location Map

Project Location Map

CRS - LAKE JEFFERY ROAD

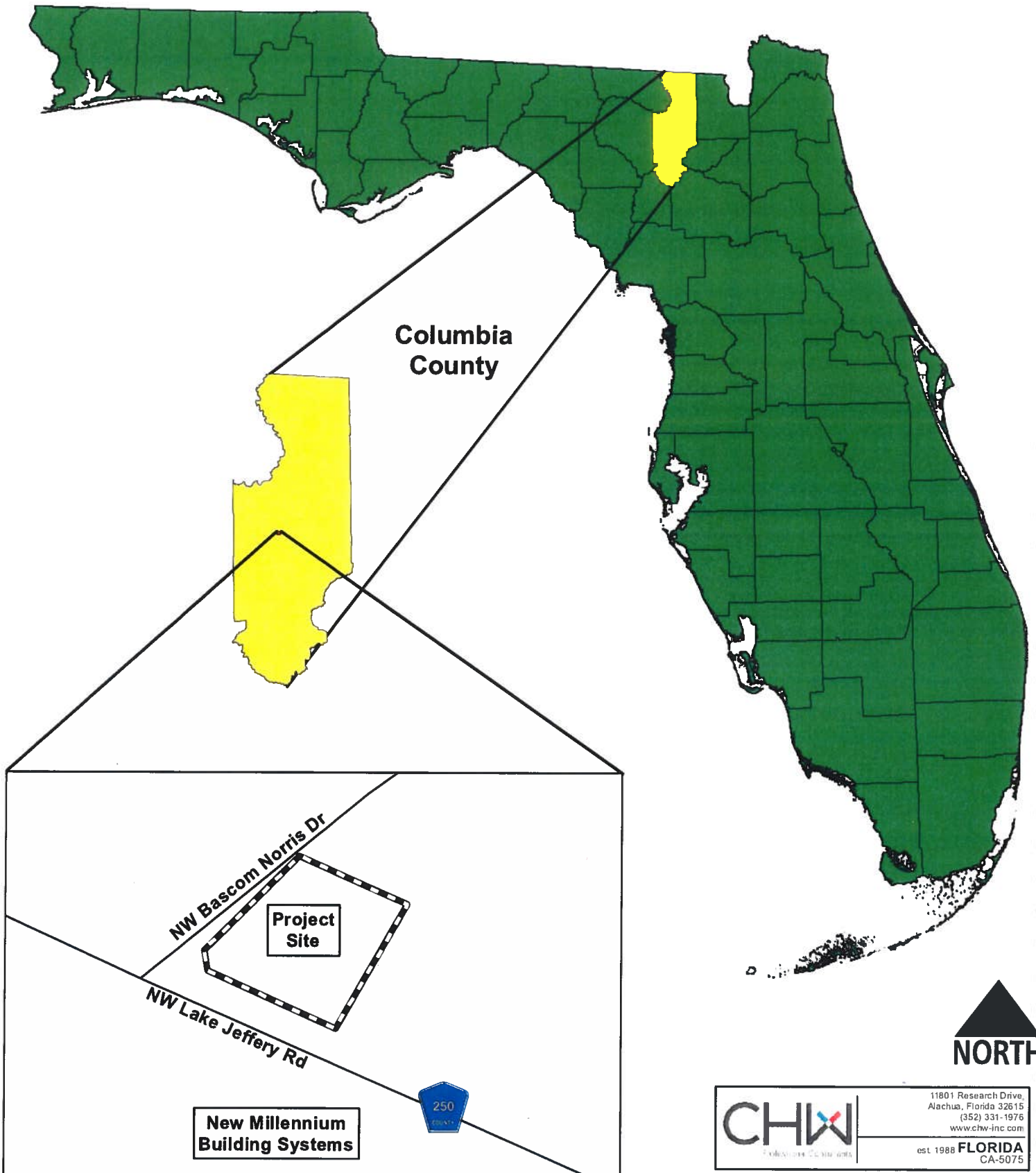
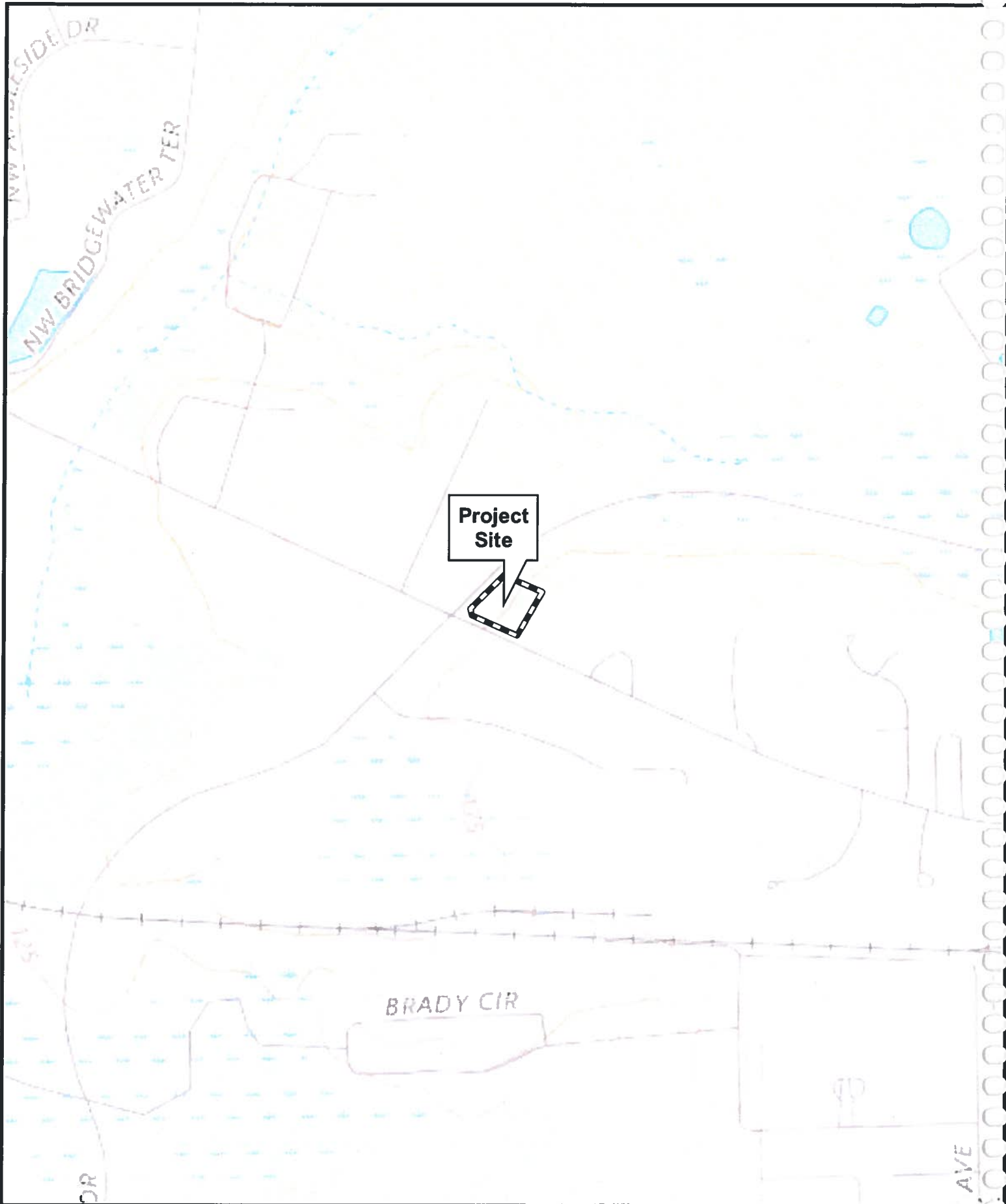


Figure 2

Quadrangle Map



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Alachua, Florida 32615
(352) 331-1976
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est. 1988 **FLORIDA**
CA-5075

CRS - LAKE JEFFERY ROAD Quad Map

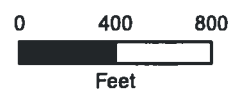
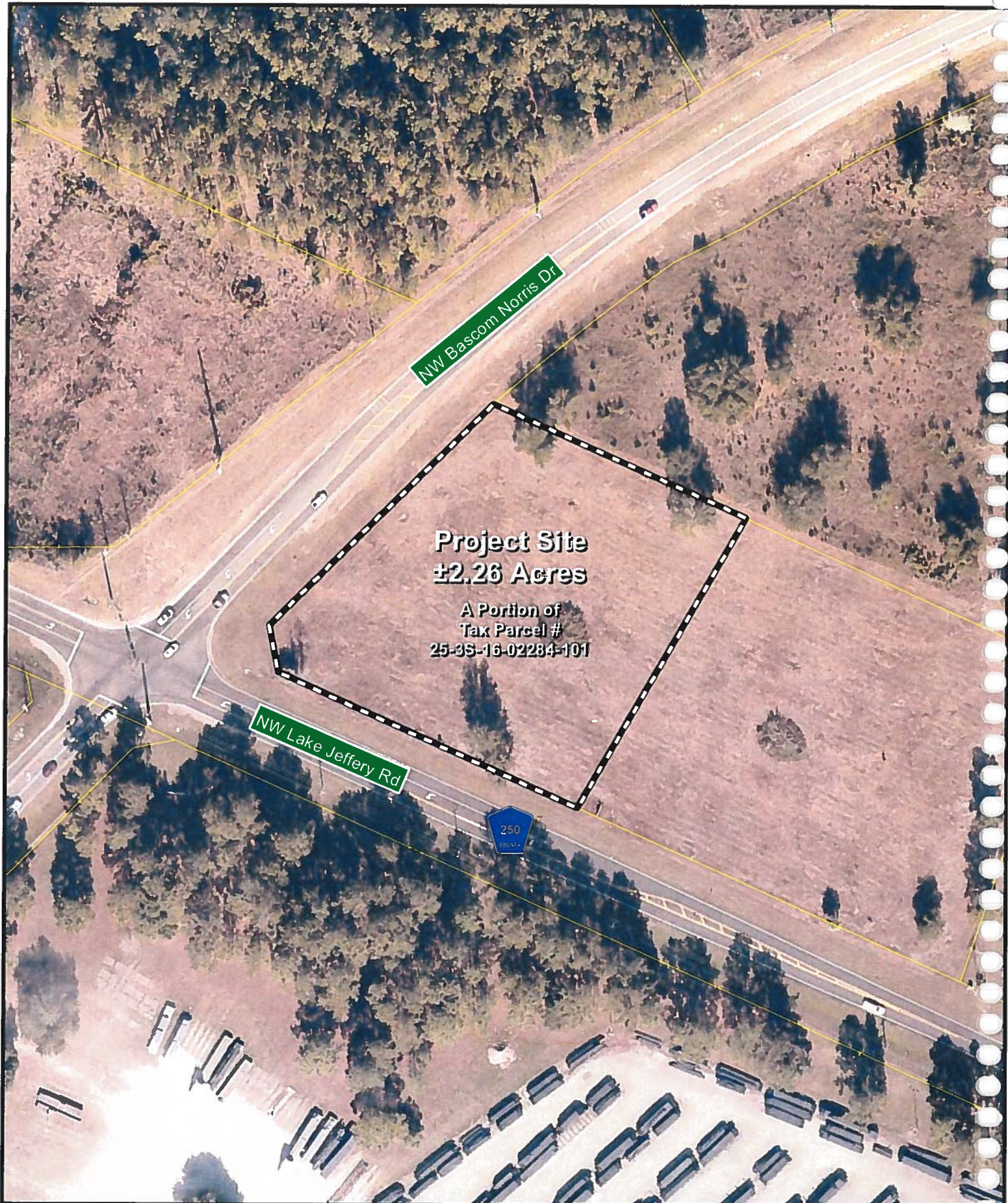


Figure 3

Aerial Map



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est. 1986 **FLORIDA**
CA-5075

CRS - LAKE JEFFERY ROAD Aerial Map

0 60 120
Feet



Figure 4

NRCS Soils Map



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est. 1988 **FLORIDA**
CA-5075

CRS - LAKE JEFFERY ROAD Soils Map

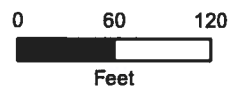
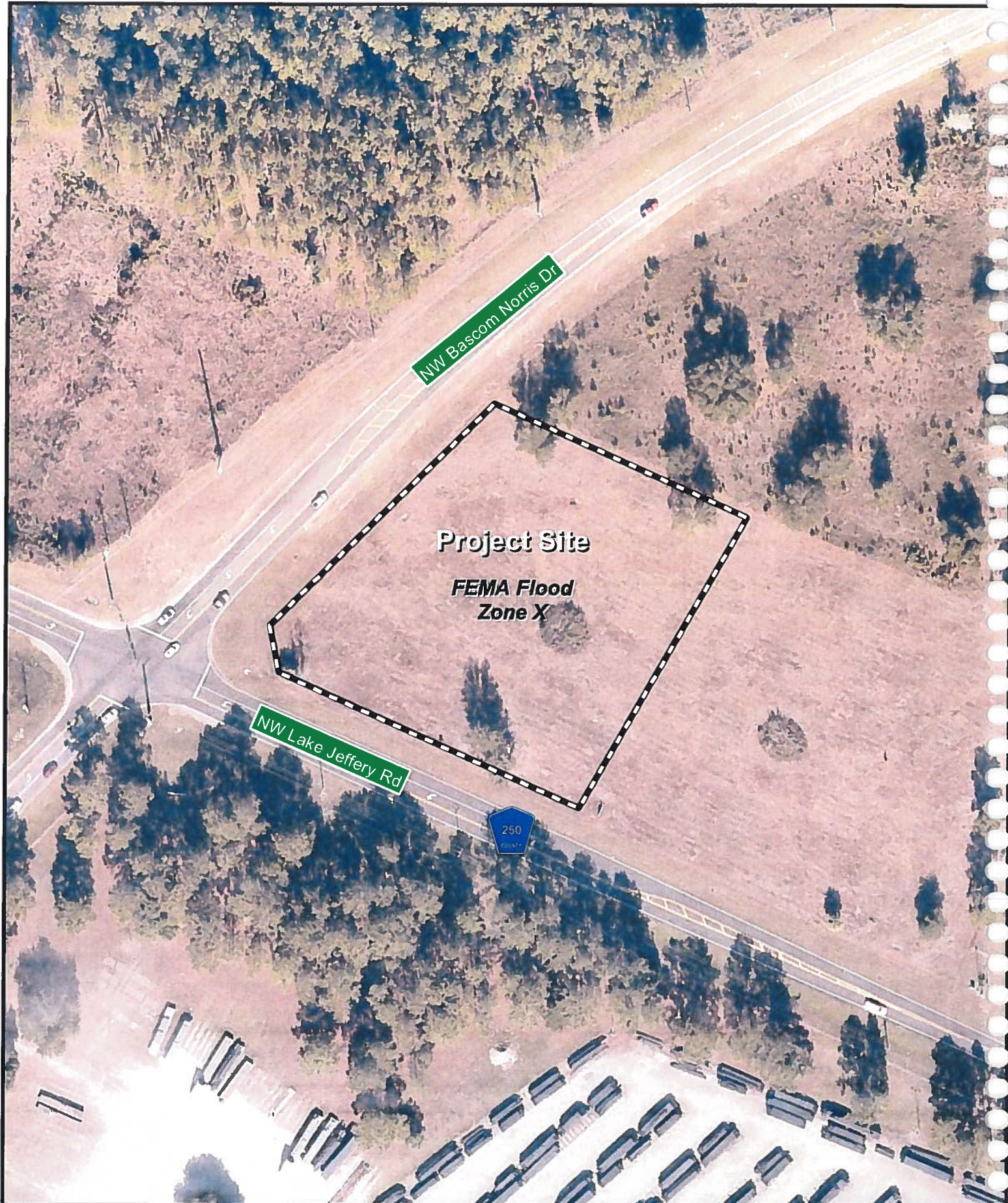


Figure 5

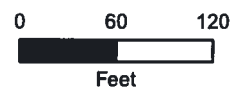
FEMA Map



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CRS - LAKE JEFFERY ROAD FEMA Map



Appendix A

Drainage Calculations and Computer Model Output

CURVE NUMBER CALCULATIONS

Pre-Development Watershed #1 (PRE-1):

Total Area:	70,342	s.f.	1.61	ac.	CN	CN * Area
Woods (Good, Type 'A' Soil):	70,342	s.f.	1.61	ac.	39	62.98

Composite CN:

40

Time of Concentration: 54 minutes
(Time of concentration was calculated using TR-55 methodology)

Pasture:

	A	B	C	D
Poor	68	79	86	89
Fair	49	69	79	84
Good	39	61	74	80

Impervious areas

Paved parking lots, roofs, driveways, etc. (excluding R/W):

A	B	C	D
98	98	98	98

Post-Development Watershed #1 (POST-1):

Total Area:	70,342	s.f.	1.61	ac.	CN	CN * Area
Impervious Area:	29,981	s.f.	0.69	ac.	98	67.45
Stormwater Management Facility:	25,440	s.f.	0.58	ac.	100	58.40
Open Area (Good, Type 'A' Soil):	14,921	s.f.	0.34	ac.	39	13.36

Composite CN:

86

Time of Concentration: 10 minutes
(Time assumed to be 10 minutes)

Note: The stormwater management area was considered to have an CN value of 100

Open Space (lawns, parks, golf courses, cemeteries, etc.):

	A	B	C	D
Poor	68	79	86	89
Fair	49	69	79	84
Good	39	61	74	80

Impervious areas

Paved parking lots, roofs, driveways, etc. (excluding R/W):

A	B	C	D
98	98	98	98

WQTV CALCULATIONS

SMF-1

SRWMD WQTV Calculations

Minimum treatment volume shall be the runoff from the first 2.0 inches of rainfall from the design storm

$$Q = C \cdot I \cdot A$$

$$C = 0.81$$

$$I \text{ (inches)} = 2.0$$

$$A \text{ (ac.)} = 1.61$$

$$Q \text{ (cf)} = 9,484 \text{ cf}$$

$$0.22 \text{ ac-ft}$$

Runoff Coefficient Calculation

	Area (ac.)	Coeff. C	C x A
Impervious Area	0.69	0.95	0.65
Open Space Area	0.34	0.20	0.07
Pond Area	0.58	1.00	0.58
Total	1.61		1.31
		C =	0.81

TIME OF CONCENTRATION VALUES DETERMINED USING TR-55 METHODOLOGY.

SHEET FLOW:

$$\pi = \frac{0.007 \text{ (nL)}^{0.8}}{(P2)^{0.5} S^{0.4}}$$

CHANNEL/PIPE FLOW:

$$V = \frac{1.49r^{2/3}s^{1/2}}{n}$$

$$\pi = \frac{L}{3600V}$$

SHALLOW CONCENTRATED FLOW:

1. For slopes < 0.005 ft/ft
Unpaved $V = 16.1345 \text{ s}^{0.5}$
Paved $V = 20.3282 \text{ s}^{0.5}$

2. For slopes > 0.005 ft/ft
Velocity per Figure 3-1, TR-55

$$\eta = \frac{L}{3600 \text{ V}}$$

STAGE-STORAGE CALCULATIONS:

Post-Development SMF-1: Stage-Storage Relationship				
ELEV.	AREA (SF)	AREA (AC)	VOLUME (CF)	VOLUME (AC-FT)
174.50	25,440	0.5840	0	0
175.00	27,538	0.6322	13,245	0.304
176.00	31,812	0.7303	42,920	0.985

<-- Control Elevation

<-- Top of Bank

WQTV (cf) =	9,484
WQTV EL (ft) =	174.85
1/2 WQTV (cf) =	4,742
1/2 WQTV EL (ft) =	174.68

Project No. 18-0617: CRS - Lake Jeffery Road Pipe Sizing

Structure No.		Invert Elev.		Length (ft)	Slope (ft/foot)	Dia. (in)	C	i (in/hr)	A (ac)	Q (cfs) Actual		Q Allowed (cfs)	Pipe A (sq-ft)	V - Full Flow (fps)	Pipe R (ft)	Minor Loss Coeff.	Minor Loss (ft)	Friction Loss (ft)	HGL		ToG/ EoP	F.B. (ft)
From	To	U.S.	D.S.							Inc	Cumul								U.S.	D.S.		
S-4	S-5	173.28	172.50	155	0.0050	15.0	0.90	6.13	0.477	2.632	2.632	4.96	1.23	4.05	0.31	1.00	0.071	0.218	174.04	173.75	175.51	1.47

Notes

1. ToG = Top of Grate/EoP = Edge of Pavement
2. FB= Free Board, CC = Concrete Collar
3. Rainfall intensity is based on Sec. 4.3.4 of the City of Jacksonville Land Development Procedures Manual- Revised March 2016, for a 5 year storm frequency and a 10-minute time of concentration (6.13 inches/hr).
4. The tailwater condition for the contributing pipe system was set at the peak stage for the Mean Annual - 24 HR storm event.

CRS - Lake Jeffery Road
Routing Network

Nodes

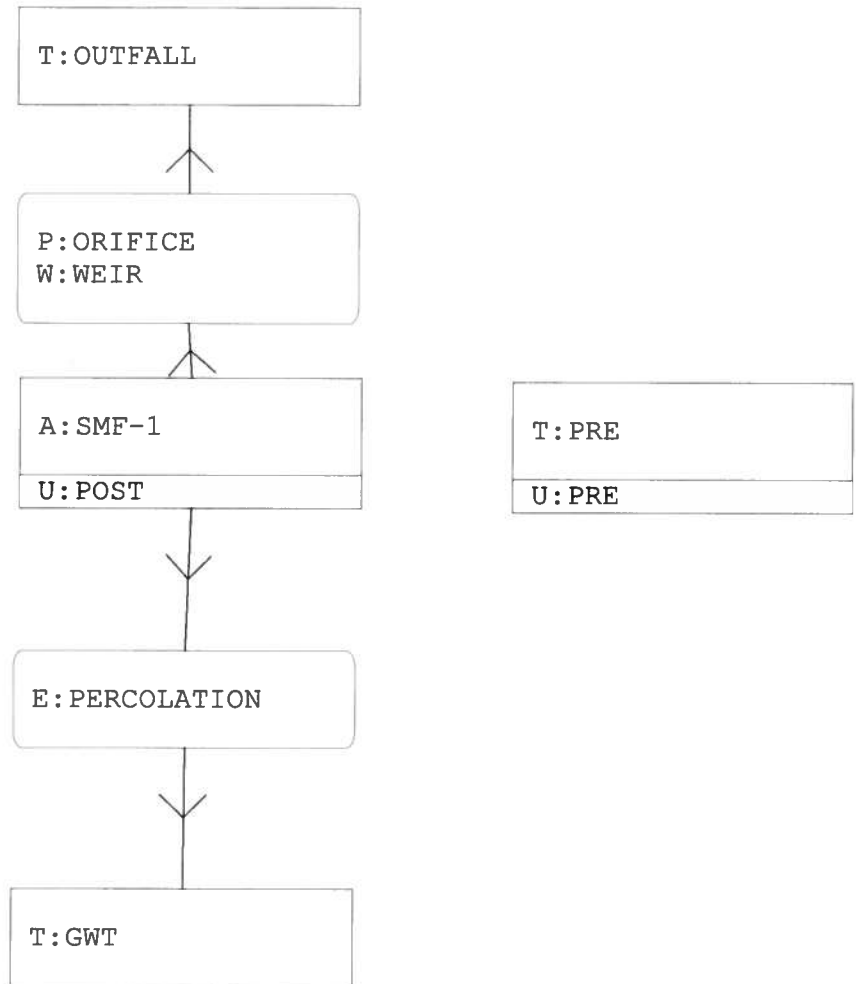
A Stage/Area
V Stage/Volume
T Time/Stage
M Manhole

Basins

O Overland Flow
U SCS Unit CN
S SBUH CN
Y SCS Unit GA
Z SBUH GA

Links

P Pipe
W Weir
C Channel
D Drop Structure
B Bridge
R Rating Curve
H Breach
E Percolation
F Filter
X Exfil Trench



CRS - Lake Jeffery Road
Inputs Report

==== Basins =====

Name: POST Node: SMF-1 Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh484 Peaking Factor: 484.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 10.00
Area(ac): 1.610 Time Shift(hrs): 0.00
Curve Number: 86.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

Name: PRE Node: PRE Status: Onsite
Group: BASE Type: SCS Unit Hydrograph CN

Unit Hydrograph: Uh323 Peaking Factor: 323.0
Rainfall File: Storm Duration(hrs): 0.00
Rainfall Amount(in): 0.000 Time of Conc(min): 54.00
Area(ac): 1.610 Time Shift(hrs): 0.00
Curve Number: 40.00 Max Allowable Q(cfs): 999999.000
DCIA(%): 0.00

==== Nodes =====

Name: GWT Base Flow(cfs): 0.000 Init Stage(ft): 0.000
Group: BASE Warn Stage(ft): 0.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	0.000
999.00	0.000

Name: OUTFALL Base Flow(cfs): 0.000 Init Stage(ft): 0.000
Group: BASE Warn Stage(ft): 0.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	0.000
999.00	0.000

Name: PRE Base Flow(cfs): 0.000 Init Stage(ft): 0.000
Group: BASE Warn Stage(ft): 0.000
Type: Time/Stage

Time(hrs)	Stage(ft)
0.00	0.000
999.00	0.000

Name: SMF-1 Base Flow(cfs): 0.000 Init Stage(ft): 174.500
Group: BASE Warn Stage(ft): 176.300
Type: Stage/Area

Stage(ft)	Area(ac)
174.500	0.5800
175.000	0.6300
176.000	0.7300

==== Pipes =====

Name: ORIFICE From Node: SMF-1 Length(ft): 16.00
Group: BASE To Node: OUTFALL Count: 1

CRS - Lake Jeffery Road
Inputs Report

	UPSTREAM	DOWNSTREAM	Friction Equation: Automatic
Geometry:	Circular	Rectangular	Solution Algorithm: Most Restrictive
Span(in):	5.00	5.00	Flow: Both
Rise(in):	5.00	5.00	Entrance Loss Coef: 0.00
Invert(ft):	175.380	175.380	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 dc
			Stabilizer Option: None

Upstream FHWA Inlet Edge Description:
Circular Concrete: Square edge w/ headwall

Downstream FHWA Inlet Edge Description:
Rectangular Box: 30° to 75° wingwall flares

=====

==== Weirs =====

Name:	WEIP	From Node:	SMF-1
Group:	BASE	To Node:	OUTFALL
Flow:	Both	Count:	1
Type:	Vertical: Mavis	Geometry:	Rectangular
Span(in): 24.00			
Rise(in): 6.00			
Invert(ft): 176.090			
Control Elevation(ft): 176.090			
Bottom Clip(in): 0.000			
Top Clip(in): 0.000			
Weir Discharge Coef: 3.200			
Orifice Discharge Coef: 0.600			

TABLE

=====

==== Percolation Links =====

Name:	PERCOLATION	From Node:	SMF-1	Flow:	Both
Group:	BASE	To Node:	GWT	Count:	1
Surface Area Option: Vary based on Stage/Area Table					
Vertical Flow Termination: Horizontal Flow Algorithm					
Aquifer Base Elev(ft): 160.050		Perimeter 1(ft): 746.000			
Water Table Elev(ft): 173.550		Perimeter 2(ft): 1012.000			
Ann Recharge Rate(in/year): 0.000		Perimeter 3(ft): 3835.000			
Horiz Conductivity(ft/day): 3.500		Distance 1 to 2(ft): 50.000			
Vert Conductivity(ft/day): 2.500		Distance 2 to 3(ft): 450.000			
Effective Porosity(dec): 0.250		Num Cells 1 to 2: 10			
Suction Head(in): 0.000		Num Cells 2 to 3: 45			
Layer Thickness(ft): 0.950					

=====

==== Hydrology Simulations =====

Name: 100Y001H
Filename: N:\2018\18-0617\Engineering\Drainage\2_Calculations\ICPR\100Y001H_R32

Override Defaults: Yes
Storm Duration(hrs): 1.00
Rainfall File: FDOT-1
Rainfall Amount(in): 4.40

Time(hrs)	Print Inc(min)
2.000	2.50

Name: 100Y002H
Filename: N:\2018\18-0617\Engineering\Drainage\2_Calculations\ICPR\100Y002H_R32

Override Defaults: Yes
Storm Duration(hrs): 2.00
Rainfall File: FDOT-2
Rainfall Amount(in): 5.40

Time(hrs)	Print Inc(min)
-----------	----------------

4.000 2.50

Name: 100Y004H
Filename: N:\2018\18-0617\Engineering\Drainage\2_Calculations\ICPR\100Y004H.R32

Override Defaults: Yes
Storm Duration(hrs): 4.00
Rainfall File: FDOT-4
Rainfall Amount(in): 6.72

Time(hrs) Print Inc(min)

6.000 2.50

Name: 100Y008H
Filename: N:\2018\18-0617\Engineering\Drainage\2_Calculations\ICPR\100Y008H.R32

Override Defaults: Yes
Storm Duration(hrs): 8.00
Rainfall File: FDOT-8
Rainfall Amount(in): 8.00

Time(hrs) Print Inc(min)

12.000 2.50

Name: 100Y024H
Filename: N:\2018\18-0617\Engineering\Drainage\2_Calculations\ICPR\100Y024H.R32

Override Defaults: Yes
Storm Duration(hrs): 24.00
Rainfall File: FDOT-24
Rainfall Amount(in): 11.04

Time(hrs) Print Inc(min)

30.000 5.00

Name: 100Y072H
Filename: N:\2018\18-0617\Engineering\Drainage\2_Calculations\ICPR\100Y072H.R32

Override Defaults: Yes
Storm Duration(hrs): 72.00
Rainfall File: FDOT-72
Rainfall Amount(in): 13.80

Time(hrs) Print Inc(min)

77.000 5.00

Name: 100Y168H
Filename: N:\2018\18-0617\Engineering\Drainage\2_Calculations\ICPR\100Y168H.R32

Override Defaults: Yes
Storm Duration(hrs): 168.00
Rainfall File: FDOT-168
Rainfall Amount(in): 16.00

Time(hrs) Print Inc(min)

173.000 5.00

Name: 100Y240H
Filename: N:\2018\18-0617\Engineering\Drainage\2_Calculations\ICPR\100Y240H.R32

Override Defaults: Yes
Storm Duration(hrs): 240.00
Rainfall File: FDOT-240
Rainfall Amount(in): 18.00

Time(hrs) Print Inc(min)

245.000 5.00

=====

==== Routing Simulations =====

Name: 100Y001H Hydrology Sim: 100Y001H
Filename: N:\2018\18-0617\Engineering\Drainage\2_Calculations\ICPR\100Y001H.I32

CRS - Lake Jeffery Road
Inputs Report

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): 721.00
Min Calc Time(sec): 0.2500	Max Calc Time(sec): 60.0000
Boundary Stages:	Boundary Flows:

100 yr / 001 hr

Time(hrs)	Print Inc(min)
-----	-----
1.000	1.000
999.000	60.000

Group	Run
-----	-----
BASE	Yes

Name: 100Y002H Hydrology Sim: 100Y002H
Filename: N:\2018\18-0617\Engineering\Drainage\2_Calculations\ICPR\100Y002H.I32

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): 722.00
Min Calc Time(sec): 0.2500	Max Calc Time(sec): 60.0000
Boundary Stages:	Boundary Flows:

100 yr / 002 hr

Time(hrs)	Print Inc(min)
-----	-----
2.000	1.000
999.000	60.000

Group	Run
-----	-----
BASE	Yes

Name: 100Y004H Hydrology Sim: 100Y004H
Filename: N:\2018\18-0617\Engineering\Drainage\2_Calculations\ICPR\100Y004H.I32

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): 724.00
Min Calc Time(sec): 0.2500	Max Calc Time(sec): 60.0000
Boundary Stages:	Boundary Flows:

100 yr / 004 hr

Time(hrs)	Print Inc(min)
-----	-----
4.000	5.000
999.000	60.000

Group	Run
-----	-----
BASE	Yes

Name: 100Y008H Hydrology Sim: 100Y008H
Filename: N:\2018\18-0617\Engineering\Drainage\2_Calculations\ICPR\100Y008H.I32

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): 728.00
Min Calc Time(sec): 0.2500	Max Calc Time(sec): 60.0000
Boundary Stages:	Boundary Flows:

100 yr / 008 hr

Time(hrs)	Print Inc(min)
-----	-----

CRS - Lake Jeffery Road
Inputs Report

8.000 5.000
999.000 60.000

Group Run

BASE Yes

Name: 100Y024H Hydrology Sim: 100Y024H
Filename: N:\2018\18-0617\Engineering\Drainage\2_Calculations\ICPR\100Y024H.I32

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): 744.00
Min Calc Time(sec): 0.2500 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

100 yr / 024 hr

Time(hrs) Print Inc(min)

24.000 5.000
999.000 60.000

Group Run

BASE Yes

Name: 100Y072H Hydrology Sim: 100Y072H
Filename: N:\2018\18-0617\Engineering\Drainage\2_Calculations\ICPR\100Y072H.I32

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): 792.00
Min Calc Time(sec): 0.2500 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

100 yr / 072 hr

Time(hrs) Print Inc(min)

72.000 5.000
999.000 60.000

Group Run

BASE Yes

Name: 100Y168H Hydrology Sim: 100Y168H
Filename: N:\2018\18-0617\Engineering\Drainage\2_Calculations\ICPR\100Y168H.I32

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): 888.00
Min Calc Time(sec): 0.2500 Max Calc Time(sec): 60.0000
Boundary Stages: Boundary Flows:

100 yr / 168 hr

Time(hrs) Print Inc(min)

168.000 5.000
999.000 60.000

Group Run

BASE Yes

Name: 100Y240H Hydrology Sim: 100Y240H
Filename: N:\2018\18-0617\Engineering\Drainage\2_Calculations\ICPR\100Y240H.I32

Execute: Yes Restart: No Patch: No

CRS - Lake Jeffery Road
Inputs Report

Alternative: No

Max Delta Z(ft): 1.00
Time Step Optimizer: 10.000
Start Time(hrs): 0.000
Min Calc Time(sec): 0.2500
Boundary Stages:

Delta Z Factor: 0.00500
End Time(hrs): 960.00
Max Calc Time(sec): 60.0000
Boundary Flows:

100 yr / 240 hr

Time(hrs)	Print Inc(min)
240.000	5.000
999.000	60.000

Group	Run
BASE	Yes

CRS - Lake Jeffery Road
SMF-1 Peak Stages

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft ²	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs
SMF-1	BASE	100Y001H	1.04	175.054	176.300	0.0050	27678	0.62	11.107	1.04
SMF-1	BASE	100Y002H	2.04	175.140	176.300	0.0050	28055	0.83	9.010	2.04
SMF-1	BASE	100Y004H	4.12	175.309	176.300	0.0050	28788	2.00	4.990	3.33
SMF-1	BASE	100Y008H	8.15	175.509	176.300	0.0050	29661	3.99	5.098	4.18
SMF-1	BASE	100Y024H	22.08	175.847	176.300	0.0035	31135	12.00	1.695	7.18
SMF-1	BASE	100Y072H	64.11	176.023	176.300	0.0020	31899	59.91	1.090	12.00
SMF-1	BASE	100Y168H	160.11	176.066	176.300	0.0011	32086	159.91	0.755	160.10
SMF-1	BASE	100Y240H	184.13	176.117	176.300	0.0018	32308	183.91	0.994	184.11

CRS - Jake Jeffery Road
Pre-Development Discharge Rates

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
PRE	BASE	100Y001H	0.00	0.000	0.000	0.0000	0	1.25	0.155	0.00
PRE	BASE	100Y002H	0.00	0.000	0.000	0.0000	0	2.00	0.295	0.00
PRE	BASE	100Y004H	0.00	0.000	0.000	0.0000	0	3.33	0.594	0.00
PRE	BASE	100Y008H	0.00	0.000	0.000	0.0000	0	5.25	0.609	0.00
PRE	BASE	100Y024H	0.00	0.000	0.000	0.0000	0	15.25	0.441	0.00
PRE	BASE	100Y072H	0.00	0.000	0.000	0.0000	0	60.08	0.623	0.00
PRE	BASE	100Y168H	0.00	0.000	0.000	0.0000	0	160.00	0.523	0.00
PRE	BASE	100Y240H	0.00	0.000	0.000	0.0000	0	184.00	0.666	0.00

CRS - Lake Jeffery Road
Post-Development Discharge Rates

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
OUTFALL	BASE	100Y001H	0.00	0.000	0.000	0.0000	0	0.00	0.000	0.00
OUTFALL	BASE	100Y002H	0.00	0.000	0.000	0.0000	0	0.00	0.000	0.00
OUTFALL	BASE	100Y004H	0.00	0.000	0.000	0.0000	0	0.00	0.000	0.00
OUTFALL	BASE	100Y008H	0.00	0.000	0.000	0.0000	0	8.15	0.028	0.00
OUTFALL	BASE	100Y024H	0.00	0.000	0.000	0.0000	0	22.08	0.232	0.00
OUTFALL	BASE	100Y072H	0.00	0.000	0.000	0.0000	0	64.11	0.389	0.00
OUTFALL	BASE	100Y168H	0.00	0.000	0.000	0.0000	0	160.11	0.444	0.00
OUTFALL	BASE	100Y240H	0.00	0.000	0.000	0.0000	0	184.13	0.559	0.00

CRS - Lake Jeffery Road
Pre-Development Discharge Volumes

Simulation	Node	Group	Time	Stage	Warning	Surface	Total	Total	Total	Total
			hrs	ft	Stage	Area	Inflow	Outflow	Vol In	Vol Out
					ft	ft2	cfs	cfs	af	af
100Y001H	PRE	BASE	706.01	0.000	0.000	0	0.000	0.000	0.0053	0.0000
100Y001H	PRE	BASE	707.01	0.000	0.000	0	0.000	0.000	0.0053	0.0000
100Y001H	PRE	BASE	708.01	0.000	0.000	0	0.000	0.000	0.0053	0.0000
100Y001H	PRE	BASE	709.01	0.000	0.000	0	0.000	0.000	0.0053	0.0000
100Y001H	PRE	BASE	710.01	0.000	0.000	0	0.000	0.000	0.0053	0.0000
100Y001H	PRE	BASE	711.01	0.000	0.000	0	0.000	0.000	0.0053	0.0000
100Y001H	PRE	BASE	712.01	0.000	0.000	0	0.000	0.000	0.0053	0.0000
100Y001H	PRE	BASE	713.01	0.000	0.000	0	0.000	0.000	0.0053	0.0000
100Y001H	PRE	BASE	714.01	0.000	0.000	0	0.000	0.000	0.0053	0.0000
100Y001H	PRE	BASE	715.01	0.000	0.000	0	0.000	0.000	0.0053	0.0000
100Y001H	PRE	BASE	716.01	0.000	0.000	0	0.000	0.000	0.0053	0.0000
100Y001H	PRE	BASE	717.01	0.000	0.000	0	0.000	0.000	0.0053	0.0000
100Y001H	PRE	BASE	718.01	0.000	0.000	0	0.000	0.000	0.0053	0.0000
100Y001H	PRE	BASE	719.01	0.000	0.000	0	0.000	0.000	0.0053	0.0000
100Y001H	PRE	BASE	720.01	0.000	0.000	0	0.000	0.000	0.0053	0.0000
100Y001H	PRE	BASE	721.01	0.000	0.000	0	0.000	0.000	0.0053	0.0000
100Y002H	PRE	BASE	0.00	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.02	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.03	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.05	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.07	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.08	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.10	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.12	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.13	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.15	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.18	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.19	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.21	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.22	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.25	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.26	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.27	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.29	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.31	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.32	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.34	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.35	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.37	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.38	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.42	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.43	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.44	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.46	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.48	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.49	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.50	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.52	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.54	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.55	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.57	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.58	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.60	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.62	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.63	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.65	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.67	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.69	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.70	0.000	0.000	0	0.001	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.72	0.000	0.000	0	0.001	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.74	0.000	0.000	0	0.001	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.75	0.000	0.000	0	0.001	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.77	0.000	0.000	0	0.002	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.78	0.000	0.000	0	0.004	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.80	0.000	0.000	0	0.005	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.82	0.000	0.000	0	0.006	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.84	0.000	0.000	0	0.007	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.85	0.000	0.000	0	0.009	0.000	0.0000	0.0000
100Y002H	PRE	BASE	0.87	0.000	0.000	0	0.012	0.000	0.0001	0.0000
100Y002H	PRE	BASE	0.89	0.000	0.000	0	0.014	0.000	0.0001	0.0000
100Y002H	PRE	BASE	0.90	0.000	0.000	0	0.016	0.000	0.0001	0.0000
100Y002H	PRE	BASE	0.92	0.000	0.000	0	0.018	0.000	0.0001	0.0000
100Y002H	PRE	BASE	0.93	0.000	0.000	0	0.022	0.000	0.0001	0.0000
100Y002H	PRE	BASE	0.95	0.000	0.000	0	0.025	0.000	0.0002	0.0000
100Y002H	PRE	BASE	0.97	0.000	0.000	0	0.029	0.000	0.0002	0.0000
100Y002H	PRE	BASE	0.99	0.000	0.000	0	0.033	0.000	0.0003	0.0000
100Y002H	PRE	BASE	1.00	0.000	0.000	0	0.037	0.000	0.0003	0.0000
100Y002H	PRE	BASE	1.02	0.000	0.000	0	0.042	0.000	0.0004	0.0000
100Y002H	PRE	BASE	1.04	0.000	0.000	0	0.047	0.000	0.0004	0.0000
100Y002H	PRE	BASE	1.05	0.000	0.000	0	0.052	0.000	0.0005	0.0000
100Y002H	PRE	BASE	1.07	0.000	0.000	0	0.057	0.000	0.0006	0.0000
100Y002H	PRE	BASE	1.08	0.000	0.000	0	0.062	0.000	0.0006	0.0000
100Y002H	PRE	BASE	1.11	0.000	0.000	0	0.072	0.000	0.0008	0.0000
100Y002H	PRE	BASE	1.12	0.000	0.000	0	0.077	0.000	0.0008	0.0000

CRS - Lake Jeffery Road
Pre-Development Discharge Volumes

Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
100Y002H	PRE	BASE	714.02	0.000	0.000	0	0.000	0.000	0.0398	0.0000
100Y002H	PRE	BASE	715.02	0.000	0.000	0	0.000	0.000	0.0398	0.0000
100Y002H	PRE	BASE	716.02	0.000	0.000	0	0.000	0.000	0.0398	0.0000
100Y002H	PRE	BASE	717.02	0.000	0.000	0	0.000	0.000	0.0398	0.0000
100Y002H	PRE	BASE	718.02	0.000	0.000	0	0.000	0.000	0.0398	0.0000
100Y002H	PRE	BASE	719.02	0.000	0.000	0	0.000	0.000	0.0398	0.0000
100Y002H	PRE	BASE	720.02	0.000	0.000	0	0.000	0.000	0.0398	0.0000
100Y002H	PRE	BASE	721.02	0.000	0.000	0	0.000	0.000	0.0398	0.0000
100Y002H	PRE	BASE	722.01	0.000	0.000	0	0.000	0.000	0.0398	0.0000
100Y004H	PRE	BASE	0.00	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	PRE	BASE	0.08	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	PRE	BASE	0.18	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	PRE	BASE	0.26	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	PRE	BASE	0.34	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	PRE	BASE	0.43	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	PRE	BASE	0.51	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	PRE	BASE	0.60	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	PRE	BASE	0.68	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	PRE	BASE	0.76	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	PRE	BASE	0.85	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	PRE	BASE	0.93	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	PRE	BASE	1.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	PRE	BASE	1.10	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	PRE	BASE	1.18	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	PRE	BASE	1.26	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	PRE	BASE	1.35	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	PRE	BASE	1.43	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	PRE	BASE	1.51	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	PRE	BASE	1.59	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	PRE	BASE	1.67	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	PRE	BASE	1.75	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	PRE	BASE	1.84	0.000	0.000	0	0.001	0.000	0.0000	0.0000
100Y004H	PRE	BASE	1.92	0.000	0.000	0	0.004	0.000	0.0000	0.0000
100Y004H	PRE	BASE	2.00	0.000	0.000	0	0.010	0.000	0.0001	0.0000
100Y004H	PRE	BASE	2.09	0.000	0.000	0	0.024	0.000	0.0002	0.0000
100Y004H	PRE	BASE	2.17	0.000	0.000	0	0.045	0.000	0.0004	0.0000
100Y004H	PRE	BASE	2.26	0.000	0.000	0	0.077	0.000	0.0009	0.0000
100Y004H	PRE	BASE	2.33	0.000	0.000	0	0.113	0.000	0.0015	0.0000
100Y004H	PRE	BASE	2.42	0.000	0.000	0	0.161	0.000	0.0024	0.0000
100Y004H	PRE	BASE	2.50	0.000	0.000	0	0.216	0.000	0.0038	0.0000
100Y004H	PRE	BASE	2.59	0.000	0.000	0	0.273	0.000	0.0055	0.0000
100Y004H	PRE	BASE	2.67	0.000	0.000	0	0.326	0.000	0.0074	0.0000
100Y004H	PRE	BASE	2.75	0.000	0.000	0	0.382	0.000	0.0099	0.0000
100Y004H	PRE	BASE	2.84	0.000	0.000	0	0.434	0.000	0.0127	0.0000
100Y004H	PRE	BASE	2.92	0.000	0.000	0	0.479	0.000	0.0160	0.0000
100Y004H	PRE	BASE	3.01	0.000	0.000	0	0.518	0.000	0.0195	0.0000
100Y004H	PRE	BASE	3.09	0.000	0.000	0	0.550	0.000	0.0232	0.0000
100Y004H	PRE	BASE	3.17	0.000	0.000	0	0.571	0.000	0.0267	0.0000
100Y004H	PRE	BASE	3.26	0.000	0.000	0	0.588	0.000	0.0312	0.0000
100Y004H	PRE	BASE	3.35	0.000	0.000	0	0.593	0.000	0.0354	0.0000
100Y004H	PRE	BASE	3.43	0.000	0.000	0	0.587	0.000	0.0395	0.0000
100Y004H	PRE	BASE	3.52	0.000	0.000	0	0.571	0.000	0.0435	0.0000
100Y004H	PRE	BASE	3.60	0.000	0.000	0	0.552	0.000	0.0473	0.0000
100Y004H	PRE	BASE	3.68	0.000	0.000	0	0.530	0.000	0.0511	0.0000
100Y004H	PRE	BASE	3.77	0.000	0.000	0	0.507	0.000	0.0546	0.0000
100Y004H	PRE	BASE	3.85	0.000	0.000	0	0.483	0.000	0.0580	0.0000
100Y004H	PRE	BASE	3.93	0.000	0.000	0	0.457	0.000	0.0613	0.0000
100Y004H	PRE	BASE	4.02	0.000	0.000	0	0.430	0.000	0.0643	0.0000
100Y004H	PRE	BASE	5.02	0.000	0.000	0	0.158	0.000	0.0886	0.0000
100Y004H	PRE	BASE	6.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	7.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	8.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	9.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	10.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	11.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	12.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	13.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	14.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	15.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	16.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	17.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	18.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	19.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	20.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	21.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	22.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	23.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	24.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	25.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	26.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	27.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	28.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	29.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	30.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000

CRS - Lake Jeffery Road
Pre-Development Discharge Volumes

Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
100Y004H	PRE	BASE	711.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	712.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	713.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	714.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	715.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	716.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	717.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	718.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	719.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	720.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	721.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	722.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	723.02	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y004H	PRE	BASE	724.01	0.000	0.000	0	0.000	0.000	0.0951	0.0000
100Y008H	PRE	BASE	0.00	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	0.08	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	0.18	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	0.26	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	0.34	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	0.43	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	0.51	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	0.60	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	0.68	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	0.76	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	0.85	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	0.93	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	1.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	1.10	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	1.18	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	1.26	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	1.35	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	1.43	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	1.51	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	1.60	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	1.68	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	1.76	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	1.85	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	1.93	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	2.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	2.10	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	2.18	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	2.26	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	2.35	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	2.43	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	2.51	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	2.60	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	2.68	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	2.76	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	2.85	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	2.93	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	3.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	3.10	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	3.18	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	3.25	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	PRE	BASE	3.34	0.000	0.000	0	0.001	0.000	0.0000	0.0000
100Y008H	PRE	BASE	3.42	0.000	0.000	0	0.005	0.000	0.0000	0.0000
100Y008H	PRE	BASE	3.51	0.000	0.000	0	0.013	0.000	0.0001	0.0000
100Y008H	PRE	BASE	3.58	0.000	0.000	0	0.026	0.000	0.0002	0.0000
100Y008H	PRE	BASE	3.67	0.000	0.000	0	0.050	0.000	0.0005	0.0000
100Y008H	PRE	BASE	3.76	0.000	0.000	0	0.086	0.000	0.0010	0.0000
100Y008H	PRE	BASE	3.84	0.000	0.000	0	0.135	0.000	0.0017	0.0000
100Y008H	PRE	BASE	3.92	0.000	0.000	0	0.188	0.000	0.0028	0.0000
100Y008H	PRE	BASE	4.00	0.000	0.000	0	0.257	0.000	0.0043	0.0000
100Y008H	PRE	BASE	4.09	0.000	0.000	0	0.329	0.000	0.0064	0.0000
100Y008H	PRE	BASE	4.17	0.000	0.000	0	0.399	0.000	0.0090	0.0000
100Y008H	PRE	BASE	4.25	0.000	0.000	0	0.458	0.000	0.0118	0.0000
100Y008H	PRE	BASE	4.34	0.000	0.000	0	0.509	0.000	0.0152	0.0000
100Y008H	PRE	BASE	4.43	0.000	0.000	0	0.543	0.000	0.0191	0.0000
100Y008H	PRE	BASE	4.51	0.000	0.000	0	0.559	0.000	0.0228	0.0000
100Y008H	PRE	BASE	4.59	0.000	0.000	0	0.569	0.000	0.0265	0.0000
100Y008H	PRE	BASE	4.67	0.000	0.000	0	0.574	0.000	0.0303	0.0000
100Y008H	PRE	BASE	4.76	0.000	0.000	0	0.579	0.000	0.0347	0.0000
100Y008H	PRE	BASE	4.84	0.000	0.000	0	0.584	0.000	0.0386	0.0000
100Y008H	PRE	BASE	4.92	0.000	0.000	0	0.590	0.000	0.0424	0.0000
100Y008H	PRE	BASE	5.00	0.000	0.000	0	0.598	0.000	0.0464	0.0000
100Y008H	PRE	BASE	5.10	0.000	0.000	0	0.605	0.000	0.0510	0.0000
100Y008H	PRE	BASE	5.18	0.000	0.000	0	0.609	0.000	0.0550	0.0000
100Y008H	PRE	BASE	5.26	0.000	0.000	0	0.608	0.000	0.0594	0.0000
100Y008H	PRE	BASE	5.35	0.000	0.000	0	0.601	0.000	0.0635	0.0000
100Y008H	PRE	BASE	5.43	0.000	0.000	0	0.586	0.000	0.0676	0.0000
100Y008H	PRE	BASE	5.51	0.000	0.000	0	0.565	0.000	0.0716	0.0000
100Y008H	PRE	BASE	5.60	0.000	0.000	0	0.543	0.000	0.0754	0.0000
100Y008H	PRE	BASE	5.68	0.000	0.000	0	0.521	0.000	0.0791	0.0000
100Y008H	PRE	BASE	5.76	0.000	0.000	0	0.499	0.000	0.0826	0.0000

Simulation	Node	Group	Time	Stage	Warning	Surface	Total	Total	Total	Total
			hrs	ft	Stage	Area	Inflow	Outflow	Vol In	Vol Out
					ft	ft2	cfs	cfs	af	af
100Y008H	PRE	BASE	661.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	662.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	663.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	664.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	665.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	666.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	667.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	668.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	669.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	670.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	671.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	672.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	673.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	674.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	675.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	676.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	677.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	678.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	679.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	680.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	681.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	682.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	683.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	684.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	685.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	686.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	687.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	688.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	689.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	690.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	691.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	692.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	693.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	694.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	695.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H	PRE	BASE	696.10	0.000	0.000	0	0.000	0.000	0.1682	0.0000
100Y008H										

Simulation	Node	Group	Time	Stage	Warning	Surface	Total	Total	Total	Total
			hrs	ft	Stage					
						ft2	cfs	cfs	af	af
100Y024H	PRE	BASE	686.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	687.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	688.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	689.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	690.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	691.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	692.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	693.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	694.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	695.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	696.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	697.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	698.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	699.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	700.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	701.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	702.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	703.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	704.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	705.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	706.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	707.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	708.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	709.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	710.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	711.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	712.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	713.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	714.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	715.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	716.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	717.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	718.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	719.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	720.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	721.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	722.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	723.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	724.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	725.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	726.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	727.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	728.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	729.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	730.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	731.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	732.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	733.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	734.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	735.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	736.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	737.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	738.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	739.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	740.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	741.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	742.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	743.10	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y024H	PRE	BASE	744.01	0.000	0.000	0	0.000	0.000	0.3764	0.0000
100Y072H	PRE	BASE	0.00	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	PRE	BASE	0.08	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	PRE	BASE	0.18	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	PRE	BASE	0.26	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	PRE	BASE	0.34	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	PRE	BASE	0.43	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	PRE	BASE	0.51	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	PRE	BASE	0.60	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	PRE	BASE	0.68	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	PRE	BASE	0.76	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	PRE	BASE	0.85	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	PRE	BASE	0.93	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	PRE	BASE	1.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	PRE	BASE	1.10	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	PRE	BASE	1.18	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	PRE	BASE	1.26	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	PRE	BASE	1.35	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	PRE	BASE	1.43	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	PRE	BASE	1.51	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	PRE	BASE	1.60	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	PRE	BASE	1.68	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	PRE	BASE	1.76	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	PRE	BASE	1.85	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	PRE	BASE	1.93	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	PRE	BASE	2.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000

Simulation	Node	Group	Time	Stage	Warning	Surface	Total	Total	Total	Total
			hrs	ft	Stage	Area	Inflow	Outflow	Vol In	Vol Out
					ft	ft2	cfs	cfs	af	af
100Y072H	PRE	BASE	763.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	764.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	765.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	766.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	767.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	768.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	769.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	770.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	771.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	772.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	773.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	774.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	775.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	776.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	777.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	778.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	779.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	780.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	781.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	782.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	783.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	784.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	785.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	786.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	787.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	788.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	789.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	790.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	791.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y072H	PRE	BASE	792.01	0.000	0.000	0	0.000	0.000	0.6058	0.0000
100Y168H	PRE	BASE	0.00	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y168H	PRE	BASE	0.08	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y168H	PRE	BASE	0.18	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y168H	PRE	BASE	0.26	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y168H	PRE	BASE	0.34	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y168H	PRE	BASE	0.43	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y168H	PRE	BASE								

CRS - Lake Jeffery Road
Pre-Development Discharge Volumes

Simulation	Node	Group	Time	Stage	Warning	Surface	Total	Total	Total	Total
			hrs	ft	Stage	Area	Inflow	Outflow	Vol In	Vol Out
					ft	ft2	cfs	cfs	af	af
100Y240H	PRE	BASE	881.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	882.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	883.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	884.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	885.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	886.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	887.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	888.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	889.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	890.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	891.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	892.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	893.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	894.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	895.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	896.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	897.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	898.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	899.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	900.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	901.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	902.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	903.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	904.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	905.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	906.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	907.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	908.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	909.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	910.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	911.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	912.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	913.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	914.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	915.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	916.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	917.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	918.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	919.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	920.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	921.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	922.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	923.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	924.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	925.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	926.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	927.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	928.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	929.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	930.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	931.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	932.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	933.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	934.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	935.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	936.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	937.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	938.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	939.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	940.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	941.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	942.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	943.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	944.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	945.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	946.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	947.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	948.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	949.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	950.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	951.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	952.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	953.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	954.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	955.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	956.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	957.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	958.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	959.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000
100Y240H	PRE	BASE	960.01	0.000	0.000	0	0.000	0.000	1.0055	0.0000

CRS - Lake Jeffery Road
Post-Development Discharge Volumes

Simulation	Node	Group	Time	Stage	Warning	Surface	Total	Total	Total	Total
			hrs	ft	Stage	Area	Inflow	Outflow	Vol In	Vol Out
					ft	ft2	cfs	cfs	af	af
100Y001H	OUTFALL	BASE	706.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y001H	OUTFALL	BASE	707.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y001H	OUTFALL	BASE	708.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y001H	OUTFALL	BASE	709.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y001H	OUTFALL	BASE	710.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y001H	OUTFALL	BASE	711.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y001H	OUTFALL	BASE	712.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y001H	OUTFALL	BASE	713.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y001H	OUTFALL	BASE	714.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y001H	OUTFALL	BASE	715.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y001H	OUTFALL	BASE	716.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y001H	OUTFALL	BASE	717.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y001H	OUTFALL	BASE	718.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y001H	OUTFALL	BASE	719.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y001H	OUTFALL	BASE	720.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y001H	OUTFALL	BASE	721.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.00	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.02	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.03	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.05	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.07	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.08	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.10	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.12	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.13	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.15	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.18	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.19	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.21	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.22	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.25	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.26	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.27	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.29	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.31	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.32	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.34	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.35	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.37	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.38	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.42	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.43	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.44	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.46	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.48	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.49	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.50	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.52	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.54	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.55	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.57	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.58	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.60	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.62	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.63	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.65	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.67	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.69	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.70	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.72	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.74	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.75	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.77	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.78	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.80	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.82	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.84	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.85	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.87	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.89	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.90	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.92	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.93	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.95	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.97	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	0.99	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	1.00	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	1.02	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	1.04	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	1.05	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	1.07	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	1.08	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	1.11	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	1.12	0.000	0.000	0	0.000	0.000	0.0000	0.0000

Simulation	Node	Group	Time	Stage	Warning	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
			hrs	ft	Stage ft					
100Y002H	OUTFALL	BASE	714.02	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	715.02	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	716.02	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	717.02	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	718.02	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	719.02	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	720.02	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	721.02	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y002H	OUTFALL	BASE	722.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	0.00	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	0.08	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	0.18	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	0.26	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	0.34	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	0.43	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	0.51	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	0.60	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	0.68	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	0.76	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	0.85	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	0.93	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	1.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	1.10	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	1.18	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	1.26	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	1.35	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	1.43	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	1.51	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	1.59	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	1.67	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	1.75	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	1.84	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	1.92	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	2.00	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	2.09	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	2.17	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	2							

CRS - Lake Jeffery Road
Post-Development Discharge Volumes

Simulation	Node	Group	Time	Stage	Warning	Surface	Total	Total	Total	Total
			hrs	ft	Stage	Area	Inflow	Outflow	Vol In	Vol Out
				ft	ft	ft2	cfs	cfs	af	af
100Y004H	OUTFALL	BASE	711.02	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	712.02	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	713.02	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	714.02	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	715.02	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	716.02	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	717.02	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	718.02	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	719.02	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	720.02	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	721.02	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	722.02	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	723.02	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y004H	OUTFALL	BASE	724.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	0.00	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	0.08	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	0.18	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	0.26	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	0.34	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	0.43	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	0.51	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	0.60	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	0.68	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	0.76	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	0.85	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	0.93	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	1.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	1.10	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	1.18	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	1.26	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	1.35	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	1.43	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	1.51	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	1.60	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	1.68	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	1.76	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	1.85	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	1.93	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	2.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	2.10	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	2.18	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	2.26	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	2.35	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	2.43	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	2.51	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	2.60	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	2.68	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	2.76	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	2.85	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	2.93	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	3.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	3.10	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	3.18	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	3.25	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	3.34	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	3.42	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	3.51	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	3.58	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	3.67	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	3.76	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	3.84	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	3.92	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	4.00	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	4.09	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	4.17	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	4.25	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	4.34	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	4.43	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	4.51	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	4.59	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	4.67	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	4.76	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	4.84	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	4.92	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	5.00	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	5.10	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	5.18	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	5.26	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	5.35	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	5.43	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	5.51	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	5.60	0.000	0.000	3	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	5.68	0.000	0.000	3	0.000	0.000	0.0000	0.0000
100Y008H	OUTFALL	BASE	5.76	0.000	0.000	3	0.000	0.000	0.0000	0.0000

Simulation	Node	Group	Time	Stage	Warning	Surface	Total	Total	Total	Total
			hrs	ft	Stage	Area	Inflow	Outflow	Vol In	Vol Out
					ft	ft2	cfs	cfs	af	af
100Y008H	OUTFALL	BASE	661.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	662.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	663.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	664.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	665.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	666.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	667.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	668.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	669.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	670.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	671.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	672.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	673.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	674.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	675.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	676.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	677.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	678.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	679.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	680.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	681.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	682.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	683.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	684.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	685.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	686.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	687.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	688.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	689.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	690.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	691.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	692.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	693.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	694.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	695.10	0.000	0.000	0	0.000	0.000	0.0119	0.0000
100Y008H	OUTFALL	BASE	696.10	0.000						

CRS - Lake Jeffery Road
Post-Development Discharge Volumes

Simulation	Node	Group	Time	Stage	Warning	Surface Area ft2	Total	Total	Total	Total
			hrs	ft	Stage ft		Inflow cfs	Outflow cfs	Vol In af	Vol Out af
100Y024H	OUTFALL	BASE	686.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	687.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	688.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	689.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	690.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	691.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	692.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	693.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	694.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	695.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	696.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	697.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	698.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	699.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	700.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	701.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	702.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	703.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	704.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	705.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	706.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	707.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	708.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	709.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	710.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	711.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	712.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	713.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	714.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	715.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	716.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	717.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	718.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	719.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	720.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	721.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	722.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	723.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	724.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	725.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	726.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	727.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	728.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	729.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	730.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	731.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	732.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	733.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	734.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	735.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	736.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	737.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	738.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	739.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	740.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	741.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	742.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	743.10	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y024H	OUTFALL	BASE	744.01	0.000	0.000	0	0.000	0.000	0.3103	0.0000
100Y072H	OUTFALL	BASE	0.00	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	OUTFALL	BASE	0.08	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	OUTFALL	BASE	0.18	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	OUTFALL	BASE	0.26	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	OUTFALL	BASE	0.34	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	OUTFALL	BASE	0.43	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	OUTFALL	BASE	0.51	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	OUTFALL	BASE	0.60	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	OUTFALL	BASE	0.68	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	OUTFALL	BASE	0.76	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	OUTFALL	BASE	0.85	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	OUTFALL	BASE	0.93	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	OUTFALL	BASE	1.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	OUTFALL	BASE	1.10	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	OUTFALL	BASE	1.18	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	OUTFALL	BASE	1.26	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	OUTFALL	BASE	1.35	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	OUTFALL	BASE	1.43	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	OUTFALL	BASE	1.51	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	OUTFALL	BASE	1.60	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	OUTFALL	BASE	1.68	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	OUTFALL	BASE	1.76	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	OUTFALL	BASE	1.85	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	OUTFALL	BASE	1.93	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y072H	OUTFALL	BASE	2.01	0.000	0.000	0	0.000	0.000	0.0000	0.0000

Simulation	Node	Group	Time	Stage	Warning	Surface	Total	Total	Total	Total
			hrs	ft	Stage	Area	Inflow	Outflow	Vol In	Vol Out
					ft	ft2	cfs	cfs	af	af
100Y072H	OUTFALL	BASE	763.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	764.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	765.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	766.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	767.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	768.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	769.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	770.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	771.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	772.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	773.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	774.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	775.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	776.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	777.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	778.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	779.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	780.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	781.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	782.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	783.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	784.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	785.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	786.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	787.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	788.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	789.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	790.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	791.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y072H	OUTFALL	BASE	792.01	0.000	0.000	0	0.000	0.000	0.5952	0.0000
100Y168H	OUTFALL	BASE	0.00	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y168H	OUTFALL	BASE	0.08	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y168H	OUTFALL	BASE	0.18	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y168H	OUTFALL	BASE	0.26	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y168H	OUTFALL	BASE	0.34	0.000	0.000	0	0.000	0.000	0.0000	0.0000
100Y168H	OUTFALL	BASE	0.43	0.000	0.000					

Simulation	Node	Group	Time	Stage	Warning	Surface	Total	Total	Total	Total
			hrs	ft	Stage	Area	Inflow	Outflow	Vol In	Vol Out
					ft	ft2	cfs	cfs	af	af
100Y168H	OUTFALL	BASE	841.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	842.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	843.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	844.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	845.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	846.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	847.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	848.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	849.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	850.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	851.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	852.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	853.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	854.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	855.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	856.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	857.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	858.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	859.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	860.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	861.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	862.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	863.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	864.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	865.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	866.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	867.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	868.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	869.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	870.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	871.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	872.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	873.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	874.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	875.01	0.000	0.000	0	0.000	0.000	0.7829	0.0000
100Y168H	OUTFALL	BASE	876.01	0.000	0					

Simulation	Node	Group	Time	Stage	Warning	Surface	Total	Total	Total	Total
			hrs	ft	Stage	Area	Inflow	Outflow	Vol In	Vol Out
					ft	ft2	cfs	cfs	af	af
100Y240H	OUTFALL	BASE	881.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	882.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	883.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	884.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	885.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	886.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	887.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	888.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	889.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	890.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	891.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	892.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	893.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	894.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	895.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	896.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	897.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	898.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	899.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	900.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	901.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	902.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	903.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	904.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	905.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	906.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	907.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	908.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	909.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	910.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	911.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	912.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	913.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	914.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	915.01	0.000	0.000	0	0.000	0.000	0.9984	0.0000
100Y240H	OUTFALL	BASE	916.01	0.000	0					

CRS - Lake Jeffery Road
SMF-1 Recovery

Simulation	Node	Group	Time	Stage	Warning	Surface	Total	Total	Total	Total
			hrs	ft	Stage ft	Area ft2	Inflow cfs	Outflow cfs	Vol In af	Vol Out af
100Y001H	SMF-1	BASE	196.01	174.525	176.300	25376	0.000	0.006	0.4302	0.3715
100Y001H	SMF-1	BASE	197.01	174.525	176.300	25372	0.000	0.006	0.4302	0.3720
100Y001H	SMF-1	BASE	198.01	174.524	176.300	25369	0.000	0.006	0.4302	0.3725
100Y001H	SMF-1	BASE	199.01	174.523	176.300	25365	0.000	0.006	0.4302	0.3729
100Y001H	SMF-1	BASE	200.01	174.522	176.300	25362	0.000	0.006	0.4302	0.3734
100Y001H	SMF-1	BASE	201.01	174.521	176.300	25358	0.000	0.006	0.4302	0.3739
100Y001H	SMF-1	BASE	202.01	174.521	176.300	25355	0.000	0.006	0.4302	0.3744
100Y001H	SMF-1	BASE	203.01	174.520	176.300	25351	0.000	0.006	0.4302	0.3748
100Y001H	SMF-1	BASE	204.01	174.519	176.300	25348	0.000	0.006	0.4302	0.3753
100Y001H	SMF-1	BASE	205.01	174.518	176.300	25344	0.000	0.006	0.4302	0.3757
100Y001H	SMF-1	BASE	206.01	174.517	176.300	25341	0.000	0.006	0.4302	0.376
100Y001H	SMF-1	BASE	207.01	174.517	176.300	25337	0.000	0.006	0.4302	0.376
100Y001H	SMF-1	BASE	208.01	174.516	176.300	25334	0.000	0.006	0.4302	0.377
100Y001H	SMF-1	BASE	209.01	174.515	176.300	25330	0.000	0.006	0.4302	0.3776
100Y001H	SMF-1	BASE	210.01	174.514	176.300	25327	0.000	0.006	0.4302	0.3780
100Y001H	SMF-1	BASE	211.01	174.513	176.300	25324	0.000	0.005	0.4302	0.3785
100Y001H	SMF-1	BASE	212.01	174.513	176.300	25320	0.000	0.005	0.4302	0.3790
100Y001H	SMF-1	BASE	213.01	174.512	176.300	25317	0.000	0.005	0.4302	0.3794
100Y001H	SMF-1	BASE	214.01	174.511	176.300	25313	0.000	0.005	0.4302	0.3799
100Y001H	SMF-1	BASE	215.01	174.510	176.300	25310	0.000	0.005	0.4302	0.3803
100Y001H	SMF-1	BASE	216.01	174.510	176.300	25307	0.000	0.005	0.4302	0.3807
100Y001H	SMF-1	BASE	217.01	174.509	176.300	25303	0.000	0.005	0.4302	0.3812
100Y001H	SMF-1	BASE	218.01	174.508	176.300	25300	0.000	0.005	0.4302	0.3816
100Y001H	SMF-1	BASE	219.01	174.507	176.300	25297	0.000	0.005	0.4302	0.3821
100Y001H	SMF-1	BASE	220.01	174.507	176.300	25294	0.000	0.005	0.4302	0.3825
100Y001H	SMF-1	BASE	221.01	174.506	176.300	25290	0.000	0.005	0.4302	0.3830
100Y001H	SMF-1	BASE	222.01	174.505	176.300	25287	0.000	0.005	0.4302	0.3834
100Y001H	SMF-1	BASE	223.01	174.504	176.300	25284	0.000	0.005	0.4302	0.3838
100Y001H	SMF-1	BASE	224.01	174.504	176.300	25280	0.000	0.005	0.4302	0.3843
100Y001H	SMF-1	BASE	225.01	174.503	176.300	25277	0.000	0.005	0.4302	0.3847
100Y001H	SMF-1	BASE	226.01	174.502	176.300	25274	0.000	0.005	0.4302	0.3851
100Y001H	SMF-1	BASE	227.01	174.501	176.300	25271	0.000	0.005	0.4302	0.3856
100Y001H	SMF-1	BASE	228.01	174.501	176.300	25268	0.000	0.005	0.4302	0.3860
100Y001H	SMF-1	BASE	229.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	230.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	231.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	232.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	233.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	234.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	235.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	236.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	237.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	238.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	239.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	240.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	241.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	242.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	243.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	244.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	245.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	246.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	247.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	248.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	249.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	250.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	251.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	252.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	253.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	254.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	255.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	256.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	257.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	258.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	259.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	260.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	261.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	262.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	263.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	264.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	265.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	266.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	267.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	268.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	269.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	270.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	271.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	272.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	273.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	274.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	275.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	276.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	277.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	278.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	279.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862
100Y001H	SMF-1	BASE	280.01	174.500	176.300	25265	0.000	0.000	0.4302	0.3862

CRS - Lake Jeffery Road
SMF-1 Recovery

Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
100Y002H	SMF-1	BASE	374.02	174.541	176.300	25443	0.000	0.004	0.5420	0.4852
100Y002H	SMF-1	BASE	375.02	174.540	176.300	25440	0.000	0.004	0.5420	0.4855
100Y002H	SMF-1	BASE	376.02	174.540	176.300	25438	0.000	0.004	0.5420	0.4858
100Y002H	SMF-1	BASE	377.02	174.539	176.300	25435	0.000	0.004	0.5420	0.4862
100Y002H	SMF-1	BASE	378.02	174.539	176.300	25433	0.000	0.004	0.5420	0.4865
100Y002H	SMF-1	BASE	379.02	174.538	176.300	25430	0.000	0.004	0.5420	0.4868
100Y002H	SMF-1	BASE	380.02	174.537	176.300	25428	0.000	0.004	0.5420	0.4872
100Y002H	SMF-1	BASE	381.02	174.537	176.300	25425	0.000	0.004	0.5420	0.4875
100Y002H	SMF-1	BASE	382.02	174.536	176.300	25423	0.000	0.004	0.5420	0.4878
100Y002H	SMF-1	BASE	383.02	174.536	176.300	25421	0.000	0.004	0.5420	0.4881
100Y002H	SMF-1	BASE	384.02	174.535	176.300	25418	0.000	0.004	0.5420	0.4885
100Y002H	SMF-1	BASE	385.02	174.535	176.300	25416	0.000	0.004	0.5420	0.4888
100Y002H	SMF-1	BASE	386.02	174.534	176.300	25413	0.000	0.004	0.5420	0.4891
100Y002H	SMF-1	BASE	387.02	174.534	176.300	25411	0.000	0.004	0.5420	0.4894
100Y002H	SMF-1	BASE	388.02	174.533	176.300	25409	0.000	0.004	0.5420	0.4897
100Y002H	SMF-1	BASE	389.02	174.532	176.300	25406	0.000	0.004	0.5420	0.4901
100Y002H	SMF-1	BASE	390.02	174.532	176.300	25404	0.000	0.004	0.5420	0.4904
100Y002H	SMF-1	BASE	391.02	174.531	176.300	25401	0.000	0.004	0.5420	0.4907
100Y002H	SMF-1	BASE	392.02	174.531	176.300	25399	0.000	0.004	0.5420	0.4910
100Y002H	SMF-1	BASE	393.02	174.530	176.300	25397	0.000	0.004	0.5420	0.4913
100Y002H	SMF-1	BASE	394.02	174.530	176.300	25394	0.000	0.004	0.5420	0.4916
100Y002H	SMF-1	BASE	395.02	174.529	176.300	25392	0.000	0.004	0.5420	0.4920
100Y002H	SMF-1	BASE	396.02	174.529	176.300	25390	0.000	0.004	0.5420	0.4923
100Y002H	SMF-1	BASE	397.02	174.528	176.300	25387	0.000	0.004	0.5420	0.4926
100Y002H	SMF-1	BASE	398.02	174.528	176.300	25385	0.000	0.004	0.5420	0.4929
100Y002H	SMF-1	BASE	399.02	174.527	176.300	25383	0.000	0.004	0.5420	0.4932
100Y002H	SMF-1	BASE	400.02	174.526	176.300	25380	0.000	0.004	0.5420	0.4935
100Y002H	SMF-1	BASE	401.02	174.526	176.300	25378	0.000	0.004	0.5420	0.4938
100Y002H	SMF-1	BASE	402.02	174.525	176.300	25376	0.000	0.004	0.5420	0.4941
100Y002H	SMF-1	BASE	403.02	174.525	176.300	25373	0.000	0.004	0.5420	0.4945
100Y002H	SMF-1	BASE	404.02	174.524	176.300	25371	0.000	0.004	0.5420	0.4948
100Y002H	SMF-1	BASE	405.02	174.524	176.300	25369	0.000	0.004	0.5420	0.4951
100Y002H	SMF-1	BASE	406.02	174.523	176.300	25366	0.000	0.004	0.5420	0.4954
100Y002H	SMF-1	BASE	407.02	174.523	176.300	25364	0.000	0.004	0.5420	0.4957
100Y002H	SMF-1	BASE	408.02	174.522	176.300	25362	0.000	0.004	0.5420	0.4960
100Y002H	SMF-1	BASE	409.02	174.522	176.300	25359	0.000	0.004	0.5420	0.4963
100Y002H	SMF-1	BASE	410.02	174.521	176.300	25357	0.000	0.004	0.5420	0.4966
100Y002H	SMF-1	BASE	411.02	174.521	176.300	25355	0.000	0.004	0.5420	0.4969
100Y002H	SMF-1	BASE	412.02	174.520	176.300	25353	0.000	0.004	0.5420	0.4972
100Y002H	SMF-1	BASE	413.02	174.520	176.300	25350	0.000	0.004	0.5420	0.4975
100Y002H	SMF-1	BASE	414.02	174.519	176.300	25348	0.000	0.004	0.5420	0.4978
100Y002H	SMF-1	BASE	415.02	174.519	176.300	25346	0.000	0.004	0.5420	0.4981
100Y002H	SMF-1	BASE	416.02	174.518	176.300	25344	0.000	0.004	0.5420	0.4984
100Y002H	SMF-1	BASE	417.02	174.518	176.300	25341	0.000	0.004	0.5420	0.4987
100Y002H	SMF-1	BASE	418.02	174.517	176.300	25339	0.000	0.004	0.5420	0.4990
100Y002H	SMF-1	BASE	419.02	174.516	176.300	25337	0.000	0.004	0.5420	0.4993
100Y002H	SMF-1	BASE	420.02	174.516	176.300	25335	0.000	0.004	0.5420	0.4996
100Y002H	SMF-1	BASE	421.02	174.515	176.300	25332	0.000	0.004	0.5420	0.4999
100Y002H	SMF-1	BASE	422.02	174.515	176.300	25330	0.000	0.004	0.5420	0.5002
100Y002H	SMF-1	BASE	423.02	174.514	176.300	25328	0.000	0.004	0.5420	0.5005
100Y002H	SMF-1	BASE	424.02	174.514	176.300	25326	0.000	0.004	0.5420	0.5008
100Y002H	SMF-1	BASE	425.02	174.513	176.300	25323	0.000	0.004	0.5420	0.5011
100Y002H	SMF-1	BASE	426.02	174.513	176.300	25321	0.000	0.004	0.5420	0.5014
100Y002H	SMF-1	BASE	427.02	174.512	176.300	25319	0.000	0.004	0.5420	0.5017
100Y002H	SMF-1	BASE	428.02	174.512	176.300	25317	0.000	0.004	0.5420	0.5020
100Y002H	SMF-1	BASE	429.02	174.511	176.300	25315	0.000	0.004	0.5420	0.5023
100Y002H	SMF-1	BASE	430.02	174.511	176.300	25312	0.000	0.004	0.5420	0.5026
100Y002H	SMF-1	BASE	431.02	174.510	176.300	25310	0.000	0.004	0.5420	0.5029
100Y002H	SMF-1	BASE	432.02	174.510	176.300	25308	0.000	0.004	0.5420	0.5032
100Y002H	SMF-1	BASE	433.02	174.509	176.300	25306	0.000	0.004	0.5420	0.5035
100Y002H	SMF-1	BASE	434.02	174.509	176.300	25304	0.000	0.004	0.5420	0.5038
100Y002H	SMF-1	BASE	435.02	174.508	176.300	25301	0.000	0.004	0.5420	0.5041
100Y002H	SMF-1	BASE	436.02	174.508	176.300	25299	0.000	0.004	0.5420	0.5043
100Y002H	SMF-1	BASE	437.02	174.507	176.300	25297	0.000	0.003	0.5420	0.5046
100Y002H	SMF-1	BASE	438.02	174.507	176.300	25295	0.000	0.003	0.5420	0.5049
100Y002H	SMF-1	BASE	439.02	174.506	176.300	25293	0.000	0.003	0.5420	0.5052
100Y002H	SMF-1	BASE	440.02	174.506	176.300	25291	0.000	0.003	0.5420	0.5055
100Y002H	SMF-1	BASE	441.02	174.505	176.300	25288	0.000	0.003	0.5420	0.5058
100Y002H	SMF-1	BASE	442.02	174.505	176.300	25286	0.000	0.003	0.5420	0.5061
100Y002H	SMF-1	BASE	443.02	174.504	176.300	25284	0.000	0.003	0.5420	0.5064
100Y002H	SMF-1	BASE	444.02	174.504	176.300	25282	0.000	0.003	0.5420	0.5066
100Y002H	SMF-1	BASE	445.02	174.503	176.300	25280	0.000	0.003	0.5420	0.5069
100Y002H	SMF-1	BASE	446.02	174.503	176.300	25278	0.000	0.003	0.5420	0.5072
100Y002H	SMF-1	BASE	447.02	174.502	176.300	25276	0.000	0.003	0.5420	0.5075
100Y002H	SMF-1	BASE	448.02	174.502	176.300	25273	0.000	0.003	0.5420	0.5078
100Y002H	SMF-1	BASE	449.02	174.501	176.300	25271	0.000	0.003	0.5420	0.5081
100Y002H	SMF-1	BASE	450.02	174.501	176.300	25269	0.000	0.003	0.5420	0.5083
100Y002H	SMF-1	BASE	451.02	174.500	176.300	25267	0.000	0.003	0.5420	0.5086
100Y002H	SMF-1	BASE	452.02	174.500	176.300	25265	0.000	0.003	0.5420	0.5089
100Y002H	SMF-1	BASE	453.02	174.500	176.300	25265	0.000	0.000	0.5420	0.5090
100Y002H	SMF-1	BASE	454.02	174.500	176.300	25265	0.000	0.000	0.5420	0.5090
100Y002H	SMF-1	BASE	455.02	174.500	176.300	25265	0.000	0.000	0.5420	0.5090
100Y002H	SMF-1	BASE	456.02	174.500	176.300	25265	0.000	0.000	0.5420	0.5090
100Y002H	SMF-1	BASE	457.02	174.500	176.300	25265	0.000	0.000	0.5420	0.5090
100Y002H	SMF-1	BASE	458.02	174.500	176.300	25265	0.000	0.000	0.5420	0.5090

CRS - Lake Jeffery Road
SMF-1 Recovery

Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
100Y004H	SMF-1	BASE	711.02	174.547	176.300	25468	0.000	0.003	0.6957	0.6550
100Y004H	SMF-1	BASE	712.02	174.546	176.300	25466	0.000	0.003	0.6957	0.6552
100Y004H	SMF-1	BASE	713.02	174.546	176.300	25465	0.000	0.003	0.6957	0.6554
100Y004H	SMF-1	BASE	714.02	174.545	176.300	25463	0.000	0.003	0.6957	0.6556
100Y004H	SMF-1	BASE	715.02	174.545	176.300	25461	0.000	0.003	0.6957	0.6559
100Y004H	SMF-1	BASE	716.02	174.545	176.300	25460	0.000	0.003	0.6957	0.6561
100Y004H	SMF-1	BASE	717.02	174.544	176.300	25458	0.000	0.003	0.6957	0.6563
100Y004H	SMF-1	BASE	718.02	174.544	176.300	25456	0.000	0.003	0.6957	0.6565
100Y004H	SMF-1	BASE	719.02	174.544	176.300	25455	0.000	0.003	0.6957	0.6568
100Y004H	SMF-1	BASE	720.02	174.543	176.300	25453	0.000	0.003	0.6957	0.6570
100Y004H	SMF-1	BASE	721.02	174.543	176.300	25451	0.000	0.003	0.6957	0.6572
100Y004H	SMF-1	BASE	722.02	174.542	176.300	25450	0.000	0.003	0.6957	0.6574
100Y004H	SMF-1	BASE	723.02	174.542	176.300	25448	0.000	0.003	0.6957	0.6577
100Y004H	SMF-1	BASE	724.01	174.542	176.300	25446	0.000	0.003	0.6957	0.6579
100Y008H	SMF-1	BASE	0.00	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y008H	SMF-1	BASE	0.08	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y008H	SMF-1	BASE	0.18	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y008H	SMF-1	BASE	0.26	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y008H	SMF-1	BASE	0.34	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y008H	SMF-1	BASE	0.43	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y008H	SMF-1	BASE	0.51	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y008H	SMF-1	BASE	0.60	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y008H	SMF-1	BASE	0.68	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y008H	SMF-1	BASE	0.76	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y008H	SMF-1	BASE	0.85	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y008H	SMF-1	BASE	0.93	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y008H	SMF-1	BASE	1.01	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y008H	SMF-1	BASE	1.10	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y008H	SMF-1	BASE	1.18	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y008H	SMF-1	BASE	1.26	174.500	176.300	25265	0.010	0.009	0.0000	0.0000
100Y008H	SMF-1	BASE	1.35	174.500	176.300	25265	0.067	0.063	0.0003	0.0003
100Y008H	SMF-1	BASE	1.43	174.500	176.300	25266	0.159	0.154	0.0011	0.0010
100Y008H	SMF-1	BASE	1.51	174.500	176.300	25266	0.255	0.250	0.0025	0.0024
100Y008H	SMF-1	BASE	1.60	174.500	176.300	25267	0.344	0.340	0.0046	0.0044
100Y008H	SMF-1	BASE	1.68	174.500	176.300	25267	0.424	0.420	0.0072	0.0071
100Y008H	SMF-1	BASE	1.76	174.501	176.300	25268	0.496	0.492	0.0104	0.0102
100Y008H	SMF-1	BASE	1.85	174.501	176.300	25268	0.560	0.557	0.0140	0.0138
100Y008H	SMF-1	BASE	1.93	174.501	176.300	25268	0.618	0.615	0.0181	0.0179
100Y008H	SMF-1	BASE	2.01	174.501	176.300	25268	0.675	0.672	0.0225	0.0223
100Y008H	SMF-1	BASE	2.10	174.501	176.300	25270	0.819	0.731	0.0277	0.0271
100Y008H	SMF-1	BASE	2.18	174.503	176.300	25279	0.997	0.731	0.0339	0.0322
100Y008H	SMF-1	BASE	2.26	174.507	176.300	25296	1.104	0.732	0.0412	0.0372
100Y008H	SMF-1	BASE	2.35	174.512	176.300	25317	1.177	0.733	0.0490	0.0422
100Y008H	SMF-1	BASE	2.43	174.518	176.300	25342	1.236	0.733	0.0573	0.0473
100Y008H	SMF-1	BASE	2.51	174.524	176.300	25369	1.286	0.734	0.0660	0.0523
100Y008H	SMF-1	BASE	2.60	174.531	176.300	25398	1.331	0.735	0.0750	0.0574
100Y008H	SMF-1	BASE	2.68	174.538	176.300	25430	1.371	0.736	0.0843	0.0625
100Y008H	SMF-1	BASE	2.76	174.546	176.300	25464	1.408	0.737	0.0939	0.0675
100Y008H	SMF-1	BASE	2.85	174.554	176.300	25499	1.441	0.738	0.1037	0.0726
100Y008H	SMF-1	BASE	2.93	174.562	176.300	25536	1.471	0.739	0.1137	0.0777
100Y008H	SMF-1	BASE	3.01	174.571	176.300	25574	1.551	0.740	0.1241	0.0828
100Y008H	SMF-1	BASE	3.10	174.585	176.300	25635	2.534	0.742	0.1382	0.0879
100Y008H	SMF-1	BASE	3.18	174.612	176.300	25752	3.779	0.745	0.1586	0.0927
100Y008H	SMF-1	BASE	3.25	174.648	176.300	25908	4.326	0.750	0.1843	0.0974
100Y008H	SMF-1	BASE	3.34	174.692	176.300	26099	4.586	0.755	0.2157	0.1027
100Y008H	SMF-1	BASE	3.42	174.737	176.300	26299	4.725	0.761	0.2485	0.1081
100Y008H	SMF-1	BASE	3.51	174.784	176.300	26502	4.817	0.767	0.2822	0.1135
100Y008H	SMF-1	BASE	3.58	174.826	176.300	26687	4.880	0.772	0.3130	0.1184
100Y008H	SMF-1	BASE	3.67	174.874	176.300	26893	4.940	0.778	0.3476	0.1238
100Y008H	SMF-1	BASE	3.76	174.921	176.300	27101	4.991	0.784	0.3826	0.1293
100Y008H	SMF-1	BASE	3.84	174.969	176.300	27309	5.034	0.790	0.4180	0.1349
100Y008H	SMF-1	BASE	3.92	175.012	176.300	27496	5.068	0.796	0.4500	0.1399
100Y008H	SMF-1	BASE	4.00	175.060	176.300	27704	5.087	0.802	0.4858	0.1455
100Y008H	SMF-1	BASE	4.09	175.104	176.300	27895	4.175	0.807	0.5185	0.1512
100Y008H	SMF-1	BASE	4.17	175.132	176.300	28017	2.692	0.811	0.5427	0.1569
100Y008H	SMF-1	BASE	4.25	175.152	176.300	28105	2.183	0.820	0.5586	0.1605
100Y008H	SMF-1	BASE	4.34	175.172	176.300	28191	2.024	0.268	0.5734	0.1624
100Y008H	SMF-1	BASE	4.43	175.192	176.300	28279	1.980	0.257	0.5884	0.1644
100Y008H	SMF-1	BASE	4.51	175.209	176.300	28355	1.974	0.247	0.6015	0.1660
100Y008H	SMF-1	BASE	4.59	175.227	176.300	28432	1.977	0.239	0.6146	0.1677
100Y008H	SMF-1	BASE	4.67	175.245	176.300	28508	1.980	0.231	0.6277	0.1692
100Y008H	SMF-1	BASE	4.76	175.265	176.300	28598	1.983	0.223	0.6429	0.1710
100Y008H	SMF-1	BASE	4.84	175.283	176.300	28676	1.985	0.216	0.6561	0.1724
100Y008H	SMF-1	BASE	4.92	175.301	176.300	28753	1.987	0.211	0.6692	0.1738
100Y008H	SMF-1	BASE	5.00	175.319	176.300	28831	1.986	0.205	0.6823	0.1752
100Y008H	SMF-1	BASE	5.10	175.338	176.300	28913	1.563	0.199	0.6960	0.1768
100Y008H	SMF-1	BASE	5.18	175.348	176.300	28960	1.029	0.193	0.7046	0.1780
100Y008H	SMF-1	BASE	5.26	175.356	176.300	28994	0.824	0.187	0.7112	0.1794
100Y008H	SMF-1	BASE	5.35	175.362	176.300	29021	0.768	0.181	0.7167	0.1807
100Y008H	SMF-1	BASE	5.43	175.368	176.300	29047	0.752	0.175	0.7219	0.1819
100Y008H	SMF-1	BASE	5.51	175.374	176.300	29073	0.749	0.170	0.7271	0.1831
100Y008H	SMF-1	BASE	5.60	175.380	176.300	29100	0.749	0.165	0.7323	0.1842
100Y008H	SMF-1	BASE	5.68	175.386	176.300	29127	0.749	0.161	0.7374	0.1854
100Y008H	SMF-1	BASE	5.76	175.392	176.300	29153	0.750	0.157	0.7426	0.1865



Engineering & Consulting, Inc.

January 8, 2019

Mr. Stephen Crawford
Concept Development, Inc.
3917 NW 97th Boulevard
Gainesville, Florida 32606

Subject: Summary Report of a Geotechnical Site Exploration
Commercial Retail – Lake City
Lake City, Columbia County, Florida
GSE Project No. 13843

Dear Mr. Crawford:

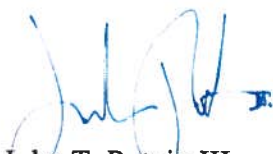
GSE Engineering & Consulting, Inc. (GSE) is pleased to submit this geotechnical site exploration report for the above referenced project.

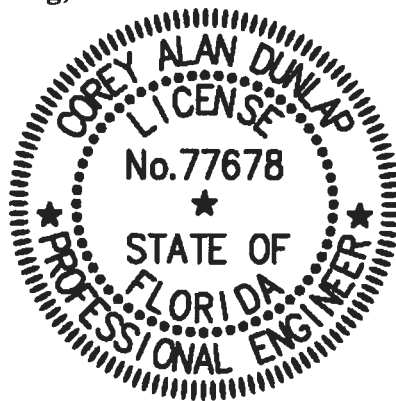
Presented herein are the findings and conclusions of our exploration, including the geotechnical parameters and recommendations to assist with building foundation, pavement, and stormwater management designs.

GSE appreciates this opportunity to have assisted you on this project. If you have any questions or comments concerning this report, please contact us.

Sincerely,

GSE Engineering & Consulting, Inc.


John T. Potvin III
Staff Scientist



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 and the signature must be verified on any electronic copies.

Corey A. Dunlap, P.E.
Senior Geotechnical Engineer
Florida Registration No. 77678

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GSE Engineering & Consulting, Inc.
5590 SW 64th Street, Suite B
Gainesville, Florida 32608
(352) 377-3233 Phone • (352) 377-0335 Fax
www.gseengineering.com
Certificate of Authorization No. 27430



Engineering & Consulting, Inc.

**SUMMARY REPORT OF A
GEOTECHNICAL SITE EXPLORATION**

**COMMERCIAL RETAIL – LAKE CITY
LAKE CITY, COLUMBIA COUNTY, FLORIDA**

GSE PROJECT No. 13843

Prepared For:

CONCEPT DEVELOPMENT

JANUARY 2019

Certificate of Authorization No. 27430

Appendix C

Geotechnical Report

Inspection Reporting

Annual inspection reports, prepared by a properly licensed professional engineer, should be submitted to the water management district as appropriate. The engineer shall inspect the site and report on the status and function of the system. Noted deficiencies and/or maintenance requirements shall be reported to the owner with recommendations for repairs. Repairs shall be executed.

Limerock/Sinkhole

If continuous limerock is encountered during excavation of the swales/basin or if a sinkhole forms in the area of a drainage swale/basin the engineer of record shall be notified by either the contractor or the established operation and maintenance entity. The engineer of record shall inspect the repaired area upon completion of the repair.

Where continuous limerock is encountered during excavation of the swales/basins, the limerock shall be over excavated by 2 feet and replaced with Putnamey soils that extend 2 feet beyond the perimeter of the limerock outcropping. The Putnamey soil shall have at least 20% passing the no. 200 sieve, compacted to 95% of standard proctor, and compacted in a wet condition with moisture 2% - 4% above optimum.

All swales/basins shall be inspected monthly for sinkhole occurrence. Should a sinkhole occur, the area shall be repaired as soon as possible. Repair shall include filling (limerock such as road base material, Putnam/sand mixture, or concrete if necessary). A 2-foot deep cap that extends 2 feet beyond the perimeter of the sinkhole shall be constructed with Putnamey soils. The Putnamey soil shall have at least 20% passing the no. 200 sieve, compacted to 95% of standard proctor, and compacted in a wet condition with moisture 2% - 4% above optimum. The Putnam soil cap shall be re-graded to prevent concentration of waters (ponding) and re-vegetated.

Outfall Structures

All outfall and drawdown orifices are to be inspected bi-annually for sediment or debris in the flow line of weirs or orifices. All sediment and debris should be removed and disposed of in an approved manner.

Discharge to Conservation Management Areas Maintenance and Repair

The stormwater management facilities shall be inspected after rainfall events greater than three inches for any indications of erosion. If any indications are noticed, then these should be repaired as soon as possible to prevent any blow outs from future rainfall events. The conditions of the facilities should be repaired to those conditions depicted on the approved Final Development Plans.

Operation & Maintenance Entity:

Concept Development, Inc.
3917 NW 97th Blvd
Gainesville, FL 32606

Operation and Maintenance Plan

Proposed operation and maintenance and soil erosion and sediment control practices are outlined in the following paragraphs.

Underground Water Management Facilities

The man-made underground stormwater management facility shall be maintained free of sediments and debris. The underground stormwater management facility shall be inspected every 6 months for the first year of operation (two inspections in the first year). After the first-year inspections shall be performed annually. When sediment depth exceeds 3 inches throughout the vault, clean-out should be performed. Documentation shall be noted based upon the inspection findings.

Structures

The structures and paved flow lines shall be maintained clear of debris. Remove any debris and silt collected in inlets and pipes as routine inspections dictate.

Surface Water Management Facilities

The man-made surface water facilities shall be maintained free of sediments and debris. Areas shall be inspected on a routine basis and nuisance plants shall be removed a minimum of twice annually. Grassed areas shall be mowed a minimum of 6 times per year. The natural systems shall be least disturbed as possible. Minimal maintenance is required for the natural and undisturbed areas. All basins shall be inspected monthly. Monthly documentation shall be noted based upon the inspection findings.

Erosion Control

All erosion damage at spillways, outfall structures, and along basin side slopes shall be repaired (grading and grassing) as conditions occur. All side slopes and other areas disturbed by construction shall be stabilized by sodding, hydro-mulching or other appropriate vegetative or non-vegetative erosion control measures.

Swale/Ditch

All swales, if any, shall be maintained free of debris and sediment. Sediments shall be removed when the depth has been reduced by 20 percent. Sediments removed from swales/ditches should be evenly spread over grassed areas away from the stormwater management facilities.

Culverts, Pipes and Structures

All pipe, if any, shall be inspected bi-annually. Culverts and pipes shall be maintained free of debris and sediment. Sediments removed from culverts and pipes should be evenly spread over grassed areas away from the stormwater management facilities.

The structures and paved flow lines, if any, shall be maintained clear of debris. Remove any debris and silt collected in inlets and pipes as routine inspections dictates.

Appendix B

Operation and Maintenance Requirements and
Erosion and Sedimentation Control Requirements

CRS - Lake Jeffery Road
SMF-1 Back-to-Back Peak Stages

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
SMF-1	BASE	100Y001H	1.04	175.410	176.300	0.0050	29230	0.62	11.107	1.04
SMF-1	BASE	100Y002H	2.00	175.488	176.300	0.0050	29572	0.83	9.007	2.00
SMF-1	BASE	100Y004H	4.09	175.638	176.300	0.0050	30226	2.00	4.989	2.59
SMF-1	BASE	100Y008H	8.08	175.796	176.300	0.0050	30909	4.00	5.100	0.01
SMF-1	BASE	100Y024H	21.13	176.004	176.300	0.0033	31819	12.00	1.695	0.01
SMF-1	BASE	100Y072H	64.08	176.087	176.300	0.0018	32181	59.91	1.090	0.01
SMF-1	BASE	100Y168H	160.11	176.083	176.300	-0.0017	32161	159.91	0.755	0.01
SMF-1	BASE	100Y240H	184.08	176.164	176.300	-0.0017	32512	183.91	0.994	184.08

CRS - Lake Jeffery Road
SMF-1 WQTV Recovery

Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
WQTV	SMF-1	BASE	63.77	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	64.02	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	64.27	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	64.52	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	64.77	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	65.02	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	65.27	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	65.52	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	65.77	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	66.02	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	66.27	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	66.52	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	66.77	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	67.02	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	67.27	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	67.52	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	67.77	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	68.02	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	68.27	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	68.52	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	68.77	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	69.02	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	69.27	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	69.52	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	69.77	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	70.02	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	70.27	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	70.52	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	70.77	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	71.02	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	71.27	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	71.52	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	71.77	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	72.01	174.500	176.000	25265	0.000	0.000	0.0000	0.1959

Simulation	Node	Group	Time	Stage	Warning	Surface	Total	Total	Total	Total
			hrs	ft	Stage	Area	Inflow	Outflow	Vol In	Vol Out
					ft	ft2	cfs	cfs	af	af
WQTV	SMF-1	BASE	42.52	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	42.77	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	43.02	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	43.27	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	43.52	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	43.77	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	44.02	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	44.27	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	44.52	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	44.77	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	45.02	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	45.27	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	45.52	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	45.77	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	46.02	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	46.27	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	46.52	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	46.77	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	47.02	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	47.27	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	47.52	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	47.77	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	48.02	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	48.27	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	48.52	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	48.77	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	49.02	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	49.27	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	49.52	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	49.77	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	50.02	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	50.27	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	50.52	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	50.77	174.500	176.000	25265	0.000	0.000	0.0000	0.1959
WQTV	SMF-1	BASE	51.02	174.500	176.000					

Simulation	Node	Group	Time	Stage	Warning	Surface	Total	Total	Total	Total	
			hrs	ft	Stage	Area	Inflow	Outflow	Vol In	Vol Out	
					ft		ft2	cfs	cfs	af	af
WQTV	SMF-1	BASE	21.27	174.512	176.000	25316	0.000	0.019	0.0000	0.1892	
WQTV	SMF-1	BASE	21.52	174.511	176.000	25313	0.000	0.019	0.0000	0.1895	
WQTV	SMF-1	BASE	21.77	174.511	176.000	25311	0.000	0.019	0.0000	0.1899	
WQTV	SMF-1	BASE	22.02	174.510	176.000	25308	0.000	0.018	0.0000	0.1903	
WQTV	SMF-1	BASE	22.27	174.509	176.000	25305	0.000	0.018	0.0000	0.1907	
WQTV	SMF-1	BASE	22.52	174.509	176.000	25302	0.000	0.018	0.0000	0.1911	
WQTV	SMF-1	BASE	22.77	174.508	176.000	25299	0.000	0.018	0.0000	0.1914	
WQTV	SMF-1	BASE	23.02	174.507	176.000	25296	0.000	0.018	0.0000	0.1918	
WQTV	SMF-1	BASE	23.27	174.507	176.000	25294	0.000	0.018	0.0000	0.1922	
WQTV	SMF-1	BASE	23.52	174.506	176.000	25291	0.000	0.018	0.0000	0.1925	
WQTV	SMF-1	BASE	23.77	174.505	176.000	25288	0.000	0.018	0.0000	0.1929	
WQTV	SMF-1	BASE	24.02	174.505	176.000	25285	0.000	0.017	0.0000	0.1933	
WQTV	SMF-1	BASE	24.27	174.504	176.000	25283	0.000	0.017	0.0000	0.1936	
WQTV	SMF-1	BASE	24.52	174.504	176.000	25280	0.000	0.017	0.0000	0.1940	
WQTV	SMF-1	BASE	24.77	174.503	176.000	25277	0.000	0.017	0.0000	0.1943	
WQTV	SMF-1	BASE	25.02	174.502	176.000	25275	0.000	0.017	0.0000	0.1947	
WQTV	SMF-1	BASE	25.27	174.502	176.000	25272	0.000	0.017	0.0000	0.1950	
WQTV	SMF-1	BASE	25.52	174.501	176.000	25270	0.000	0.017	0.0000	0.1954	
WQTV	SMF-1	BASE	25.77	174.500	176.000	25267	0.000	0.017	0.0000	0.1957	
WQTV	SMF-1	BASE	26.02	174.500	176.000	25265	0.000	0.000	0.0000	0.1959	
WQTV	SMF-1	BASE	26.27	174.500	176.000	25265	0.000	0.000	0.0000	0.1959	
WQTV	SMF-1	BASE	26.52	174.500	176.000	25265	0.000	0.000	0.0000	0.1959	
WQTV	SMF-1	BASE	26.77	174.500	176.000	25265	0.000	0.000	0.0000	0.1959	
WQTV	SMF-1	BASE	27.02	174.500	176.000	25265	0.000	0.000	0.0000	0.1959	
WQTV	SMF-1	BASE	27.27	174.500	176.000	25265	0.000	0.000	0.0000	0.1959	
WQTV	SMF-1	BASE	27.52	174.500	176.000	25265	0.000	0.000	0.0000	0.1959	
WQTV	SMF-1	BASE	27.77	174.500	176.000	25265	0.000	0.000	0.0000	0.1959	
WQTV	SMF-1	BASE	28.02	174.500	176.000	25265	0.000	0.000	0.0000	0.1959	
WQTV	SMF-1	BASE	28.27	174.500	176.000	25265	0.000	0.000	0.0000	0.1959	
WQTV	SMF-1	BASE	28.52	174.500	176.000	25265	0.000	0.000	0.0000	0.1959	
WQTV	SMF-1	BASE	28.77	174.500	176.000	25265	0.000	0.000	0.0000	0.1959	
WQTV	SMF-1	BASE	29.02	174.500	176.000	25265	0.000	0.000	0.0000	0.1959	
WQTV	SMF-1	BASE	29.27	174.500	176.000	25265	0.000	0.000	0.0000	0.1959	
WQTV	SMF-1	BASE	29.52	174.500	176.000	25265	0.000	0.000	0.0000	0.1959	
WQTV	SMF-1	BASE	29.77	174.500	176.000</						

CRS - Lake Jeffery Road
SMF-1 WQTV Recovery

Simulation	Node	Group	Time	Stage	Warning	Surface	Total	Total	Total	Total
			hrs	ft	Stage	Area	Inflow	Outflow	Vol In	Vol Out
					ft	ft2	cfs	cfs	af	af
WQTV	SMF-1	BASE	0 00	174.850	176.000	26789	0.000	0.000	0.0000	0.0000
WQTV	SMF-1	BASE	0.26	174.823	176.000	26673	0.000	0.772	0.0000	0.0083
WQTV	SMF-1	BASE	0.50	174.798	176.000	26564	0.000	0.769	0.0000	0.0236
WQTV	SMF-1	BASE	0.77	174.771	176.000	26444	0.000	0.765	0.0000	0.0404
WQTV	SMF-1	BASE	1.02	174.745	176.000	26330	0.000	0.762	0.0000	0.0562
WQTV	SMF-1	BASE	1.27	174.719	176.000	26217	0.000	0.759	0.0000	0.0719
WQTV	SMF-1	BASE	1.52	174.692	176.000	26103	0.000	0.755	0.0000	0.0876
WQTV	SMF-1	BASE	1.77	174.666	176.000	25990	0.000	0.752	0.0000	0.1031
WQTV	SMF-1	BASE	2.02	174.640	176.000	25876	0.000	0.749	0.0000	0.1186
WQTV	SMF-1	BASE	2.27	174.616	176.000	25769	0.000	0.745	0.0000	0.1283
WQTV	SMF-1	BASE	2.52	174.610	176.000	25743	0.000	0.745	0.0000	0.1318
WQTV	SMF-1	BASE	2.77	174.605	176.000	25721	0.000	0.745	0.0000	0.1348
WQTV	SMF-1	BASE	3.02	174.600	176.000	25701	0.000	0.745	0.0000	0.1374
WQTV	SMF-1	BASE	3.27	174.596	176.000	25685	0.000	0.745	0.0000	0.1397
WQTV	SMF-1	BASE	3.52	174.593	176.000	25670	0.000	0.745	0.0000	0.1417
WQTV	SMF-1	BASE	3.77	174.590	176.000	25656	0.000	0.745	0.0000	0.1435
WQTV	SMF-1	BASE	4.02	174.587	176.000	25644	0.000	0.745	0.0000	0.1452
WQTV	SMF-1	BASE	4.27	174.585	176.000	25633	0.000	0.745	0.0000	0.1467
WQTV	SMF-1	BASE	4.52	174.582	176.000	25623	0.000	0.745	0.0000	0.1481
WQTV	SMF-1	BASE	4.77	174.580	176.000	25613	0.000	0.745	0.0000	0.1494
WQTV	SMF-1	BASE	5.02	174.578	176.000	25604	0.000	0.745	0.0000	0.1506
WQTV	SMF-1	BASE	5.27	174.576	176.000	25595	0.000	0.745	0.0000	0.1517
WQTV	SMF-1	BASE	5.52	174.574	176.000	25587	0.000	0.745	0.0000	0.1528
WQTV	SMF-1	BASE	5.77	174.572	176.000	25579	0.000	0.745	0.0000	0.1539
WQTV	SMF-1	BASE	6.02	174.571	176.000	25572	0.000	0.745	0.0000	0.1549
WQTV	SMF-1	BASE	6.27	174.569	176.000	25565	0.000	0.745	0.0000	0.1558
WQTV	SMF-1	BASE	6.52	174.567	176.000	25558	0.000	0.745	0.0000	0.1568
WQTV	SMF-1	BASE	6.77	174.566	176.000	25551	0.000	0.745	0.0000	0.1576
WQTV	SMF-1	BASE	7.02	174.564	176.000	25545	0.000	0.745	0.0000	0.1585
WQTV	SMF-1	BASE	7.27	174.563	176.000	25539	0.000	0.745	0.0000	0.1593
WQTV	SMF-1	BASE	7.52	174.562	176.000	25533	0.000	0.745	0.0000	0.1602
WQTV	SMF-1	BASE	7.77	174.560	176.000	25527	0.000	0.745	0.0000	0.1609
WQTV	SMF-1	BASE	8.02	174.559	176.000	25521	0.000	0.745	0.0000	0.1617
WQTV	SMF-1	BASE	8.27	174.558	176.000	25516	0.000	0.745	0.0000	0.1625
WQTV	SMF-1	BASE	8.52	174.556	176.000	25510	0.000	0.745	0.0000	0.1632
WQTV	SMF-1	BASE	8.77	174.555	176.000	25505	0.000	0.745	0.0000	0.1639
WQTV	SMF-1	BASE	9.02	174.554	176.000	25500	0.000	0.745	0.0000	0.1646
WQTV	SMF-1	BASE	9.27	174.553	176.000	25495	0.000	0.745	0.0000	0.1653
WQTV	SMF-1	BASE	9.52	174.552	176.000	25490	0.000	0.745	0.0000	0.1660
WQTV	SMF-1	BASE	9.77	174.550	176.000	25485	0.000	0.745	0.0000	0.1666
WQTV	SMF-1	BASE	10.02	174.549	176.000	25480	0.000	0.745	0.0000	0.1673
WQTV	SMF-1	BASE	10.27	174.548	176.000	25475	0.000	0.745	0.0000	0.1679
WQTV	SMF-1	BASE	10.52	174.547	176.000	25470	0.000	0.745	0.0000	0.1685
WQTV	SMF-1	BASE	10.77	174.546	176.000	25466	0.000	0.745	0.0000	0.1692
WQTV	SMF-1	BASE	11.02	174.545	176.000	25461	0.000	0.745	0.0000	0.1698
WQTV	SMF-1	BASE	11.27	174.544	176.000	25457	0.000	0.745	0.0000	0.1704
WQTV	SMF-1	BASE	11.52	174.543	176.000	25453	0.000	0.745	0.0000	0.1709
WQTV	SMF-1	BASE	11.77	174.542	176.000	25448	0.000	0.745	0.0000	0.1715
WQTV	SMF-1	BASE	12.02	174.541	176.000	25444	0.000	0.745	0.0000	0.1721
WQTV	SMF-1	BASE	12.27	174.540	176.000	25440	0.000	0.745	0.0000	0.1726
WQTV	SMF-1	BASE	12.52	174.539	176.000	25436	0.000	0.745	0.0000	0.1732
WQTV	SMF-1	BASE	12.77	174.538	176.000	25432	0.000	0.745	0.0000	0.1737
WQTV	SMF-1	BASE	13.02	174.537	176.000	25428	0.000	0.745	0.0000	0.1743
WQTV	SMF-1	BASE	13.27	174.536	176.000	25424	0.000	0.745	0.0000	0.1748
WQTV	SMF-1	BASE	13.52	174.536	176.000	25420	0.000	0.745	0.0000	0.1753
WQTV	SMF-1	BASE	13.77	174.535	176.000	25416	0.000	0.745	0.0000	0.1758
WQTV	SMF-1	BASE	14.02	174.534	176.000	25412	0.000	0.745	0.0000	0.1764
WQTV	SMF-1	BASE	14.27	174.533	176.000	25408	0.000	0.745	0.0000	0.1769
WQTV	SMF-1	BASE	14.52	174.532	176.000	25405	0.000	0.745	0.0000	0.1774
WQTV	SMF-1	BASE	14.77	174.531	176.000	25401	0.000	0.745	0.0000	0.1779
WQTV	SMF-1	BASE	15.02	174.530	176.000	25397	0.000	0.745	0.0000	0.1783
WQTV	SMF-1	BASE	15.27	174.530	176.000	25394	0.000	0.745	0.0000	0.1788
WQTV	SMF-1	BASE	15.52	174.529	176.000	25390	0.000	0.745	0.0000	0.1793
WQTV	SMF-1	BASE	15.77	174.528	176.000	25387	0.000	0.745	0.0000	0.1798
WQTV	SMF-1	BASE	16.02	174.527	176.000	25383	0.000	0.745	0.0000	0.1802
WQTV	SMF-1	BASE	16.27	174.526	176.000	25380	0.000	0.745	0.0000	0.1807
WQTV	SMF-1	BASE	16.52	174.526	176.000	25376	0.000	0.745	0.0000	0.1812
WQTV	SMF-1	BASE	16.77	174.525	176.000	25373	0.000	0.745	0.0000	0.1816
WQTV	SMF-1	BASE	17.02	174.524	176.000	25369	0.000	0.745	0.0000	0.1821
WQTV	SMF-1	BASE	17.27	174.523	176.000	25366	0.000	0.745	0.0000	0.1825
WQTV	SMF-1	BASE	17.52	174.522	176.000	25363	0.000	0.745	0.0000	0.1830
WQTV	SMF-1	BASE	17.77	174.522	176.000	25359	0.000	0.745	0.0000	0.1834
WQTV	SMF-1	BASE	18.02	174.521	176.000	25356	0.000	0.745	0.0000	0.1838
WQTV	SMF-1	BASE	18.27	174.520	176.000	25353	0.000	0.745	0.0000	0.1843
WQTV	SMF-1	BASE	18.52	174.520	176.000	25350	0.000	0.745	0.0000	0.1847
WQTV	SMF-1	BASE	18.77	174.519	176.000	25347	0.000	0.745	0.0000	0.1851
WQTV	SMF-1	BASE	19.02	174.518	176.000	25343	0.000	0.745	0.0000	0.1855
WQTV	SMF-1	BASE	19.27	174.517	176.000	25340	0.000	0.745	0.0000	0.1859
WQTV	SMF-1	BASE	19.52	174.517	176.000	25337	0.000	0.745	0.0000	0.1864
WQTV	SMF-1	BASE	19.77	174.516	176.000	25334	0.000	0.745	0.0000	0.1868
WQTV	SMF-1	BASE	20.02	174.515	176.000	25331	0.000	0.745	0.0000	0.1872
WQTV	SMF-1	BASE	20.27	174.515	176.000	25328	0.000	0.745	0.0000	0.1876
WQTV	SMF-1	BASE	20.52	174.514	176.000	25325	0.000	0.745	0.0000	0.1880
WQTV	SMF-1	BASE	20.77	174.513	176.000	25322	0.000	0.745	0.0000	0.1884
WQTV	SMF-1	BASE	21.02	174.513	176.000	25319	0.000	0.745	0.0000	0.1888

CRS - Lake Jeffery Road
SMF-1 Recovery

Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
100Y240H	SMF-1	BASE	881.01	174.958	176.300	27260	0.000	0.004	2.1699	1.8917
100Y240H	SMF-1	BASE	882.01	174.958	176.300	27258	0.000	0.004	2.1699	1.8921
100Y240H	SMF-1	BASE	883.01	174.957	176.300	27256	0.000	0.004	2.1699	1.8924
100Y240H	SMF-1	BASE	884.01	174.957	176.300	27254	0.000	0.004	2.1699	1.8927
100Y240H	SMF-1	BASE	885.01	174.956	176.300	27252	0.000	0.004	2.1699	1.8930
100Y240H	SMF-1	BASE	886.01	174.956	176.300	27249	0.000	0.004	2.1699	1.8933
100Y240H	SMF-1	BASE	887.01	174.955	176.300	27247	0.000	0.004	2.1699	1.8936
100Y240H	SMF-1	BASE	888.01	174.955	176.300	27245	0.000	0.004	2.1699	1.8939
100Y240H	SMF-1	BASE	889.01	174.954	176.300	27243	0.000	0.004	2.1699	1.8942
100Y240H	SMF-1	BASE	890.01	174.954	176.300	27241	0.000	0.004	2.1699	1.8945
100Y240H	SMF-1	BASE	891.01	174.953	176.300	27239	0.000	0.004	2.1699	1.8948
100Y240H	SMF-1	BASE	892.01	174.953	176.300	27237	0.000	0.004	2.1699	1.8951
100Y240H	SMF-1	BASE	893.01	174.952	176.300	27235	0.000	0.004	2.1699	1.8954
100Y240H	SMF-1	BASE	894.01	174.952	176.300	27232	0.000	0.004	2.1699	1.8957
100Y240H	SMF-1	BASE	895.01	174.951	176.300	27230	0.000	0.004	2.1699	1.8960
100Y240H	SMF-1	BASE	896.01	174.951	176.300	27228	0.000	0.004	2.1699	1.8963
100Y240H	SMF-1	BASE	897.01	174.950	176.300	27226	0.000	0.004	2.1699	1.8966
100Y240H	SMF-1	BASE	898.01	174.950	176.300	27224	0.000	0.004	2.1699	1.8969
100Y240H	SMF-1	BASE	899.01	174.949	176.300	27222	0.000	0.004	2.1699	1.8972
100Y240H	SMF-1	BASE	900.01	174.949	176.300	27220	0.000	0.004	2.1699	1.8975
100Y240H	SMF-1	BASE	901.01	174.948	176.300	27218	0.000	0.004	2.1699	1.8978
100Y240H	SMF-1	BASE	902.01	174.948	176.300	27216	0.000	0.004	2.1699	1.8981
100Y240H	SMF-1	BASE	903.01	174.947	176.300	27214	0.000	0.004	2.1699	1.8984
100Y240H	SMF-1	BASE	904.01	174.947	176.300	27211	0.000	0.004	2.1699	1.8987
100Y240H	SMF-1	BASE	905.01	174.946	176.300	27209	0.000	0.004	2.1699	1.8990
100Y240H	SMF-1	BASE	906.01	174.946	176.300	27207	0.000	0.004	2.1699	1.8993
100Y240H	SMF-1	BASE	907.01	174.945	176.300	27205	0.000	0.004	2.1699	1.8996
100Y240H	SMF-1	BASE	908.01	174.945	176.300	27203	0.000	0.004	2.1699	1.8999
100Y240H	SMF-1	BASE	909.01	174.944	176.300	27201	0.000	0.004	2.1699	1.9002
100Y240H	SMF-1	BASE	910.01	174.944	176.300	27199	0.000	0.004	2.1699	1.9005
100Y240H	SMF-1	BASE	911.01	174.944	176.300	27197	0.000	0.004	2.1699	1.9008
100Y240H	SMF-1	BASE	912.01	174.943	176.300	27195	0.000	0.004	2.1699	1.9011
100Y240H	SMF-1	BASE	913.01	174.943	176.300	27193	0.000	0.004	2.1699	1.9014
100Y240H	SMF-1	BASE	914.01	174.942	176.300	27191	0.000	0.004	2.1699	1.9017
100Y240H	SMF-1	BASE	915.01	174.942	176.300	27189	0.000	0.004	2.1699	1.9020
100Y240H	SMF-1	BASE	916.01	174.941	176.300	27187	0.000	0.004	2.1699	1.9023
100Y240H	SMF-1	BASE	917.01	174.941	176.300	27184	0.000	0.004	2.1699	1.9026
100Y240H	SMF-1	BASE	918.01	174.940	176.300	27182	0.000	0.004	2.1699	1.9029
100Y240H	SMF-1	BASE	919.01	174.940	176.300	27180	0.000	0.004	2.1699	1.9032
100Y240H	SMF-1	BASE	920.01	174.939	176.300	27178	0.000	0.004	2.1699	1.9035
100Y240H	SMF-1	BASE	921.01	174.939	176.300	27176	0.000	0.004	2.1699	1.9038
100Y240H	SMF-1	BASE	922.01	174.938	176.300	27174	0.000	0.004	2.1699	1.9041
100Y240H	SMF-1	BASE	923.01	174.938	176.300	27172	0.000	0.004	2.1699	1.9044
100Y240H	SMF-1	BASE	924.01	174.937	176.300	27170	0.000	0.004	2.1699	1.9046
100Y240H	SMF-1	BASE	925.01	174.937	176.300	27168	0.000	0.004	2.1699	1.9049
100Y240H	SMF-1	BASE	926.01	174.936	176.300	27166	0.000	0.004	2.1699	1.9052
100Y240H	SMF-1	BASE	927.01	174.936	176.300	27164	0.000	0.004	2.1699	1.9055
100Y240H	SMF-1	BASE	928.01	174.935	176.300	27162	0.000	0.004	2.1699	1.9058
100Y240H	SMF-1	BASE	929.01	174.935	176.300	27160	0.000	0.004	2.1699	1.9061
100Y240H	SMF-1	BASE	930.01	174.935	176.300	27158	0.000	0.004	2.1699	1.9064
100Y240H	SMF-1	BASE	931.01	174.934	176.300	27156	0.000	0.004	2.1699	1.9067
100Y240H	SMF-1	BASE	932.01	174.934	176.300	27154	0.000	0.004	2.1699	1.9070
100Y240H	SMF-1	BASE	933.01	174.933	176.300	27152	0.000	0.004	2.1699	1.9073
100Y240H	SMF-1	BASE	934.01	174.933	176.300	27150	0.000	0.004	2.1699	1.9076
100Y240H	SMF-1	BASE	935.01	174.932	176.300	27148	0.000	0.004	2.1699	1.9079
100Y240H	SMF-1	BASE	936.01	174.932	176.300	27146	0.000	0.004	2.1699	1.9082
100Y240H	SMF-1	BASE	937.01	174.931	176.300	27144	0.000	0.004	2.1699	1.9084
100Y240H	SMF-1	BASE	938.01	174.931	176.300	27142	0.000	0.004	2.1699	1.9087
100Y240H	SMF-1	BASE	939.01	174.930	176.300	27140	0.000	0.003	2.1699	1.9090
100Y240H	SMF-1	BASE	940.01	174.930	176.300	27138	0.000	0.003	2.1699	1.9093
100Y240H	SMF-1	BASE	941.01	174.929	176.300	27135	0.000	0.003	2.1699	1.9096
100Y240H	SMF-1	BASE	942.01	174.929	176.300	27133	0.000	0.003	2.1699	1.9099
100Y240H	SMF-1	BASE	943.01	174.928	176.300	27131	0.000	0.003	2.1699	1.9102
100Y240H	SMF-1	BASE	944.01	174.928	176.300	27129	0.000	0.003	2.1699	1.9105
100Y240H	SMF-1	BASE	945.01	174.928	176.300	27127	0.000	0.003	2.1699	1.9107
100Y240H	SMF-1	BASE	946.01	174.927	176.300	27125	0.000	0.003	2.1699	1.9110
100Y240H	SMF-1	BASE	947.01	174.927	176.300	27123	0.000	0.003	2.1699	1.9113
100Y240H	SMF-1	BASE	948.01	174.926	176.300	27121	0.000	0.003	2.1699	1.9116
100Y240H	SMF-1	BASE	949.01	174.926	176.300	27119	0.000	0.003	2.1699	1.9119
100Y240H	SMF-1	BASE	950.01	174.925	176.300	27117	0.000	0.003	2.1699	1.9122
100Y240H	SMF-1	BASE	951.01	174.925	176.300	27115	0.000	0.003	2.1699	1.9125
100Y240H	SMF-1	BASE	952.01	174.924	176.300	27113	0.000	0.003	2.1699	1.9128
100Y240H	SMF-1	BASE	953.01	174.924	176.300	27111	0.000	0.003	2.1699	1.9130
100Y240H	SMF-1	BASE	954.01	174.923	176.300	27109	0.000	0.003	2.1699	1.9133
100Y240H	SMF-1	BASE	955.01	174.923	176.300	27107	0.000	0.003	2.1699	1.9136
100Y240H	SMF-1	BASE	956.01	174.923	176.300	27105	0.000	0.003	2.1699	1.9139
100Y240H	SMF-1	BASE	957.01	174.922	176.300	27103	0.000	0.003	2.1699	1.9142
100Y240H	SMF-1	BASE	958.01	174.922	176.300	27101	0.000	0.003	2.1699	1.9145
100Y240H	SMF-1	BASE	959.01	174.921	176.300	27099	0.000	0.003	2.1699	1.9147
100Y240H	SMF-1	BASE	960.01	174.921	176.300	27098	0.000	0.003	2.1699	1.9150

CRS - Lake Jeffery Road
SMF-1 Recovery

Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
100Y168H	SMF-1	BASE	841.01	174.927	176.300	27125	0.000	0.004	1.9067	1.6455
100Y168H	SMF-1	BASE	842.01	174.927	176.300	27123	0.000	0.004	1.9067	1.6458
100Y168H	SMF-1	BASE	843.01	174.926	176.300	27121	0.000	0.004	1.9067	1.6461
100Y168H	SMF-1	BASE	844.01	174.926	176.300	27119	0.000	0.004	1.9067	1.6464
100Y168H	SMF-1	BASE	845.01	174.925	176.300	27117	0.000	0.004	1.9067	1.6467
100Y168H	SMF-1	BASE	846.01	174.925	176.300	27114	0.000	0.004	1.9067	1.6470
100Y168H	SMF-1	BASE	847.01	174.924	176.300	27112	0.000	0.004	1.9067	1.6473
100Y168H	SMF-1	BASE	848.01	174.924	176.300	27110	0.000	0.004	1.9067	1.6476
100Y168H	SMF-1	BASE	849.01	174.923	176.300	27108	0.000	0.004	1.9067	1.6479
100Y168H	SMF-1	BASE	850.01	174.923	176.300	27106	0.000	0.004	1.9067	1.6482
100Y168H	SMF-1	BASE	851.01	174.922	176.300	27104	0.000	0.004	1.9067	1.6485
100Y168H	SMF-1	BASE	852.01	174.922	176.300	27102	0.000	0.004	1.9067	1.6488
100Y168H	SMF-1	BASE	853.01	174.921	176.300	27100	0.000	0.004	1.9067	1.6491
100Y168H	SMF-1	BASE	854.01	174.921	176.300	27098	0.000	0.004	1.9067	1.6494
100Y168H	SMF-1	BASE	855.01	174.920	176.300	27095	0.000	0.004	1.9067	1.6497
100Y168H	SMF-1	BASE	856.01	174.920	176.300	27093	0.000	0.004	1.9067	1.6500
100Y168H	SMF-1	BASE	857.01	174.919	176.300	27091	0.000	0.004	1.9067	1.6503
100Y168H	SMF-1	BASE	858.01	174.919	176.300	27089	0.000	0.004	1.9067	1.6506
100Y168H	SMF-1	BASE	859.01	174.918	176.300	27087	0.000	0.004	1.9067	1.6509
100Y168H	SMF-1	BASE	860.01	174.918	176.300	27085	0.000	0.004	1.9067	1.6512
100Y168H	SMF-1	BASE	861.01	174.917	176.300	27083	0.000	0.004	1.9067	1.6515
100Y168H	SMF-1	BASE	862.01	174.917	176.300	27081	0.000	0.004	1.9067	1.6518
100Y168H	SMF-1	BASE	863.01	174.916	176.300	27079	0.000	0.004	1.9067	1.6521
100Y168H	SMF-1	BASE	864.01	174.916	176.300	27077	0.000	0.004	1.9067	1.6524
100Y168H	SMF-1	BASE	865.01	174.915	176.300	27075	0.000	0.004	1.9067	1.6527
100Y168H	SMF-1	BASE	866.01	174.915	176.300	27072	0.000	0.004	1.9067	1.6530
100Y168H	SMF-1	BASE	867.01	174.914	176.300	27070	0.000	0.004	1.9067	1.6533
100Y168H	SMF-1	BASE	868.01	174.914	176.300	27068	0.000	0.004	1.9067	1.6536
100Y168H	SMF-1	BASE	869.01	174.914	176.300	27066	0.000	0.004	1.9067	1.6539
100Y168H	SMF-1	BASE	870.01	174.913	176.300	27064	0.000	0.004	1.9067	1.6542
100Y168H	SMF-1	BASE	871.01	174.913	176.300	27062	0.000	0.004	1.9067	1.6545
100Y168H	SMF-1	BASE	872.01	174.912	176.300	27060	0.000	0.004	1.9067	1.6548
100Y168H	SMF-1	BASE	873.01	174.912	176.300	27058	0.000	0.004	1.9067	1.6551
100Y168H	SMF-1	BASE	874.01	174.911	176.300	27056	0.000	0.004	1.9067	1.6553
100Y168H	SMF-1	BASE	875.01	174.911	176.300	27054	0.000	0.004	1.9067	1.6556
100Y168H	SMF-1	BASE	876.01	174.910	176.300	27052	0.000	0.004	1.9067	1.6559
100Y168H	SMF-1	BASE	877.01	174.910	176.300	27050	0.000	0.004	1.9067	1.6562
100Y168H	SMF-1	BASE	878.01	174.909	176.300	27048	0.000	0.004	1.9067	1.6565
100Y168H	SMF-1	BASE	879.01	174.909	176.300	27046	0.000	0.004	1.9067	1.6568
100Y168H	SMF-1	BASE	880.01	174.908	176.300	27044	0.000	0.004	1.9067	1.6571
100Y168H	SMF-1	BASE	881.01	174.908	176.300	27042	0.000	0.004	1.9067	1.6574
100Y168H	SMF-1	BASE	882.01	174.907	176.300	27039	0.000	0.004	1.9067	1.6577
100Y168H	SMF-1	BASE	883.01	174.907	176.300	27037	0.000	0.004	1.9067	1.6580
100Y168H	SMF-1	BASE	884.01	174.906	176.300	27035	0.000	0.004	1.9067	1.6583
100Y168H	SMF-1	BASE	885.01	174.906	176.300	27033	0.000	0.004	1.9067	1.6586
100Y168H	SMF-1	BASE	886.01	174.905	176.300	27031	0.000	0.004	1.9067	1.6589
100Y168H	SMF-1	BASE	887.01	174.905	176.300	27029	0.000	0.004	1.9067	1.6591
100Y168H	SMF-1	BASE	888.01	174.905	176.300	27027	0.000	0.004	1.9067	1.6594
100Y240H	SMF-1	BASE	0.00	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	0.08	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	0.18	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	0.26	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	0.34	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	0.43	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	0.51	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	0.60	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	0.68	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	0.76	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	0.85	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	0.93	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	1.01	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	1.10	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	1.18	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	1.26	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	1.35	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	1.43	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	1.51	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	1.60	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	1.68	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	1.76	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	1.85	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	1.93	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	2.01	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	2.10	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	2.18	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	2.26	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	2.35	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	2.43	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	2.51	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	2.60	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	2.68	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	2.76	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	2.85	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y240H	SMF-1	BASE	2.93	174.500	176.300	25265	0.000	0.000	0.0000	0.0000

Simulation	Node	Group	Time	Stage	Warning	Surface	Total	Total	Total	Total
			hrs	ft	Stage	Area	Inflow	Outflow	Vol In	Vol Out
					ft	ft2	cfs	cfs	af	af
100Y072H	SMF-1	BASE	763.01	174.856	176.300	26818	0.000	0.004	1.6137	1.3976
100Y072H	SMF-1	BASE	764.01	174.856	176.300	26816	0.000	0.004	1.6137	1.3979
100Y072H	SMF-1	BASE	765.01	174.856	176.300	26814	0.000	0.004	1.6137	1.3982
100Y072H	SMF-1	BASE	766.01	174.855	176.300	26812	0.000	0.004	1.6137	1.3985
100Y072H	SMF-1	BASE	767.01	174.855	176.300	26809	0.000	0.004	1.6137	1.3988
100Y072H	SMF-1	BASE	768.01	174.854	176.300	26807	0.000	0.004	1.6137	1.3991
100Y072H	SMF-1	BASE	769.01	174.854	176.300	26805	0.000	0.004	1.6137	1.3994
100Y072H	SMF-1	BASE	770.01	174.853	176.300	26803	0.000	0.004	1.6137	1.3997
100Y072H	SMF-1	BASE	771.01	174.853	176.300	26801	0.000	0.004	1.6137	1.4000
100Y072H	SMF-1	BASE	772.01	174.852	176.300	26799	0.000	0.004	1.6137	1.4003
100Y072H	SMF-1	BASE	773.01	174.852	176.300	26797	0.000	0.004	1.6137	1.4006
100Y072H	SMF-1	BASE	774.01	174.851	176.300	26795	0.000	0.004	1.6137	1.4009
100Y072H	SMF-1	BASE	775.01	174.851	176.300	26793	0.000	0.004	1.6137	1.4011
100Y072H	SMF-1	BASE	776.01	174.850	176.300	26791	0.000	0.004	1.6137	1.4014
100Y072H	SMF-1	BASE	777.01	174.850	176.300	26789	0.000	0.004	1.6137	1.4017
100Y072H	SMF-1	BASE	778.01	174.849	176.300	26787	0.000	0.004	1.6137	1.4020
100Y072H	SMF-1	BASE	779.01	174.849	176.300	26785	0.000	0.004	1.6137	1.4023
100Y072H	SMF-1	BASE	780.01	174.848	176.300	26783	0.000	0.004	1.6137	1.4026
100Y072H	SMF-1	BASE	781.01	174.848	176.300	26780	0.000	0.004	1.6137	1.4029
100Y072H	SMF-1	BASE	782.01	174.847	176.300	26778	0.000	0.004	1.6137	1.4032
100Y072H	SMF-1	BASE	783.01	174.847	176.300	26776	0.000	0.004	1.6137	1.4035
100Y072H	SMF-1	BASE	784.01	174.847	176.300	26774	0.000	0.003	1.6137	1.4038
100Y072H	SMF-1	BASE	785.01	174.846	176.300	26772	0.000	0.003	1.6137	1.4041
100Y072H	SMF-1	BASE	786.01	174.846	176.300	26770	0.000	0.003	1.6137	1.4043
100Y072H	SMF-1	BASE	787.01	174.845	176.300	26768	0.000	0.003	1.6137	1.4046
100Y072H	SMF-1	BASE	788.01	174.845	176.300	26766	0.000	0.003	1.6137	1.4049
100Y072H	SMF-1	BASE	789.01	174.844	176.300	26764	0.000	0.003	1.6137	1.4052
100Y072H	SMF-1	BASE	790.01	174.844	176.300	26762	0.000	0.003	1.6137	1.4055
100Y072H	SMF-1	BASE	791.01	174.843	176.300	26760	0.000	0.003	1.6137	1.4058
100Y072H	SMF-1	BASE	792.01	174.843	176.300	26758	0.000	0.003	1.6137	1.4061
100Y168H	SMF-1	BASE	0.00	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y168H	SMF-1	BASE	0.08	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y168H	SMF-1	BASE	0.18	174.500	176.300	25265	0.000	0.000	0.00	

CRS - Lake Jeffery Road
SMF-1 Recovery

Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
100Y024H	SMF-1	BASE	686.10	174.815	176.300	26638	0.000	0.004	1.2502	1.0597
100Y024H	SMF-1	BASE	687.10	174.815	176.300	26636	0.000	0.004	1.2502	1.0600
100Y024H	SMF-1	BASE	688.10	174.814	176.300	26633	0.000	0.004	1.2502	1.0603
100Y024H	SMF-1	BASE	689.10	174.814	176.300	26631	0.000	0.004	1.2502	1.0606
100Y024H	SMF-1	BASE	690.10	174.813	176.300	26629	0.000	0.004	1.2502	1.0609
100Y024H	SMF-1	BASE	691.10	174.813	176.300	26627	0.000	0.004	1.2502	1.0612
100Y024H	SMF-1	BASE	692.10	174.812	176.300	26625	0.000	0.004	1.2502	1.0615
100Y024H	SMF-1	BASE	693.10	174.812	176.300	26623	0.000	0.004	1.2502	1.0618
100Y024H	SMF-1	BASE	694.10	174.811	176.300	26621	0.000	0.004	1.2502	1.0621
100Y024H	SMF-1	BASE	695.10	174.811	176.300	26619	0.000	0.004	1.2502	1.0624
100Y024H	SMF-1	BASE	696.10	174.810	176.300	26616	0.000	0.004	1.2502	1.0627
100Y024H	SMF-1	BASE	697.10	174.810	176.300	26614	0.000	0.004	1.2502	1.0630
100Y024H	SMF-1	BASE	698.10	174.809	176.300	26612	0.000	0.004	1.2502	1.0633
100Y024H	SMF-1	BASE	699.10	174.809	176.300	26610	0.000	0.004	1.2502	1.0636
100Y024H	SMF-1	BASE	700.10	174.808	176.300	26608	0.000	0.004	1.2502	1.0639
100Y024H	SMF-1	BASE	701.10	174.808	176.300	26606	0.000	0.004	1.2502	1.0642
100Y024H	SMF-1	BASE	702.10	174.807	176.300	26604	0.000	0.004	1.2502	1.0645
100Y024H	SMF-1	BASE	703.10	174.807	176.300	26602	0.000	0.004	1.2502	1.0648
100Y024H	SMF-1	BASE	704.10	174.806	176.300	26600	0.000	0.004	1.2502	1.0650
100Y024H	SMF-1	BASE	705.10	174.806	176.300	26598	0.000	0.004	1.2502	1.0653
100Y024H	SMF-1	BASE	706.10	174.805	176.300	26595	0.000	0.004	1.2502	1.0656
100Y024H	SMF-1	BASE	707.10	174.805	176.300	26593	0.000	0.004	1.2502	1.0659
100Y024H	SMF-1	BASE	708.10	174.804	176.300	26591	0.000	0.004	1.2502	1.0662
100Y024H	SMF-1	BASE	709.10	174.804	176.300	26589	0.000	0.004	1.2502	1.0665
100Y024H	SMF-1	BASE	710.10	174.804	176.300	26587	0.000	0.004	1.2502	1.0668
100Y024H	SMF-1	BASE	711.10	174.803	176.300	26585	0.000	0.004	1.2502	1.0671
100Y024H	SMF-1	BASE	712.10	174.803	176.300	26583	0.000	0.004	1.2502	1.0674
100Y024H	SMF-1	BASE	713.10	174.802	176.300	26581	0.000	0.004	1.2502	1.0677
100Y024H	SMF-1	BASE	714.10	174.802	176.300	26579	0.000	0.004	1.2502	1.0680
100Y024H	SMF-1	BASE	715.10	174.801	176.300	26577	0.000	0.004	1.2502	1.0683
100Y024H	SMF-1	BASE	716.10	174.801	176.300	26575	0.000	0.004	1.2502	1.0685
100Y024H	SMF-1	BASE	717.10	174.800	176.300	26573	0.000	0.003	1.2502	1.0688
100Y024H	SMF-1	BASE	718.10	174.800	176.300	26571	0.000	0.003	1.2502	1.0691
100Y024H	SMF-1	BASE	719.10	174.799	176.300	26568	0.000	0.003	1.2502	1.0694
100Y024H	SMF-1	BASE	720.10	174.799	176.300	26566	0.000	0.003	1.2502	1.0697
100Y024H	SMF-1	BASE	721.10	174.798	176.300	26564	0.000	0.003	1.2502	1.0700
100Y024H	SMF-1	BASE	722.10	174.798	176.300	26562	0.000	0.003	1.2502	1.0703
100Y024H	SMF-1	BASE	723.10	174.797	176.300	26560	0.000	0.003	1.2502	1.0706
100Y024H	SMF-1	BASE	724.10	174.797	176.300	26558	0.000	0.003	1.2502	1.0709
100Y024H	SMF-1	BASE	725.10	174.796	176.300	26556	0.000	0.003	1.2502	1.0711
100Y024H	SMF-1	BASE	726.10	174.796	176.300	26554	0.000	0.003	1.2502	1.0714
100Y024H	SMF-1	BASE	727.10	174.795	176.300	26552	0.000	0.003	1.2502	1.0717
100Y024H	SMF-1	BASE	728.10	174.795	176.300	26550	0.000	0.003	1.2502	1.0720
100Y024H	SMF-1	BASE	729.10	174.795	176.300	26548	0.000	0.003	1.2502	1.0723
100Y024H	SMF-1	BASE	730.10	174.794	176.300	26546	0.000	0.003	1.2502	1.0726
100Y024H	SMF-1	BASE	731.10	174.794	176.300	26544	0.000	0.003	1.2502	1.0728
100Y024H	SMF-1	BASE	732.10	174.793	176.300	26542	0.000	0.003	1.2502	1.0731
100Y024H	SMF-1	BASE	733.10	174.793	176.300	26540	0.000	0.003	1.2502	1.0734
100Y024H	SMF-1	BASE	734.10	174.792	176.300	26538	0.000	0.003	1.2502	1.0737
100Y024H	SMF-1	BASE	735.10	174.792	176.300	26536	0.000	0.003	1.2502	1.0740
100Y024H	SMF-1	BASE	736.10	174.791	176.300	26534	0.000	0.003	1.2502	1.0743
100Y024H	SMF-1	BASE	737.10	174.791	176.300	26532	0.000	0.003	1.2502	1.0745
100Y024H	SMF-1	BASE	738.10	174.790	176.300	26530	0.000	0.003	1.2502	1.0748
100Y024H	SMF-1	BASE	739.10	174.790	176.300	26528	0.000	0.003	1.2502	1.0751
100Y024H	SMF-1	BASE	740.10	174.789	176.300	26526	0.000	0.003	1.2502	1.0754
100Y024H	SMF-1	BASE	741.10	174.789	176.300	26524	0.000	0.003	1.2502	1.0757
100Y024H	SMF-1	BASE	742.10	174.789	176.300	26522	0.000	0.003	1.2502	1.0760
100Y024H	SMF-1	BASE	743.10	174.788	176.300	26520	0.000	0.003	1.2502	1.0762
100Y024H	SMF-1	BASE	744.01	174.788	176.300	26518	0.000	0.003	1.2502	1.0765
100Y072H	SMF-1	BASE	0.00	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y072H	SMF-1	BASE	0.08	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y072H	SMF-1	BASE	0.18	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y072H	SMF-1	BASE	0.26	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y072H	SMF-1	BASE	0.34	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y072H	SMF-1	BASE	0.43	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y072H	SMF-1	BASE	0.51	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y072H	SMF-1	BASE	0.60	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y072H	SMF-1	BASE	0.68	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y072H	SMF-1	BASE	0.76	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y072H	SMF-1	BASE	0.85	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y072H	SMF-1	BASE	0.93	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y072H	SMF-1	BASE	1.01	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y072H	SMF-1	BASE	1.10	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y072H	SMF-1	BASE	1.18	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y072H	SMF-1	BASE	1.26	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y072H	SMF-1	BASE	1.35	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y072H	SMF-1	BASE	1.43	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y072H	SMF-1	BASE	1.51	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y072H	SMF-1	BASE	1.60	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y072H	SMF-1	BASE	1.68	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y072H	SMF-1	BASE	1.76	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y072H	SMF-1	BASE	1.85	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y072H	SMF-1	BASE	1.93	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y072H	SMF-1	BASE	2.01	174.500	176.300	25265	0.000	0.000	0.0000	0.0000

CRS - Lake Jeffery Road
SMF-1 Recovery

Simulation	Node	Group	Time hrs	Stage ft	Warning Stage ft	Surface Area ft2	Total Inflow cfs	Total Outflow cfs	Total Vol In af	Total Vol Out af
100Y008H	SMF-1	BASE	661.10	174.716	176.300	26205	0.000	0.003	0.8570	0.7223
100Y008H	SMF-1	BASE	662.10	174.715	176.300	26203	0.000	0.003	0.8570	0.7225
100Y008H	SMF-1	BASE	663.10	174.715	176.300	26201	0.000	0.003	0.8570	0.7228
100Y008H	SMF-1	BASE	664.10	174.714	176.300	26199	0.000	0.003	0.8570	0.7231
100Y008H	SMF-1	BASE	665.10	174.714	176.300	26197	0.000	0.003	0.8570	0.7234
100Y008H	SMF-1	BASE	666.10	174.713	176.300	26195	0.000	0.003	0.8570	0.7236
100Y008H	SMF-1	BASE	667.10	174.713	176.300	26193	0.000	0.003	0.8570	0.7239
100Y008H	SMF-1	BASE	668.10	174.713	176.300	26191	0.000	0.003	0.8570	0.7242
100Y008H	SMF-1	BASE	669.10	174.712	176.300	26189	0.000	0.003	0.8570	0.7245
100Y008H	SMF-1	BASE	670.10	174.712	176.300	26187	0.000	0.003	0.8570	0.7248
100Y008H	SMF-1	BASE	671.10	174.711	176.300	26185	0.000	0.003	0.8570	0.7250
100Y008H	SMF-1	BASE	672.10	174.711	176.300	26183	0.000	0.003	0.8570	0.7253
100Y008H	SMF-1	BASE	673.10	174.710	176.300	26181	0.000	0.003	0.8570	0.7256
100Y008H	SMF-1	BASE	674.10	174.710	176.300	26179	0.000	0.003	0.8570	0.7259
100Y008H	SMF-1	BASE	675.10	174.709	176.300	26177	0.000	0.003	0.8570	0.7261
100Y008H	SMF-1	BASE	676.10	174.709	176.300	26175	0.000	0.003	0.8570	0.7264
100Y008H	SMF-1	BASE	677.10	174.708	176.300	26173	0.000	0.003	0.8570	0.7267
100Y008H	SMF-1	BASE	678.10	174.708	176.300	26171	0.000	0.003	0.8570	0.7270
100Y008H	SMF-1	BASE	679.10	174.708	176.300	26169	0.000	0.003	0.8570	0.7272
100Y008H	SMF-1	BASE	680.10	174.707	176.300	26167	0.000	0.003	0.8570	0.7275
100Y008H	SMF-1	BASE	681.10	174.707	176.300	26165	0.000	0.003	0.8570	0.7278
100Y008H	SMF-1	BASE	682.10	174.706	176.300	26163	0.000	0.003	0.8570	0.7280
100Y008H	SMF-1	BASE	683.10	174.706	176.300	26161	0.000	0.003	0.8570	0.7283
100Y008H	SMF-1	BASE	684.10	174.705	176.300	26159	0.000	0.003	0.8570	0.7286
100Y008H	SMF-1	BASE	685.10	174.705	176.300	26157	0.000	0.003	0.8570	0.7289
100Y008H	SMF-1	BASE	686.10	174.704	176.300	26155	0.000	0.003	0.8570	0.7291
100Y008H	SMF-1	BASE	687.10	174.704	176.300	26153	0.000	0.003	0.8570	0.7294
100Y008H	SMF-1	BASE	688.10	174.703	176.300	26151	0.000	0.003	0.8570	0.7297
100Y008H	SMF-1	BASE	689.10	174.703	176.300	26149	0.000	0.003	0.8570	0.7299
100Y008H	SMF-1	BASE	690.10	174.703	176.300	26147	0.000	0.003	0.8570	0.7302
100Y008H	SMF-1	BASE	691.10	174.702	176.300	26145	0.000	0.003	0.8570	0.7305
100Y008H	SMF-1	BASE	692.10	174.702	176.300	26143	0.000	0.003	0.8570	0.7308
100Y008H	SMF-1	BASE	693.10	174.701	176.300	26141	0.000	0.003	0.8570	0.7310
100Y008H	SMF-1	BASE	694.10	174.701	176.300	26139	0.000	0.003	0.8570	0.7313
100Y008H	SMF-1	BASE	695.10	174.700	176.300	26138	0.000	0.003	0.8570	0.7316
100Y008H	SMF-1	BASE	696.10	174.700	176.300	26136	0.000	0.003	0.8570	0.7318
100Y008H	SMF-1	BASE	697.10	174.699	176.300	26134	0.000	0.003	0.8570	0.7321
100Y008H	SMF-1	BASE	698.10	174.699	176.300	26132	0.000	0.003	0.8570	0.7324
100Y008H	SMF-1	BASE	699.10	174.699	176.300	26130	0.000	0.003	0.8570	0.7326
100Y008H	SMF-1	BASE	700.10	174.698	176.300	26128	0.000	0.003	0.8570	0.7329
100Y008H	SMF-1	BASE	701.10	174.698	176.300	26126	0.000	0.003	0.8570	0.7332
100Y008H	SMF-1	BASE	702.10	174.697	176.300	26124	0.000	0.003	0.8570	0.7334
100Y008H	SMF-1	BASE	703.10	174.697	176.300	26122	0.000	0.003	0.8570	0.7337
100Y008H	SMF-1	BASE	704.10	174.696	176.300	26120	0.000	0.003	0.8570	0.7340
100Y008H	SMF-1	BASE	705.10	174.696	176.300	26118	0.000	0.003	0.8570	0.7342
100Y008H	SMF-1	BASE	706.10	174.695	176.300	26116	0.000	0.003	0.8570	0.7345
100Y008H	SMF-1	BASE	707.10	174.695	176.300	26114	0.000	0.003	0.8570	0.7348
100Y008H	SMF-1	BASE	708.10	174.695	176.300	26112	0.000	0.003	0.8570	0.7350
100Y008H	SMF-1	BASE	709.10	174.694	176.300	26111	0.000	0.003	0.8570	0.7353
100Y008H	SMF-1	BASE	710.10	174.694	176.300	26109	0.000	0.003	0.8570	0.7355
100Y008H	SMF-1	BASE	711.10	174.693	176.300	26107	0.000	0.003	0.8570	0.7358
100Y008H	SMF-1	BASE	712.10	174.693	176.300	26105	0.000	0.003	0.8570	0.7361
100Y008H	SMF-1	BASE	713.10	174.692	176.300	26103	0.000	0.003	0.8570	0.7363
100Y008H	SMF-1	BASE	714.10	174.692	176.300	26101	0.000	0.003	0.8570	0.7366
100Y008H	SMF-1	BASE	715.10	174.691	176.300	26099	0.000	0.003	0.8570	0.7369
100Y008H	SMF-1	BASE	716.10	174.691	176.300	26097	0.000	0.003	0.8570	0.7371
100Y008H	SMF-1	BASE	717.10	174.691	176.300	26095	0.000	0.003	0.8570	0.7374
100Y008H	SMF-1	BASE	718.10	174.690	176.300	26093	0.000	0.003	0.8570	0.7376
100Y008H	SMF-1	BASE	719.10	174.690	176.300	26091	0.000	0.003	0.8570	0.7379
100Y008H	SMF-1	BASE	720.10	174.689	176.300	26090	0.000	0.003	0.8570	0.7382
100Y008H	SMF-1	BASE	721.10	174.689	176.300	26088	0.000	0.003	0.8570	0.7384
100Y008H	SMF-1	BASE	722.10	174.688	176.300	26086	0.000	0.003	0.8570	0.7387
100Y008H	SMF-1	BASE	723.10	174.688	176.300	26084	0.000	0.003	0.8570	0.7389
100Y008H	SMF-1	BASE	724.10	174.688	176.300	26082	0.000	0.003	0.8570	0.7392
100Y008H	SMF-1	BASE	725.10	174.687	176.300	26080	0.000	0.003	0.8570	0.7395
100Y008H	SMF-1	BASE	726.10	174.687	176.300	26078	0.000	0.003	0.8570	0.7397
100Y008H	SMF-1	BASE	727.10	174.686	176.300	26076	0.000	0.003	0.8570	0.7400
100Y008H	SMF-1	BASE	728.00	174.686	176.300	26075	0.000	0.003	0.8570	0.7402
100Y024H	SMF-1	BASE	0.00	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y024H	SMF-1	BASE	0.08	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y024H	SMF-1	BASE	0.18	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y024H	SMF-1	BASE	0.26	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y024H	SMF-1	BASE	0.34	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y024H	SMF-1	BASE	0.43	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y024H	SMF-1	BASE	0.51	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y024H	SMF-1	BASE	0.60	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y024H	SMF-1	BASE	0.68	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y024H	SMF-1	BASE	0.76	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y024H	SMF-1	BASE	0.85	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y024H	SMF-1	BASE	0.93	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y024H	SMF-1	BASE	1.01	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y024H	SMF-1	BASE	1.10	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y024H	SMF-1	BASE	1.18	174.500	176.300	25265	0.000	0.000	0.0000	0.0000
100Y024H	SMF-1	BASE	1.26	174.500	176.300	25265	0.000	0.000	0.0000	0.0000



GSE Engineering & Consulting, Inc.
 5590 SW 64th Street, Suite B
 Gainesville, Florida 32608
 Telephone: (352) 377-3233
 Fax: (352) 377-0335

CLIENT Concept Development, Inc.

PROJECT NAME Commercial Retail - Lake City

PROJECT NUMBER 13843

PROJECT LOCATION Lake City, Columbia County, Florida

DATE PERFORMED 12/15/2018 **BORING NUMBER P-1**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING 3.5 FT CHECKED BY JTP

▼ ESTIMATED SEASONAL HIGH 1.5 FT

NOTES _____

DATE PERFORMED 12/15/2018 **BORING NUMBER P-2**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING 3.2 FT CHECKED BY JTP

▼ ESTIMATED SEASONAL HIGH 1.5 FT

NOTES _____

AB 2 PORTRAIT - GINT STD US.GDT - 1/4/19 10:46 - C:\PROJECTS\13843 COMMERCIAL RETAIL - LAKE CITY - GEO\13843 BORINGS\13843 BORINGS.GPJ

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0.0				0.0			
		AU 1	(SP-SM) Brown and gray SAND with silt			AU 1	(SP-SM) Dark brown and gray SAND with silt
			▼				▼
2.5		AU 2	(SP-SC) Brown and tan SAND with clay	2.5		AU 2	(SP-SC) Brown and tan SAND with clay
			▼			PS	▼ %PASS - 200 = 6.3 MC = 20 k _h = 11.0 ft/day
5.0				5.0			
7.0		AU 3	(SP-SM) Dark brown SAND with silt	7.0		AU 3	(SP-SM) Dark brown SAND with silt
10.0				10.0			
						AU 4	
12.5		AU 4		12.5			
15.0			Bottom of borehole at 15.0 feet.	15.0			Bottom of borehole at 15.0 feet.

(Continued Next Page)



Engineering & Consulting, Inc.

GSE Engineering & Consulting, Inc.
5590 SW 64th Street, Suite B
Gainesville, Florida 32608
Telephone: (352) 377-3233
Fax: (352) 377-0335

CLIENT Concept Development, Inc.

PROJECT NAME Commercial Retail - Lake City

PROJECT NUMBER 13843

PROJECT LOCATION Lake City, Columbia County, Florida

DATE PERFORMED 12/15/2018 **BORING NUMBER A-3**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING 2.5 FT CHECKED BY JTP

▽ ESTIMATED SEASONAL HIGH 1.5 FT

NOTES _____

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0			
1			(SP-SM) Dark brown and gray SAND with silt
		AU 1	▽
2			▽
3			3.0
		AU 2	(SP) Brown and tan SAND
4			
5			5.0
			Bottom of borehole at 5.0 feet.

AB 2 PORTRAIT - GINT STD US.GDT - 1/4/19 11:10 - Q:\PROJECTS\13843 COMMERCIAL RETAIL - LAKE CITY - GEO\13843 BORINGS\13843 BORINGS.GPJ



GSE Engineering & Consulting, Inc.
 5590 SW 64th Street, Suite B
 Gainesville, Florida 32608
 Telephone: (352) 377-3233
 Fax: (352) 377-0335

CLIENT Concept Development, Inc.

PROJECT NAME Commercial Retail - Lake City

PROJECT NUMBER 13843

PROJECT LOCATION Lake City, Columbia County, Florida

DATE PERFORMED 12/15/2018 **BORING NUMBER A-1**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING 2.7 FT CHECKED BY JTP

▽ ESTIMATED SEASONAL HIGH 1.5 FT

NOTES _____

DATE PERFORMED 12/15/2018 **BORING NUMBER A-2**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▼ AT TIME OF DRILLING 2.5 FT CHECKED BY JTP

▽ ESTIMATED SEASONAL HIGH 1.5 FT

NOTES _____

AB 2 PORTRAIT - GINT STD US.GDT - 1/4/19 11:10 - Q:\PROJECTS\13843 COMMERCIAL RETAIL - LAKE CITY - GEO\13843 BORINGS\13843 BORINGS.GPJ

DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0				0			
		AU 1	(SM) Dark brown silty SAND			AU 1	(SP-SM) Dark brown and gray SAND with silt
1				1			
			▽				▽
2				2			
							2.0
							(SP) Brown and tan SAND
			2.5				▽
		AU 2	(SP) Brown and tan SAND				
3				3			
						AU 2	%PASS - 200 = 4.3 MC = 22
4				4			
5				5			
			5.0				5.0
			Bottom of borehole at 5.0 feet.				Bottom of borehole at 5.0 feet.

(Continued Next Page)

5.1 Auger Boring Logs

5.0 FIELD DATA

When using on-site soils as fill materials, we recommend the silty and clayey sand soils (SM, SC) be used in the lower depths of the fill. Sand and sand with silt (SP, SP-SM) should be used in the upper portions of the fill. We recommend a minimum of 2 feet of sand (SP, SP-SM) cover the silty and clayey sand fill materials to reduce the potential for soggy surface conditions due to the low permeability characteristics of the silty and clayey sand materials.

4.9 Surface Water Control and Landscaping

Roof gutters should be considered to divert runoff away from the building. The gutter downspouts should discharge a minimum of 10 feet from the structure to reduce the amount of water collecting around the foundations. Where possible, the gutter downspouts should discharge directly into the storm sewer system or onto the asphalt paved areas in order to reduce the amount of water collecting around the foundations. Grading of the site should be such that water is diverted away from the building on all sides to reduce the potential for erosion and water infiltration along the foundation.

With respect to landscaping, it is recommended that existing and planted trees and large “tree-like” shrubbery with potential for developing large root systems be planted a minimum distance of half their mature height, and preferably their expected final height, away from the structure. The purpose of this is to reduce the potential for foundation or slab movements from the growth of root systems as the landscaping matures. Consideration should also be given to using landscaping that has a low water demand, so that excessive irrigation is not conducted around the structures.

4.8 Fill Suitability

The soils encountered at this site within the explored depths range from sands (SP) to silty sands (SM). A discussion of the suitability for reuse as structural fill for each soil classification according to the Unified Soil Classification System (USCS) designation is provided below.

SP, SP/SM – Sands (SP) and sand with silt (SP/SM) have less than 5 percent and 12 percent soil fines passing the No. 200 sieve, respectively, and are typically well draining soils that are suitable for reuse as structural fill. The sands with silt may require moisture conditioning (drying) to make the material more workable. These soils will require stockpiling and drying before they are reused if they are excavated from below the water table.

SM – Silty sands (SM) can have between 12 percent and 50 percent soil fines passing the No. 200 sieve. Silty sands are typically non-plastic or have low plasticity, and can be reused as structural fill with precautions. Silty sands can be moisture sensitive and difficult to work and compact and can rut if the moisture content is near or above the optimum moisture content. We recommend these soils be moisture conditioned (dried) so that the moisture content during use is at or below the optimum moisture content. Aerating and exposure to the sun is typically the most effective methods of drying these soils. It may not be practical to reuse these materials during the wet season, as frequent rain showers may not allow these soils to dry to a workable moisture content. Suitable silty sands are limited to soil having less than 30 percent soil fines passing the No. 200 sieve. Silty sands with more than 30 percent soil fines are especially moisture sensitive, and are not recommended for reuse as structural fill. These soils will behave more as sandy silt, and for this reason, very silty sands having more than 30 percent soil fines passing the No. 200 sieve have been assigned a dual classification of SM/ML. Silty sand soils that are excavated from below the water table are not recommended for reuse as structural fill due to the amount of time that will be required to dry these soils to a workable condition.

SC – Clayey sand (SC) soils can have between 12 percent and 50 percent soil fines passing the No. 200 sieve. Clayey sands can have a high range of plasticity, varying from a PI of 7 or greater and plotting above the A-line to highly plastic. Friable clayey sands are typically suitable for use as structural fill with precautions. Clayey sands will be moisture sensitive and difficult to work and compact and can rut during placement if the moisture content is near or above the natural moisture content. We recommend these soils be moisture conditioned (dried) so that the moisture content during use is at or below the optimum moisture content. Aerating and exposure to the sun is typically the most effective methods of drying these soils. It may not be practical to reuse these materials during the wet season, as frequent rain showers may not allow these soils to dry to a workable moisture content. Suitable clayey sands are limited to soil having less than 30 percent soil fines passing the No. 200 sieve. Clayey sands with more than 30 percent soil fines passing the No. 200 sieve are especially moisture sensitive and are typically highly plastic, and are not recommended for reuse as structural fill. These soils will behave more as sandy clay, and for this reason, very clayey sands having more than 30 percent soil fines passing the No. 200 sieve have been assigned a dual classification of SC/CH or SC/CL. Clayey sand soils that are excavated from below the water table are not recommended for reuse as structural fill due to the amount of time that will be required to dry these soils to a workable condition.

ML, MH, CL, CH – Silts and clays are not suitable materials for reuse as structural fill.

4.6 Quality Control and Construction Materials Testing

It should be noted that the geotechnical engineering design does not end with the advertisement of the construction documents. As the geotechnical engineer of record, GSE is the most qualified to perform the construction materials testing that will be required for this project. The benefits of having the geotechnical engineer of record also perform the construction materials testing are numerous. If GSE continues to be involved with the project through construction, we will be able to constantly re-evaluate and possibly alter our geotechnical recommendations in a timely and cost effective manner once final design and construction techniques are developed. This often results in cost savings for the project.

We recommend performing compaction testing beneath the concrete floor slab and the building foundations. We recommend one test be performed every 50 linear feet of continuous footing and every other column footing, per foot depth of fill or native material. We recommend a compaction test be performed for each 2,500 square feet of floor area or 10,000 square feet of pavement area per foot of fill or native material, or a minimum of three tests each, whichever is greater. Test all footing excavations to a depth of 12 inches at the frequencies stated above.

4.7 Stormwater Management

The soil conditions at the stormwater management facility are relatively consistent; penetrating approximately 15 feet of sand with silt (SP-SM). Strata of sand with clay (SP-SC) was interbedded from depths of 2 to 7 feet bls.

The groundwater table was recorded at depths ranging between 2 to 2.3 feet in each of the four SPT borings. The groundwater table was also recorded in each of the remaining auger borings ranging between 1.5 to 3.5 feet. We estimate the seasonal high groundwater table will be approximately 1.5 feet beneath grade.

The laboratory permeability tests indicate the surficial layer of sand with silt (SP-SM) has a hydraulic conductivity value of 2.9 feet per day. The tested sand with clay (SP-SC) has a hydraulic conductivity value of 11 feet per day.

Based upon our findings and test results, our recommended soil parameters for the stormwater management design in the explored areas are presented below. The recommended parameters consider the results of the permeability tests, wash 200 determinations, and our experience with these types of soils. The parameters below do not consider a factor of safety.

1. Base elevation of effective or mobilized aquifer (average depth of confining layer) equal to 15 feet bls.
2. Unsaturated vertical infiltration rate of 5 feet per day.
3. Horizontal hydraulic conductivity equal to 7 feet per day.
4. Specific yield (fillable porosity) of 25 percent.
5. Average seasonal high groundwater table depth equal to 1.5 feet bls.
6. Average seasonal low groundwater table depth equal to 6 feet bls.

The constructability of differing asphalt thicknesses may be difficult, and having a uniform 2-inch thick asphalt wearing surface may be more practical.

4.5 Site Preparation

The soils at this site should be suitable for supporting the proposed construction using normal, good practice site preparation procedures. The following recommendations are our general guidelines for site preparation.

4.5.1 Stripping

Strip the construction limits and 10 feet beyond the perimeter of all grass, roots, topsoil, pavement, and other deleterious materials. You should expect to strip to depths of 12 or more inches. Deeper stripping may be necessary if major root systems are present at the site.

4.5.2 Dewatering

Temporary dewatering might be necessary for this project. If needed, we anticipate dewatering can be accomplished with sumps placed near the construction area, or with underdrains connected to a vacuum pump.

In any case, the site should always be graded to promote runoff and limit the amount of ponding. Localized ponding of stormwater is expected without proper grading during construction, and could render previously acceptable surfaces unacceptable.

4.5.3 Proof-Rolling

Proof-roll the subgrade with heavy rubber-tired equipment, such as a loaded front-end loader or dump truck, to identify any loose or soft zones not found by the soil borings. The proof-rolling should be monitored by a geotechnical engineer or qualified technician. Undercut or otherwise treat these zones as recommended by the geotechnical engineer in this report.

4.5.4 Proof Compaction

Compact the subgrade to a density of at least 95 percent of the Modified Proctor maximum dry density (ASTM D1557). The specified compaction should be obtained to a depth of 1 foot below the foundation bottoms and the existing grade prior to placing fill. Vibratory roller equipment should not be used within approximately 100 feet of existing structures. Lighter “walk-behind” compaction equipment may be used to achieve the degree of compaction.

4.5.5 Fill Placement

Imported fill placed to raise the site grades should consist of clean sand having less than 10 percent passing the No. 200 sieve. On-site soils meeting the requirements of Section 4.8 may also be used as structural fill. The fill should be placed in maximum 12-inch loose lifts that are compacted to at least 95 percent of the Modified Proctor maximum dry density (ASTM D1557). If lighter “walk-behind” compaction equipment is used, this may require lifts of 4 inches or less to achieve the required degree of compaction.

4.4.1 Stabilized Subgrade

If a crushed limerock or recycled concrete base is used, we recommend a stabilized subgrade be located beneath the base. The stabilized subgrade should have a minimum Limerock Bearing Ratio (LBR) of 40, with minimum thicknesses of 6 inches for automobile parking areas and 12 inches for driveways.

The stabilized subgrade can be imported material or a mixture of imported and on-site material. If a mix is proposed, a mix design should be performed to determine the optimum mix proportions. The stabilized subgrade should be compacted to a minimum of 98 percent of the Modified Proctor maximum dry density (ASTM D1557) for soils with less than 15 percent fines content. Soils with 15 percent or greater fines content should be compacted to 100 percent of the Standard Proctor maximum dry density (ASTM D698).

4.4.2 Base Course

The base course can consist of either crushed limerock, soil cement, or recycled concrete. If you should use a soil cement base course, a stabilized subgrade is not required.

Limerock should have a LBR of at least 100, be obtained from a FDOT approved source and meet FDOT gradation requirements. The base course thickness should be a minimum of 6 inches in automobile parking areas, and 8 inches in driveway areas. The base course should be compacted to at least 98 percent of the Modified Proctor maximum dry density (ASTM D1557). We recommend a minimum 24 inches separation between the bottom of the limerock base course and the estimated seasonal high water table. If site grading does not allow for this separation we recommend underdrains or undercutting be considered.

Soil cement can consist of an imported material or a blend of the on-site soils and cement. A mix design should be performed to determine the optimum cement content. We recommend the soil cement have a minimum 28-day compressive strength of 500 psi. Soil cement can be blended off-site (in a pug mill) or on site. Soil cement pills should be cast from each day's production to verify the recommended compressive strength has been achieved at 28 days. We recommend the soil cement base course be a minimum of 8 inches thick throughout the project. We recommend a minimum 18 inches separation between the bottom of the soil cement base course and the estimated seasonal high water table. If site grading does not allow for this separation we recommend underdrains or undercutting be considered.

Recycled concrete should have a LBR of at least 150, be obtained from a FDOT approved source and meet FDOT gradation requirements. The base course thickness should be a minimum of 8 inches. The base course should be compacted to at least 98 percent of the Modified Proctor maximum dry density (ASTM D1557). We recommend a minimum 12 inches separation between the bottom of the recycled concrete base course and the estimated seasonal high water table. If site grading does not allow for this separation we recommend underdrains or undercutting be considered.

4.4.3 Wearing Surface

The asphalt-wearing surface should consist of an FDOT Type SP Hot Mix Asphalt mixture. For automobile parking areas, the thickness should be a minimum of 1.5 inches. For driveway areas, the thickness should be a minimum of 2 inches. The asphalt-wearing surface should consist of an SP-12.5 mix. The asphalt should be compacted to at least 95 percent of the mix design density.

The foundations should be embedded a minimum of 18 inches below the lowest adjacent grade. Interior foundations or thickened sections should be embedded a minimum of 12 inches. The foundations should have minimum widths of 18 inches for strip footings, and 24 inches for columns, even though the maximum soil bearing pressure may not be fully developed.

Due to the mostly sandy nature of the majority of the near-surface soils, we expect settlement to be mostly elastic in nature. The majority of the settlement will occur on application of the loads, during and immediately following construction. Using the recommended maximum bearing pressure, the assumed maximum structural loads, and the field and laboratory test data which we have correlated into the strength and compressibility characteristics of the subsurface soils, we estimate the total settlements of the structure to be 1 inch or less, with approximately half of it occurring upon load application (during construction).

Differential settlement results from differences in applied bearing pressures and the variations in the compressibility characteristics of the subsurface soils. For the building pad prepared as recommended, we anticipate differential settlement of less than 1/2 inch.

Post-construction settlement of the structures will be influenced by several interrelated factors, such as (1) subsurface stratification and strength/compressibility characteristics of the bearing soils; (2) footing size, bearing level, applied loads, and resulting bearing pressures beneath the foundation; (3) site preparation and earthwork construction techniques used by the contractor, and (4) external factors, including but not limited to vibration from off-site sources and groundwater fluctuations beyond those normally anticipated for the naturally-occurring site and soil conditions which are present.

Our settlement estimates for the structure are based upon our limited understanding of the structural loads and site grading and the use of successful adherence to the site preparation recommendations presented later in this report. Any deviation from our project understanding and/or our site preparation recommendations could result in an increase in the estimated post-construction settlement of the structure.

4.4 Flexible Pavement

Overall soil conditions encountered by our borings at this site are suitable for supporting conventional limerock base and asphalt wearing surface pavements. We have not been provided the anticipated traffic loading conditions; therefore, the following pavement component recommendations should be used only as guidelines.

The seasonal high groundwater table is estimated to be approximately 1.5 feet beneath existing grade at the site. We recommend a minimum of either 12 to 24 inches of separation (depending upon the pavement section design) be present between the bottom of the base course and the estimated seasonal high groundwater table. If this separation cannot be achieved by site grading, GSE recommends underdrains be used beneath the base course.

In areas where the minimum 12 to 24 inch separation is not able to be achieved through grading design, we recommend you consider underdrains.

4.0 EVALUATION AND RECOMMENDATIONS

4.1 General

The following recommendations are made based upon our understanding of the proposed construction, a review of the attached soil borings and laboratory test data, and experience with similar projects and subsurface conditions. If plans or the location of proposed construction changes from those discussed previously, GSE requests the opportunity to review and possibly amend our recommendations with respect to those changes.

The final design of a foundation system is dependent upon adequate integration of geotechnical and structural engineering considerations. Consequently, GSE must review the final foundation design in order to evaluate the effectiveness and applicability of our initial analyses, and to determine if additional recommendations may be warranted. Without such a review, the recommendations presented herein could be misinterpreted or misapplied resulting in potentially unacceptable performance of the foundation system.

The performance of site improvements may be sensitive to their post-construction relationship to site groundwater levels, seepage zones, or soil/rock characteristics exposed at final site grades. GSE recommends that use of boring information for final design of all site improvements be predicated on proper horizontal and vertical control of borings.

In this section of the report, we present our geotechnical parameters and recommendations to assist with building foundation, stormwater management, and pavement designs as well as our general site preparation guidelines.

4.2 Groundwater

The groundwater table was recorded at depths ranging between 2 to 2.3 feet in each of the four SPT borings. The groundwater table was also recorded in each of the remaining auger borings ranging between 1.5 to 3.5 feet. The County Soil Survey indicates seasonal high groundwater levels are between 20 to 40 inches for 2 to 4 months during most years.

Based upon the soil borings performed, review of the provided topographic survey, and the County Soil Survey information, we estimate the seasonal high groundwater table will be approximately 1.5 feet beneath grade.

4.3 Building Foundations

The soil borings near the proposed building footprint indicate the soils at the site are relatively consistent. The borings penetrated approximately 20 feet of sand with silt (SP-SM). Strata of sand with clay (SP-SC) was interbedded from depths ranging between 2.5 to 13.5 feet bls.

Based upon the soil conditions encountered and our limited understanding of the structural loads and site grading, we recommend the building be supported by conventional, shallow strip and/or spread foundations. We recommend the shallow foundations be designed for a maximum allowable gross bearing pressure of 2,000 psf. The gross bearing pressure is defined as the soil contact pressure that can be imposed from the maximum structural loads, weight of the concrete foundations, and weight of the soil above the foundations. The foundations should be designed based upon the maximum load that could be imposed by all loading conditions.

3.3 Review of Published Data

The majority of the site is mapped as one soil series by the Soil Conservation Service (SCS) Soil Survey for Alachua County². The following soil description is from the Soil Survey.

Chipley fine sand, 0 to 5 percent slopes – The Chipley series is a member of the thermic, coated family of Aquic Quartzic Psammments. It consists of moderately well drained, rapidly permeable soils that formed in thick, sandy marine sediments. This is a moderately well drained, nearly level to gently sloping soil in somewhat depressed areas and on flats in the uplands. The areas range from 3 to 800 acres and are circular to irregularly elongated.

Typically, the surface layer is gray fine sand about 7 inches thick. Fine sand extends to a depth of 80 inches. In sequence downward, 23 inches is very pale brown and has yellow mottles; the next 10 inches is light gray and has very pale brown mottles; the next 20 inches is very pale brown and has brownish yellow, white, and yellowish red mottles; and the lowermost 20 inches is white with brownish yellow and yellow mottles.

Included with this soil in mapping are small areas of Blanton, Alpin, Lakeland, Albany, and Hurricane soils. These soils make up less than 15 percent of the map unit.

This Chipley soil has a water table at a depth of 20 or 40 inches for 2 to 4 months in most years. The water table is usually at a depth of 40 to 60 inches during the rest of the year. It recedes; however, to a depth of more than 60 inches during very dry periods. The available water capacity is very low, and permeability is rapid throughout the soil. Natural fertility and the organic matter content are low.

3.4 Laboratory Soil Analysis

Selected soil samples recovered from the soil borings were analyzed for the percent soil fines passing the No. 200 sieve, natural moisture content, and hydraulic conductivity. Samples selected for laboratory testing were collected at depths ranging from near ground surface to 15 feet bls. These tests were performed to confirm visual soil classification and evaluate their engineering properties. The complete laboratory report is provided in Section 5.3.

The laboratory tests indicate the tested soils consist of poorly graded sand, sand with silt, and sand with clay. The tested poorly graded sand (SP) contains approximately 4.3 percent soil fines passing the No. 200 sieve with a natural moisture content of about 22 percent. The tested sand with silt (SP-SM) contains approximately 6.8 to 8.4 percent soil fines passing the No. 200 sieve with natural moisture contents of about 19 to 23 percent. The tested sand with clay (SP-SC) contains approximately 6.3 to 7.2 percent soil fines passing the No. 200 sieve with natural moisture contents of about 19 to 20 percent.

The constant head hydraulic conductivity test results indicate the near-surface sand with silt (SP-SM) has a hydraulic conductivity value of 2.9 feet per day. The tested sand with clay (SP-SC) has a hydraulic conductivity value of 11 feet per day.

² Soil Survey of Columbia County, Florida. Soil Conservation Service, U.S. Department of Agriculture.

3.0 FINDINGS

3.1 Surface Conditions

Mr. John Potvin with GSE visited the site on December 7, 2018 to observe the site conditions and mark the boring locations. The property boundaries were estimated in the field based on the provided site plan and physical features in the field, including dirt pathways and other readily apparent features.

The approximately 2.26 acre site is currently vacant. The property is mostly overgrown grass with shrubs and weeds and wooded area to the north. The site is located on the east side of NW Bascom Norris Drive and north of Lake Jeffery Road (CR 250).

The topography at the site is gently to moderately sloping down toward the southeast from the northwest. Regional topography is gently sloping towards the southeast from the east. The Lake City, Florida (2015) West Quadrangle USGS Topographic Map indicates the ground surface elevations at the site are near elevations 90 to 100 feet¹ NAVD88.

3.2 Subsurface Conditions

The locations of the auger and SPT borings are provided on Figure 2. Complete logs for the borings are provided in Sections 5.1 and 5.2. Descriptions for the soils encountered are accompanied by the Unified Soil Classification System symbol (SM, SP-SM, etc.) and are based on visual examination of the recovered soil samples and the laboratory tests performed. Stratification boundaries between the soil types should be considered approximate, as the actual transition between soil types may be gradual.

The auger borings located in the proposed stormwater management facilities indicate the soils across these areas are relatively consistent. The auger borings penetrated approximately 15 feet of sand with silt (SP-SM). Strata of sand with clay (SP-SC) was interbedded from depths of 2 to 7 feet bls.

The auger borings located in the proposed roadways generally encountered a near-surface sandy stratum consisting of poorly graded sand, sand with silt, and silty sand (SP, SP-SM, SM) to the explored depth of up to 5 feet bls.

The SPT borings located in the proposed building area indicate the soils across these locations are relatively consistent. The borings penetrated approximately 20 feet of sand with silt (SP-SM). Strata of sand with clay (SP-SC) was interbedded from depths of 2.5 to 13.5 feet bls.

The near-surface soil layers (within 10 feet of grade) are generally in very loose to loose conditions with N-values ranging from 3 to 9 blows per foot. The deeper soils (10+ feet beneath grade) are generally in loose to medium dense conditions with N-values ranging from 7 to 24 blows per foot.

The groundwater table was recorded at depths ranging between 1.5 to 3.5 feet in the soil borings at the time of drilling.

¹ United States Geological Survey, Lake City West, 2015.

2.0 FIELD AND LABORATORY TESTS

2.1 General Description

The procedures used for field sampling and testing are in general accordance with industry standards of care and established geotechnical engineering practices for this geographic region. This exploration consisted of performing four (4) Standard Penetration Test (SPT) borings to depths of 20 feet below land surface (bls) in the area of the proposed building, three (3) auger borings to depths of 5 feet bls in the area of the parking lots, and four (4) auger borings to depths of 15 feet bls in the area of the proposed stormwater management facilities.

The soil borings were performed at the approximate locations as shown on Figure 2. The borings were located at the site using the provided site plan, Global Positioning System (GPS) coordinates, and obvious site features as reference. The boring locations should be considered approximate. The soil borings were performed on December 15, 2018.

2.2 Auger Borings

The auger borings were performed in accordance with ASTM D1452. The borings were performed with flight auger equipment that was rotated into the ground in a manner that reduces soil disturbance. After penetrating to the required depth, the auger was retracted and the soils collected on the auger flights were field classified and placed in sealed containers. Representative samples of each stratum were retained from the auger boring. Results from the auger borings are provided in Section 5.1.

2.3 Standard Penetration Test Borings

The soil borings were performed with a drill rig employing mud rotary drilling techniques and Standard Penetration Testing (SPT) in accordance with ASTM D1586. The SPTs were performed continuously to 10 feet and at 5-foot intervals thereafter. Soil samples were obtained at the depths where the SPTs were performed. The soil samples were classified in the field, placed in sealed containers, and returned to our laboratory for further evaluation.

After drilling to the sampling depth and flushing the borehole, the standard two-inch O.D. split-barrel sampler was seated by driving it 6 inches into the undisturbed soil. Then the sampler was driven an additional 12 inches by blows of a 140-pound hammer falling 30 inches. The number of blows required to produce the next 12 inches of penetration were recorded as the penetration resistance (N-value). These values and the complete SPT boring logs are provided in Section 5.2.

Upon completion of the sampling, the boreholes were abandoned in accordance with Water Management District guidelines.

2.4 Soil Laboratory Tests

The soil samples recovered from the soil borings were returned to our laboratory, and examined to confirm the field descriptions. Representative samples were then selected for laboratory testing. The laboratory tests consisted of six (6) percent soil fines passing the No. 200 sieve determinations, six (6) natural moisture content determinations, and two (2) constant head hydraulic conductivity tests. These tests were performed in order to aid in classifying the soils and to further evaluate their engineering properties. The laboratory tests are provided in Section 5.3.

1.0 INTRODUCTION

1.1 General

GSE Engineering & Consulting, Inc. (GSE) has completed this geotechnical exploration for the proposed commercial retail development to be located in Lake City, Columbia County, Florida. This exploration was performed in accordance with GSE Proposal No. 2018-588 dated November 27, 2018. Mr. Stephen Crawford with Concept Development, Inc. provided authorization for our services on November 28, 2018.

1.2 Project Description

This project will consist of a commercial retail store located in Lake City, Columbia County, Florida (Figure 1). The site is located at the east corner of the NW Bascom Norris Drive and Lake Jeffrey Road intersection. According to the Columbia County Property Appraiser (CCPA), the approximately 2.26 acre subject site is listed as Tax Parcel No. 25-3S-16-02284-102. Mr. Stephen Crawford with Concept Development, Inc. provided information about the project including a plan illustrating the proposed site layout.

The project will consist of an approximate 9,100 square foot building, a parking lot, and a stormwater management facility. The structure is expected to be single-story, high wall concrete masonry unit (CMU) and steel frame construction. Structural loads have not been provided, but are expected to be on the order of 1 to 2 kips per foot for non-load bearing CMU walls, and less than 50 kips for columns. The finished floor of the structure is anticipated to be constructed within 1 to 2 feet of the existing site grades.

The building will be located near the central portion of the site. The parking lot will be located south and west of the structure, and an access driveway will be located at the southeast corner of the site. The stormwater management facility will be located at the north side of the site behind the building.

Mr. John T. Potvin III with GSE conducted a site visit on December 7, 2018. Boring locations were staked on December 7, 2018. In addition to the Conceptual Plan, a recent aerial photograph was also obtained and reviewed. The Conceptual Plan and aerial photograph were used in the preparation of this exploration and report.

1.3 Purpose

The purpose of this geotechnical exploration was to determine the general subsurface conditions, evaluate these conditions with respect to the proposed construction, and prepare geotechnical parameters and recommendations to assist with building foundation, stormwater management, and pavement designs.

LIST OF FIGURES

Figure

1. Project Site Location Map
2. Site Plan Showing Approximate Locations of Field Tests

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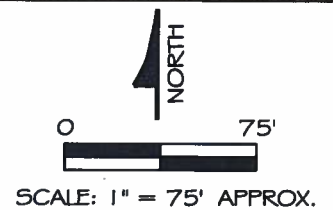
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REFERENCE: AERIAL PHOTOGRAPH (2018) GOOGLE EARTH

LEGEND:

- SUBJECT PROPERTY
- ⊕ SPT BORING
- ⊕ AUGER BORING



COMMERCIAL RETAIL - LAKE CITY LAKE CITY, COLUMBIA COUNTY, FLORIDA GSE PROJECT NO. 13843		SITE PLAN SHOWING APPROXIMATE LOCATIONS OF FIELD TESTS	
		DESIGNED BY: JTP CHECKED BY: CAD DRAWN BY: EEW	FIGURE 2





COMMERCIAL RETAIL - LAKE CITY
LAKE CITY, COLUMBIA COUNTY, FLORIDA
GSE PROJECT NO. 13843

PROJECT SITE LOCATION MAP

DESIGNED BY: JTP
CHECKED BY: CAD
DRAWN BY: EEW



FIGURE

1

FIGURES

6.0 LIMITATIONS

6.1 Warranty

This report has been prepared for our client for his exclusive use, in accordance with generally accepted soil and foundation engineering practices, and makes no other warranty either expressed or implied as to the professional advice provided in the report.

6.2 Auger and SPT Borings

The determination of soil type and conditions was performed from the ground surface to the maximum depth of the borings, only. Any changes in subsurface conditions that occur between or below the borings would not have been detected or reflected in this report.

Soil classifications that were made in the field are based upon identifiable textural changes, color changes, changes in composition or changes in resistance to penetration in the intervals from which the samples were collected. Abrupt changes in soil type, as reflected in boring logs and/or cross sections may not actually occur, but instead, be transitional.

Depth to the water table is based upon observations made during the performance of the auger and SPT borings. This depth is an estimate and does not reflect the annual variations that would be expected in this area due to fluctuations in rainfall and rates of evapotranspiration.

6.3 Site Figures

The measurements used for the preparation of the figures in this report were made using the provided site plan and by estimating distances from existing structures and site features. Figures in this report were not prepared by a licensed land surveyor and should not be interpreted as such.

6.4 Unanticipated Soil Conditions

The analysis and recommendations submitted in this report are based upon the data obtained from soil borings performed at the locations indicated on Figure 2. This report does not reflect any variations that may occur between these borings.

The nature and extent of variations between borings may not become known until excavation begins. If variations appear, we may have to re-evaluate our recommendations after performing on-site observations and noting the characteristics of any variations.

6.5 Misinterpretation of Soil Engineering Report

GSE Engineering & Consulting, Inc. is responsible for the conclusions and opinions contained within this report based upon the data relating only to the specific project and location discussed herein. If others make the conclusions or recommendations based upon the data presented, those conclusions or recommendations are not the responsibility of GSE.

KEY TO SOIL CLASSIFICATION CHART

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests				SYMBOLS		GROUP NAME
				GRAPHIC	LETTER	
COARSE-GRAINED SOILS More than 50% retained on No. 200 sieve	Gravels More than 50% of coarse fraction retained on No. 4 sieve	Clean Gravels	$Cu \geq 4$ and $1 \leq Cc \leq 3$		GW	Well graded GRAVEL
		Less than 5% fines	$Cu < 4$ and/or $1 > Cc > 3$		GP	Poorly graded GRAVEL
		Gravels with fines	Fines classify as ML or MH		GM	Silty GRAVEL
		More than 12% fines	Fines classify as CL or CH		GC	Clayey GRAVEL
	Sands 50% or more of coarse fraction passes No. 4 sieve	Clean Sands	$Cu \geq 6$ and $1 \leq Cc \leq 3$		SW	Well graded SAND
		Less than 5% fines	$Cu < 6$ and/or $1 > Cc > 3$		SP	Poorly graded SAND
		Sand with fines	Fines classify as ML or MH		SP-SM	SAND with silt
		$5\% \leq \text{fines} < 12\%$	Fines classify as CL or CH		SP-SC	SAND with clay
		Sand with fines	Fines classify as ML or MH		SM	Silty SAND
		$12\% \leq \text{fines} < 30\%$	Fines classify as CL or CH		SC	Clayey SAND
		Sand with fines	Fines classify as ML or MH		SM	Very silty SAND
		30% fines or more	Fines classify as CL or CH		SC	Very clayey SAND
	FINE-GRAINED SOILS 50% or more passes the No. 200 sieve	Clays	inorganic	$50\% \leq \text{fines} < 70\%$		CL/CH
$70\% \leq \text{fines} < 85\%$					CL/CH	CLAY with sand
$\text{fines} \geq 85\%$					CL/CH	CLAY
Silt and Clays Liquid Limit less than 50		inorganic	$PI > 7$ and plots on/above "A" line		CL	Lean CLAY
			$PI < 4$ or plots below "A" line		ML	SILT
		organic	<u>Liquid Limit - oven dried</u> < 0.75		OL	Organic clay
			Liquid Limit - not dried		OL	Organic silt
Silt and Clays Liquid Limit 50 or more		inorganic	PI plots on or above "A" line		CH	Fat CLAY
			PI plots below "A" line		MH	Elastic SILT
		organic	<u>Liquid Limit - oven dried</u> < 0.75		OH	Organic clay
		Liquid Limit - not dried		OH	Organic silt	
HIGHLY ORGANIC SOILS	Primarily organic matter, dark in color, and organic odor				PT	PEAT

CORRELATION OF PENETRATION RESISTANCE WITH RELATIVE DENSITY AND CONSISTENCY

SANDS:	No. OF BLOWS, N	RELATIVE DENSITY		No. OF BLOWS, N	CONSISTENCY
	0 - 4	Very Loose		0 - 2	Very Soft
	5 - 10	Loose	SILTS	3 - 4	Soft
	11 - 30	Medium dense	&	5 - 8	Firm
	31 - 50	Dense	CLAYS:	9 - 15	Stiff
	OVER 50	Very Dense		16 - 30	Very Stiff
				31 - 50	Hard
	No. OF BLOWS, N	RELATIVE DENSITY		OVER 50	Very Hard

SAMPLE GRAPHIC TYPE LEGEND



Location
of SPT
Sample



Location
of Auger
Sample

PARTICLE SIZE IDENTIFICATION

BOULDERS:	Greater than 300 mm
COBBLES:	75 mm to 300 mm
GRAVEL:	Coarse - 19.0 mm to 75 mm
	Fine - 4.75 mm to 19.0 mm
SANDS:	Coarse - 2.00 mm to 4.75 mm
	Medium - 0.425 mm to 2.00 mm
	Fine - 0.075 mm to 0.425 mm
SILTS & CLAYS:	Less than 0.075 mm

LABORATORY TEST LEGEND

LL	=	Liquid Limit, %
PL	=	Plastic Limit, %
PI	=	Plasticity Index, %
% PASS - 200	=	Percent Passing the No. 200 Sieve
MC	=	Moisture Content, %
ORG	=	Organic Content, %
k_h	=	Horizontal Hydraulic Conductivity, ft/day

5.4 Key to Soil Classification



SUMMARY REPORT OF LABORATORY TEST RESULTS

Project Number: 13843

Project Name: Commercial Retail - Lake City

[illegible]

5.3 Laboratory Results



GSE Engineering & Consulting, Inc.
5590 SW 64th Street, Suite B
Gainesville, Florida 32608
Telephone: (352) 377-3233
Fax: (352) 377-0335

BORING NUMBER B-4

CLIENT Concept Development, Inc.

PROJECT NAME Commercial Retail - Lake City

PROJECT NUMBER 13843

PROJECT LOCATION Lake City, Columbia County, Florida

DATE STARTED 12/15/18 COMPLETED 12/15/18

GROUND ELEVATION _____ HOLE SIZE _____

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Mud Rotary

▽ AT TIME OF DRILLING 2.3 FT

LOGGED BY WDI CHECKED BY JTP

▽ ESTIMATED SEASONAL HIGH 1.5 FT

NOTES _____

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲
0											20 40 60 80
		(SP-SM) Loose light brown SAND with silt									
	▽			SPT 1	2-2-3 (5)						
	▽		2.5								
		(SP-SC) Very loose to loose light brown SAND with clay		SPT 2	3-3-3 (6)				7.2	19	
5				SPT 3	4-5-4 (9)						
				SPT 4	3-2-2 (4)						
				SPT 5	1-2-2 (4)						
				SPT 6	2-4-4 (8)						
10											
			13.5								
		(SP-SM) Loose to medium dense dark brown SAND with silt		SPT 7	4-5-5 (10)						
15											
				SPT 8	7-9-8 (17)						
20			20								
		Bottom of borehole at 20.0 feet.									

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GSE Engineering & Consulting, Inc.
5590 SW 64th Street, Suite B
Gainesville, Florida 32608
Telephone: (352) 377-3233
Fax: (352) 377-0335

BORING NUMBER B-3

CLIENT Concept Development, Inc.

PROJECT NAME Commercial Retail - Lake City

PROJECT NUMBER 13843

PROJECT LOCATION Lake City, Columbia County, Florida

DATE STARTED 12/15/18 COMPLETED 12/15/18

GROUND ELEVATION _____ HOLE SIZE _____

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Mud Rotary

▼ AT TIME OF DRILLING 2.3 FT

LOGGED BY WDI CHECKED BY JTP

▼ ESTIMATED SEASONAL HIGH 1.5 FT

NOTES _____

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲
0											20 40 60 80
		(SP-SM) Very loose dark brown and gray SAND with silt									
			2.5	SPT 1	2-2-2 (4)						
		(SP-SC) Very loose to loose brown and tan SAND with clay									
				SPT 2	2-3-2 (5)						
5				SPT 3	3-2-3 (5)						
			7	SPT 4	2-2-2 (4)						
		(SP-SM) Loose brown SAND with silt							6.8	21	
			8.5	SPT 5	1-3-4 (7)						
		(SP-SM) Loose to medium dense dark brown SAND with silt									
				SPT 6	3-3-4 (7)						
10											
				SPT 7	3-4-6 (10)						
15											
				SPT 8	7-11-13 (24)						
20		Bottom of borehole at 20.0 feet.	20								

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GSE Engineering & Consulting, Inc.
5590 SW 64th Street, Suite B
Gainesville, Florida 32608
Telephone: (352) 377-3233
Fax: (352) 377-0335

BORING NUMBER B-2

CLIENT Concept Development, Inc.

PROJECT NAME Commercial Retail - Lake City

PROJECT NUMBER 13843

PROJECT LOCATION Lake City, Columbia County, Florida

DATE STARTED 12/15/18 COMPLETED 12/15/18

GROUND ELEVATION _____ HOLE SIZE _____

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Mud Rotary

▽ AT TIME OF DRILLING 2.0 FT

LOGGED BY WDI CHECKED BY JTP

▽ ESTIMATED SEASONAL HIGH 1.5 FT

NOTES _____

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲
0											20 40 60 80
		(SP) Very loose to loose brown and tan SAND									
	▽			SPT 1	2-2-2 (4)						
	▽			SPT 2	2-3-5 (8)						
5				SPT 3	4-3-4 (7)						
			5.5								
		(SP-SM) Very loose brown SAND with silt		SPT 4	2-2-1 (3)						
			7								
		(SP-SM) Very loose to medium dense dark brown SAND with silt		SPT 5	2-1-2 (3)						
				SPT 6	2-3-4 (7)						
10											
				SPT 7	3-3-4 (7)				8.4	23	
15											
				SPT 8	8-11-12 (23)						
20			20								
		Bottom of borehole at 20.0 feet.									

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GSE Engineering & Consulting, Inc.
5590 SW 64th Street, Suite B
Gainesville, Florida 32608
Telephone: (352) 377-3233
Fax: (352) 377-0335

BORING NUMBER B-1

CLIENT Concept Development, Inc.

PROJECT NAME Commercial Retail - Lake City

PROJECT NUMBER 13843

PROJECT LOCATION Lake City, Columbia County, Florida

DATE STARTED 12/15/18 COMPLETED 12/15/18

GROUND ELEVATION _____ HOLE SIZE _____

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS:

DRILLING METHOD Mud Rotary

▽ AT TIME OF DRILLING 2.0 FT

LOGGED BY WDI CHECKED BY JTP

▽ ESTIMATED SEASONAL HIGH 1.5 FT

NOTES _____

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	CONTACT DEPTH (ft)	SAMPLE TYPE NUMBER	BLOW COUNTS (N VALUE)	LIQUID LIMIT, %	PLASTIC LIMIT, %	PLASTICITY INDEX	PERCENT PASS NO. 200 SIEVE	MOISTURE CONTENT, %	▲ SPT N VALUE ▲
0											20 40 60 80
		(SP-SM) Very loose to loose dark brown and gray SAND with silt		SPT 1	1-2-1 (3)						
			4	SPT 2	2-2-3 (5)						
5		(SP-SC) Loose brown and tan SAND with clay		SPT 3	3-3-4 (7)						
				SPT 4	2-3-3 (6)						
			8.5	SPT 5	2-3-4 (7)						
10		(SP-SM) Loose to medium dense dark brown SAND with silt		SPT 6	4-3-4 (7)						
				SPT 7	4-3-4 (7)						
15				SPT 8	6-8-12 (20)						
20		Bottom of borehole at 20.0 feet.	20								

5.2 Standard Penetration Test Soil Boring Logs



GSE Engineering & Consulting, Inc.
 5590 SW 64th Street, Suite B
 Gainesville, Florida 32608
 Telephone: (352) 377-3233
 Fax: (352) 377-0335

CLIENT Concept Development, Inc.

PROJECT NAME Commercial Retail - Lake City

PROJECT NUMBER 13843

PROJECT LOCATION Lake City, Columbia County, Florida

DATE PERFORMED 12/15/2018 **BORING NUMBER P-3**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▽ AT TIME OF DRILLING 1.5 FT CHECKED BY JTP

▽ ESTIMATED SEASONAL HIGH 1.5 FT

NOTES _____

DATE PERFORMED 12/15/2018 **BORING NUMBER P-4**

DRILLING CONTRACTOR Whitaker Drilling, Inc.

GROUND WATER LEVELS: LOGGED BY WDI

▽ AT TIME OF DRILLING 2.7 FT CHECKED BY JTP

▽ ESTIMATED SEASONAL HIGH 1.5 FT

NOTES _____

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DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION	DEPTH (ft)	GRAPHIC LOG	SAMPLE TYPE NUMBER	MATERIAL DESCRIPTION
0.0				0.0			
		AU 1	(SP-SM) Dark brown and gray SAND with silt %PASS - 200 = 7.4 MC = 19 $k_h = 2.9 \text{ ft/day}$			AU 1	(SP-SM) Dark brown and gray SAND with silt
		PS	▽				▽
2.5				2.5			
		AU 2	(SP-SC) Brown and tan SAND with clay			AU 2	(SP-SC) Brown and tan SAND with clay
5.0				5.0			
		AU 3	(SP-SM) Dark brown SAND with silt			AU 3	(SP-SM) Dark brown SAND with silt
7.5				7.5			
		AU 4				AU 4	
10.0				10.0			
12.5				12.5			
15.0				15.0			
			Bottom of borehole at 15.0 feet.				Bottom of borehole at 15.0 feet.