Florida Department of
TRANSPORTATION

DRAFT POND SITING REPORT

Florida Department of Transportation
District Five

PROJECT DEVELOPMENT AND ENVIRONMENT STUDY
I-75 (SR 93) at NW 49th Street

Marion County, Florida
Financial Management Number: 435209-1-22-01
ETDM Number: 14242

OCTOBER 2020

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. §327 and a Memorandum of Understanding dated December 14, 2016, and executed by the Federal Highway Administration and FDOT.

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PROFESSIONAL ENGINEER CERTIFICATE

I hereby certify that I am a registered professional engineer in the State of Florida practicing engineering with Metric Engineering, Inc. and I have reviewed or approved the evaluation, findings, opinions and conclusions as reported for:

PROJECT:	**I-75 (SR 93) at NW 49th Street PD&E**
FINANCIAL PROJECT NUMBER:	**435209-1-22-01**
LOCATION:	**Marion County**
CLIENT:	**Florida Department of Transportation**

This Drainage Report includes a summary of data collection efforts, calculations, and an overall drainage review prepared for the I-75 at NW 49th Street PD&E Study in Marion County.

I acknowledge that the procedures and references used to develop the results contained in this report are standard to the professional practice of transportation engineering and planning as applied through professional judgements and experience.

Florida Registered Engineer:

Name: Michael A. Holt, P.E.

THE FINAL PSR WILL BE SIGNED & SEALED.

Registration Number: FL # 76111

Signature:

Date:

EXECUTIVE SUMMARY

The Florida Department of Transportation (FDOT) in conjunction with Marion County is conducting a Project Development and Environment (PD&E) Study for a new interchange on Interstate 75 (I-75) at NW 49 Street, located just west of the City of Ocala in Marion County, Florida.

The goal of the NW 49th Street and I-75 Interchange Project Development and Environment (PD&E) study is to develop a proposed improvement strategy that is technically sound, environmentally sensitive and publicly acceptable. As with every PD&E study, emphasis has been placed on the development, evaluation and documentation of detailed engineering and environmental studies including data collection, conceptual design, environmental analyses, project documentation and the preparation of a Pond Siting Report.

After a comprehensive evaluation process, one alternative was selected as being the most effective option. The recommended alternative (shown on **Appendix A, Figure 2**), diverging diamond interchange (Alternative 3), consists of a diamond interchange in which the two directions of traffic on the minor road (NW 49th Street) crossover, or diverge, to the opposite side between the signalized crossover intersections at the on/off ramps. This eliminates the need for left-turning vehicles to cross the paths of approaching through vehicles, facilitating operational maneuvers and eliminating the potential for side-impact crashes. This allows for a simple two-phase operation at the two signalized intersections within the interchange (no left turns), thus improving efficiency. The recommended alternative also includes the extension of NW 49th Street from NW 44th Avenue to Marion County's future NW 35th Street extension (currently in final design). The proposed typical section for NW 49th Street (shown in **Appendix B**) will feature four 12-foot travel lanes with 7-foot bicycle lanes, a 28-foot raised median, and 6-foot sidewalk. The proposed right-of-way for NW 49th Street is 120 feet. NW 49 Street will curve towards the south east of I-75 to connect to Marion County's future NW 35 Street extension (Phase 2B) connection through the Magnum Materials Mine which is funded for construction in 2021 by the County. At the western limit, the proposed NW 49 Street will tie in to the existing NW 49 Street at the NW 44 Avenue intersection. Improvements at the NW 44 Avenue intersection include the addition of a northbound right turn lane and a southbound left turn lane for access to the proposed NW 49 Street and interchange ramps. Additionally, based on the preliminary profile of NW 49 Street, the intersection of NW 44 Avenue would need to be reconstructed to raise the profile approximately 2 feet.

This Pond Siting Report presents the results of hydraulic and hydrologic analyses of the project corridor and proposed improvements. Based on offsite topography and permitted mainline conditions, 5 onsite drainage basins were delineated for this project, along with the appropriate offsite basins. The drainage basin boundaries were delineated using 1-foot contour lidar data, available survey data, and information from ERP #19796-1. The hydrological basins are considered closed basins since they flow to localized depressional areas with no discharge into receiving water bodies. There is no history of flooding along the project corridor. See **Figures 7 and 8** for existing and proposed basin boundaries. Stormwater treatment and attenuation is

addressed via a mix of dry linear swales and dry stormwater ponds as described in the following sections of this report.

The project corridor is within Sections 26, 27, 34, & 35 of Township 14 South and Range 21 East. The purpose of this Pond Siting Report is to discuss the proposed stormwater management plan for the project. Two alternative approaches were established for all basins not proposed to contain treatment and attenuation within the right-of-way. One stormwater approach per basin has been identified as the recommended alternative. There are proposed pond sites in offsite areas which will R/W acquisition. Alternative pond sites were not evaluated for the northern (Basin G2) and southern (Basin D) basins as they are proposed to be treated within the right-of-way. Local topography prevents conveyance of stormwater runoff back to the interchange from these two basins, and regrading of the roadside swale areas is anticipated to provide the treatment/attenuation needed for these basins. The Datum used in design calculations and construction plans is 1988 NAVD.

Existing Drainage Conditions

The proposed I-75 and NW 49th Street interchange basin area is located primarily within the jurisdiction of the St. Johns River Water Management District (SJRWMD) and hydrologically within the Silver Springs Watershed Area within the Ocklawaha River Basin. I-75 forms the boundary between two designated Basin Management Action Plans (BMAPs), but runoff from the project area flows to localized depressional areas which are landlocked, and there is no surface flow contributions to the springs associated with these BMAPs. The western edge of I-75 is the dividing boundary between SJRWMD to the east and South West Florida Water Management District (SWFWMD) to the west (see **Figure 2**). Roadway runoff from I-75 corridor is currently collected in roadside dry retention swales. Runoff on the east side of I-75 generally drains from south to north towards a low-lying area. Runoff on west side of I-75 generally drains toward NW 44th Ave. There are (3) three cross drains functioning as equalizer pipes and/or emergency “pop-offs” between existing dry retention swales. The dry retention swales utilize a series of ditch blocks to collect and treat runoff from I-75. The existing I-75 corridor is permitted with Saint Johns River Water Management District (SJRWMD Permit #19796-1). Data from this permit and the associated as-builts was used to establish the basin areas for this project (see **Figure 7**), and relevant excerpts are included in **Appendices H & D**. There are no FEMA regulated floodways within the limits of the project. Most of the project area is located outside of the floodplain however, there are areas on the east side of I-75 designated as Zone AE (see **Figure 5**). Existing land use is predominantly mining and agricultural/rural with some commercial sites. Commercial sites are located primarily on the west side of I-75 (see **Figure 4**).

Beginning at the southern limits, basins were established as basins D, E, and F. The northern half of the project area (originally permitted as basin G) was divided into G1 and G2, and offsite basins were identified along the western and eastern alignments of the NW 49 Street overpass. These basins are described in more detail in **Section 5.0** of this report.

Proposed Drainage Conditions

Drainage and stormwater management facilities were estimated for the preferred alternative. In general the northern and southern limits of the existing drainage boundaries along I-75 were

maintained in the proposed conditions, while the eastern/western boundaries were adjusted as necessary to include the interchange and NW 49th Streeet. In addition to Basins D, E, F, G1, & G2 as described above, the eastern alignment of the NW 49th Street overpass was designated as Basin 49. These basins are described in **Section 6.0** of this report.

The proposed stormwater management plans include offsite dry retention ponds and roadside dry retention swales with intermittent ditch blocks. Recommended ponds are shown in **Figure 9** and summarized in **Table 1** below. These measures will provide required treatment and attenuation volume. Additional right-of-way will be required for proposed pond sites. The recommended stormwater management facilities are not expected to have significant environmental, wildlife, floodplain, or cultural resource impacts.

The project will not have adverse impacts to the area's water quality and quantity. The design of the stormwater management facilities for the project is governed by the rules set forth by the SJRWMD and FDOT. Water quality and water quantities requirement will comply with the guidelines as defined in Chapter 40D-4 of the Florida Administration Code (F.A.C) and the SJRWMD Environmental Resource Permit (ERP) Applicant's Handbook. Due to the landlocked nature of the basins and floodplains within the area, critical duration analysis should be performed during final design to comply with FDOT Rule Chapter 14-86 F.A.C. For the purposes of this report, the SWFWMD 25 year/24 hour, the SJRWMD 10 year/24 hour and 25 year/96 hour, and the FDOT 100 year/10 day storms have been evaluated. Attenuation was calculated based on the largest difference in pre-post runoff volume (resulting from the 100 year/10 day storm). The results are included in **Appendix C**, and a summary table showing the pre-development vs. post-development discharge in the 100 year/10 day storm event is included with the post-development model results.

Table-1 Summary of Recommended Stormwater Management Approach

Basin	Recommended Ponds	Pond Selection Justification
D	Dry Retention Swales	The recommended dry retention swales are located within the proposed FDOT R/W. Additional pond sites are not necessary since the swales will provide sufficient storage for treatment, attenuation and floodplain compensation.
E	Pond E-3	Pond E-3 is recommended and will provide volume sufficient for treatment and attenuation.
F	Pond F-1	Pond F-1 is recommended and will provide volume sufficient for treatment and attenuation.
G1	Pond G1-1	Pond G1-1 is recommended and will provide volume sufficient for treatment and attenuation.
G2	Dry Retention Swales	The recommended dry retention swales are located within the proposed FDOT R/W. Additional pond sites are not necessary since the swales will provide sufficient storage for treatment, attenuation and floodplain compensation.
49	Pond 49-1	Pond 49-1 is recommended and will provide volume sufficient for treatment and attenuation.

1.0 INTRODUCTION

The Florida Department of Transportation (FDOT) in conjunction with Marion County is planning to provide a new I-75 interchange at NW 49th Street just west of the City of Ocala, Florida. The proposed interchange is needed to support the economic viability of the Ocala 489, a 489-acre industrial and commercial development, which is intended to serve as an economic engine for job creation in the region.

The project is in both the St Johns River Water Management District (SJRWMD) and the Southwest Florida Water Management District (SWFWMD). I-75 acts as the divider between the two Water Management Districts. Please refer to the WMD Boundary Map (**Figure 2**). I-75 is under the jurisdiction of and permitted by SJRWMD and NW 44th Ave is permitted by SWFWMD. An inter-agency agreement between the Water Management Districts will be required to designate the responsible agency for this project. The project location and vicinity are shown in **Figure 1**. The proposed typical section is provided in **Appendix B**.

This Pond Siting Report presents the results of hydraulic and hydrologic evaluation of the project corridor and proposed improvements. This report discusses the recommended stormwater management plan for the project, identifies potential pond locations, and discusses the right-of-way requirements associated with recommended pond sites. A description of the proposed pond sites is in Section 8.0 of this report and recommended and alternate pond site exhibits are shown in **Figure 9.**

2.0 PROJECT DESCRIPTION

The project is located 4.5 miles northwest of the City of Ocala and 2 miles north of US 27. Please refer to Project Location Map and USGS Map (**Figures 1 and 3**). The proposed interchange on I-75 at NW 49th Street will serve the growing community in the area.

After a comprehensive evaluation process, one interchange alternative was selected as being the most effective option. The recommended alternative (shown on **Appendix A, Figure 2**), diverging diamond interchange (Alternative 3), consists of a diamond interchange in which the two directions of traffic on the minor road (NW 49th Street) crossover, or diverge, to the opposite side between the signalized crossover intersections at the on/off ramps. This eliminates the need for left-turning vehicles to cross the paths of approaching through vehicles, facilitating operational maneuvers and eliminating the potential for side-impact crashe.This allows for a simple two-phase operation at the two signalized intersections within the interchange (no left turns), thus improving efficiency. The recommended alternative also includes the extension of NW 49th Street from NW 44th Avenue to Marion County's future NW 35th Street extension (currently in final design). NW 49th Street (shown in **Appendix B**) will feature four 12-foot travel lanes with 7-foot bicycle lanes, a 28-foot raised median, and 6-foot sidewalk. The proposed right-of-way for NW 49th Street is 122 feet. NW 49 Street will curve towards the south east of I-75 to connect to Marion County's future NW 35 Street extension (Phase 2B) connection through the Magnum Materials Mine which is funded for construction in 2021 by the County. At the western limit, the proposed NW 49 Street will tie in to the existing NW 49 Street at the NW 44 Avenue intersection. Improvements at the NW 44 Avenue intersection include the addition of a northbound right turn lane and a southbound left turn

lane for access to the proposed NW 49 Street and interchange ramps. Additionally, based on the preliminary profile of NW 49 Street, the intersection of NW 44 Avenue would need to be reconstructed to raise the profile approximately 2 feet.

The datum used for this project is in 1988 NAVD. The conversion from 1929 NGVD to 1988 NAVD is (-)0.925. (See **Appendix I**)

3.0 DATA COLLECTION

Data was collected and reviewed from the following sources:

- Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs)
- Natural Resources Conservation Service (NRCS) maps
- United States Geological Survey (USGS) maps
- Site Visits
- Interviews with FDOT Maintenance Staff
- State LiDAR Data
- Marion County Tax Maps
- Marion County LiDAR data
- SJRWMD E-Permit Site
- SWFWMD E-Permit Site
- Topographic Survey
- FDEP Map Direct GIS data

4.0 DESIGN CRITERIA

The design criteria for stormwater management facilities for this project are governed by the rules and criteria set forth by the permitting agency and the FDOT. I-75 has dry retention swale systems in this area permitted by St. Johns River Water Management District (SJRWMD) which discharge primarily to the east. As a portion of the interchange footprint will be within SWFWMD, an interagency agreement is expected for a single permit with SJRWMD. For this reason, the criteria from the 2013 SJRWMD Applicant's Handbook and the 2013 SJRWMD Permit Information Manual are considered for the PD&E Study, in conjunction with the 2020 FDOT Drainage Manual.

Per SJRWMD design criteria, discharge from this project will not cause an increase in the total pre-development flood stage. In determining the treatment volume of direct runoff, dry retention system criteria was used for this analysis. All basins within the project area were delineated and evaluated through review of U.S.G.S. Quadrangle Sheets, Aerial Photogrammetry, SJRWMD topographical maps, available topographic survey, existing permit data, existing construction plans and field verification of offsite contributing areas.

Water Quality and Pond Recovery

- Dry Retention (on-line) systems are expected based on the available geotechnical information. SJRWMD criteria for dry ponds includes:
    1. Treatment Required: Greater of 0.5" over the basin or 1.25" over the impervious area

2. On-line retention of an additional 0.5” of runoff from the drainage area over the larger volume specified above.
3. Recover treatment volume within 72 hours following a storm event assuming average antecedent moisture condition.
4. For closed basins the required runoff storage volumes should recover within 14 days after the storm event.

Water Quantity

The project area drains to offsite floodplains and/or depressional areas which are landlocked. Based on closed basin criteria, dry retention ponds will:

- Retain the difference between the pre- and post-development runoff volume for the 100yr-10day, 25yr-24hr and 25yr-96hr storm events.
- Fully recover the stormwater attenuation runoff volume within 14 days through percolation. Ponds that do not meet the recovery criteria via percolation through native soils should demonstrate that a subsequent “stacked” design storm event can be contained without increase in discharge as compared to the pre-development basin conditions.
- As part of the design criteria, systems in the Ocklawaha River Hydrologic Basin must:
    - Meet applicable discharge criteria for the 10-year and 25-year frequency storms.
    - On-site storage and outlet capacity should be designed for the 25-year event.
    - Outlet capacity design should be checked and further refined, if necessary, for the 10-year event.

Pond Configuration (FDOT Criteria)

To establish the right-of-way requirements for proposed ponds, the following design features were considered:

- Ponds have been sized to provide a minimum 20 foot of horizontal clearance between the front of the berm and the right-of-way line.
- Maintenance berm shall be at least 15 feet with a slope of 1:8 or flatter.
- Corners of ponds set to provide an acceptable turning radius for maintenance equipment (30-foot minimum inside radius).
- 1-foot freeboard above maximum design stage below front of maintenance berm.

5.0 EXISTING CONDITIONS

The proposed I-75 and NW 49th Street interchange basin area is located primarily within the jurisdiction of the St. Johns River Water Management District (SJRWMD) and hydrologically within the Silver Springs Watershed Area within the Ocklawaha River Basin. I-75 forms the boundary between two designated Basin Management Action Plans (BMAPs), but runoff from the project area flows to localized depressional areas which are landlocked, and there is no surface flow contribution to the springs associated with these BMAPs. The western edge of I-75 is the dividing boundary between SJRWMD to the east and South West Florida Water Management District (SWFWMD) to the west (see **Figure 2**).

5.1 SOILS AND GEOTECHNICAL DATA

The NRCS Soil Survey of Marion County published by United States Department of Agriculture (USDA) has been reviewed for the project. The NRCS USDA Soil Survey map for the project is shown in **Appendix A**. The soil report for this project is also provided in **Appendix J**. The information from the soil survey indicates that the surficial soils consist of fine sandy well-drained soil with very little low permeability loam. In general, the groundwater is expected to be encountered at a depth of 3 to 6 ft below the existing ground. **Table 2** outlines the most commonly occurring soils expected within the project area.

Table 2 – USDS NRCS Soil Survey Information

Soil No.	Marion County USDA Soil Name	Hydrologic Soil Group
7	Udalfic Arents, 0 to 5 percent slopes	A
8	Udalfic Arents, 15 to 60 percent slopes	A
9	Arredondo sand, 0 to 5 percent slopes*	A
10	Arredondo sand, 5 to 8 percent slopes	A
17	Blichton sand, 2 to 5 percent slopes	C/D
22	Candler sand, 0 to 5 percent slopes	A
32	Fellowship gravelly loamy sand, gravelly subsoil variant, 5 to 8 percent slopes	D
35	Gainesville loamy sand, 0 to 5 percent slopes*	A
37	Hague sand, 2 to 5 percent slopes*	A
38	Hague sand, 5 to 8 percent slopes	A
43	Kanapaha wet, fine sand, 0 to 5 percent slopes	A/D
44	Kendrick loamy sand, 0 to 5 percent slopes	A
46	Lochloosa fine sand, 0 to 5 percent slopes	A
47	Lochloosa fine sand, 5 to 8 percent slopes	B
50	Micanopy fine sand, 2 to 5 percent slopes	C
57	Borrow pits	N/A
65	Sparr fine sand, 0 to 5 percent slopes	A
69	Tavares sand, 0 to 5 percent slopes	A
75	Wacahoota gravelly sand, gravelly subsoil variant, 5 to 8 percent slopes	B/D
77	Zuber loamy sand, 2 to 5 percent slopes	C
78	Zuber loamy sand, 5 to 8 percent slopes	C
99	Water	N/A

An * denotes soils expected within the actual area of the interchange ponds.

A report on the findings from preliminary geotechnical exploration was provided in May 2019. Data from this report has been used in modeling the expected performance of the proposed stormwater treatment facilities. The geotechnical data indicated an extreme variability in the soil conditions, and noted the presence of poorly drained clayey/plastic soils throughout much

of the project area, with the estimated confining layer at or near the ESHW (i.e. "perched" groundwater conditions). These conditions are reflected in the provided conductivity rates, which show a wide range of values.

5.2 LAND USE

The existing land use along the proposed NW 49th St is a mixture of pasture, woods, commercial uses, and highway. The western portion of the project consists primarily of commercial development and low to medium density residential, and the eastern portion consists mainly of pasture/cropland, woods and mining area. Please refer to **Figure 4** for a Land Use Map.

5.3 DRAINAGE PATTERNS

The elevation within the project boundaries varies from 64 to 130 feet. The east side of project (east of I-75) generally drains from south to north towards a defined depressional area just north east of the proposed interchange. The west side of the project (west of I-75) slopes generally west toward NW 44th Ave. Please refer to the Pre-Development Drainage Map and USGS Quadrangle Map (**Figures 7 and 3**). Drainage from I-75 is collected in roadside dry retention swales with intermittent ditch blocks along the project corridor. The I-75 corridor was permitted with SJRWMD under permit #19679-1. Data from this permit was used to establish the sub-basin areas for this project (See **Appendix D & H** for excerpts from the plans and and permit).

Offsite runoff generally drains away from the I-75 corridor into localized depressional areas. On the west side, businesses like Barracuda Boat and RV Storage and MARK III Industries collect runoff and drain it into stormwater ponds. The Barracuda dry pond bottom elevation is 73.0 ft NAVD, refer to **Appendix E**. NW 44th Ave is owned by the County and drainage is collected in a closed drainage system and discharged into dry retention Pond # 3 (elevation 71.0 ft NAVD). Please refer to **Appendix G** for permitted plans for NW 44th Ave. On the east side offsite flow in the area of the interchange is generally from south to north, into an depressional floodplain area (designated Depressional Area 1 in this report).

The project is located within closed basins and runoff generally drains into low lying areas and percolates into ground with no surficial discharge into named receiving water bodies.

Beginning at the southern limits, basins were established as basins D, E, and F according to the originally permitted conditions. The northern half of the project area (originally basin G) was divided into G1 and G2, and an offsite basin was identified along the western and eastern alignments of the NW 49th Street overpass. Please refer to existing condition drainage map (**Figure 7**) and basin descriptions below. Note that the modeling for Basins F, G1, and G2 was performed consistent with the permitted conditions, and the nodes broken down in the original sub-basins as described below. An aerial map depicting these sub-basins has been included with the post-development ICPR node-link diagram for clarity.

Basin D

Basin D limits are from approximately station 2434+00 to 2455+00. Basin D flows to permitted dry swales along the eastern right-of-way, which stage up and pop off to a localized

depressional area via a weir located at approximate station 2446+00.

Basin E

Basin E is comprised of the southbound roadway from station 2455+00 to 2475+00. Basin E flows to permitted dry swales located along the western right-of-way. This basin pops off near station 2475 into an offsite bypass ditch along the north side of the Barracuda Boat and RV Storage property which flows west into an inlet and is conveyed to Marion County Pond 3.

Basin F

Basin F is comprised of the northbound roadway from station 2455+00 to 2482+00. Basin F flows to permitted dry swales located along the eastern right-of-way. The ICPR model for Basin F includes Basins F1, F2, F3, and F4. Basin F-4 pops off via a ditch block to the north into Basin G1, with an emergency pop off provided via CD-2 towards the Basin E outfall.

Basin G1

The originally permitted Basin G was divided into basins G1 and G2. Basin G1 goes from Basins E & F to station 2495+00. Runoff from the northbound lanes and the easternmost southbound lane and shoulder flows to permitted treatment swales along the eastern right-of-way and pops off via a ditch block into Basin G2. The ICPR model for Basin G1 includes Basins G1, G2, and G3. Basin G-3 pops off via a ditch block to the north into Basin G2 (sub-basin G4). The outside southbound lanes and shoulder flow to the west, and are conveyed to the north into Basin G2.

Basin G2

Basin G2 goes from station 2495+00 to 2515+00, and also includes the 2 outside southbound lanes beginning at approximate station 2478+00, which flow into roadside ditches and are conveyed to the north towards the permitted swale systems. Runoff from the southbound roadway flows to permitted treatment swales along the western right-of-way (connected to the eastern swales by CD-3). Runoff from the northbound roadway flows to permitted treatment swales along the eastern right-of-way and pop off into an offsite depressional area east of I-75 (designated as Depressional Area 2 for the purposes of this report). The ICPR model for Basin G2 includes Basins G4 thru G7 (east side) and G9 thru G14 (west side). Basin G-6 pops off into Depressional Area 2 via a permitted weir structure at approximate station 2500+50.

Offsite Basins

Offsite basins to the west of I-75 generally flow towards NW 44th, with the roadway flowing into a closed storm sewer system conveyed to the Marion County dry retention pond (Pond 3).

A large offsite area to the east of I-75 flows into a localized depressional area (designated Depressional Area 1) which is identified as a FEMA flood zone.

5.4 EXISTING CROSS DRAINS

The proposed NW 49th Street is a new alignment, thus there are no existing cross drains or bridge structures for review. However, the I-75 corridor within the proposed interchange has (3) three cross drains functioning as equalizer pipes and/or emergency “pop-offs” between the existing dry retention swales on the east and west side. All 3 cross drains will be extended to

accommodate the future interchange on and off ramp alignments. The functionality of these cross drains will be maintained, and the recommended improvements do not adversely impact the overall drainage function of I-75. Refer to **Table 3** for existing I-75 cross drain information. The I-75 Straight Line Diagram is in **Appendix K** and identifies each I-75 cross drain**.** Since these cross drains are equalizer pipes a cross drain analysis will be conducted during the design. No significant floodplain impacts are anticipated due to cross drain extensions, although CD-3 will have very minor impacts which will be compensated within the roadside swales.

Table 3 - Existing I-75 Cross Drain General Information

Cross Drain ID	Station Location	Pipe Description	Date of Plan
I-75 CD-1	2447+00	24" RCP	1992
I-75 CD-2	2475+00	24" RCP	1992
I-75 CD-3	2500+00	24" RCP	1992

5.5 FLOODING HISTORY AND MAINTENANCE CONCERNS

During a phone interview with the FDOT maintenance staff at the Ocala Operations Center on 5/2/19, it was indicated that no areas of flooding concern were present along the proposed I-75 and NW 49th Street Interchange area. The staff member, Jeff Purdy, mentioned the existing roadside ditch along I-75, ditch blocks and median drainage pipes had no maintenance issues. The only maintenance issues that were brought to our attention was the median guardrails are too close to each other and mowing is difficult with the standard mowing equipment.

6.0 PROPOSED CONDITIONS

There are two existing I-75 interchanges within the project vicinity. The I-75/US 27 interchange is located approximately 2 miles south of the proposed interchange, and the I-75/SR 326 interchange, approximately 2 miles to the north. An Interchange Justification Report (IJR) completed in May 2016 concluded that the existing I-75 interchange ramp movements and intersections at US 27 and at SR 326 are expected to operate at failing levels of service. A new I-75 interchange at NW 49th Street (approximately midway between the two existing interchanges) is proposed to relieve congestion on the adjacent interchanges. The western limit of this project is NW 44 Avenue (west of I-75) and the eastern limit is the future NW 35 Street extension to the northern end of limerock pit (Magnum Materials Mine), just southeast of the new proposed interchange (Phase 2B). It should be noted that this proposed NW 35 Street extension (Phase 2B) connection will be constructed by the County and is funded for construction in 2021, so it will be completed prior to the interchange being constructed.

In general the northern and southern limits of the existing drainage boundaries along I-75 were maintained in the proposed conditions, while the eastern/western boundaries were adjusted as necessary to include the interchange and NW 49th Streeet. Water quality treatment in the proposed condition will be achieved through the construction of stormwater ponds and expansion/regrading of existing roadside retention swales. Proposed pond bottoms were reviewed with respect to a projected minimum conveyance slope to ensure adequate fall from

the adjacent ramps. A summary table is provided with the post-development model results in **Appendix C**. Due to the landlocked nature of the the project area, a summary of pre-dev vs. post-dev discharge volumes to the depressional areas is also provided.

- Runoff from the western portion of the new NW 49th Street alignment will be collected in a closed drainage system and conveyed into proposed Pond E-3. Discharge from the portion of Ramp D and the I-75 mainline within Basin E will be collected in roadside ditches and will also discharge into Pond E-3. Pond E-3 will discharge into Basin G2.

- Runoff from proposed Ramp A will directly discharge into Pond F-1 via mix of open and closed conveyance systems. Pond F-1 will discharge into Pond 49-1.

- Runoff from the portion of Ramp B within Basin G1 will be collected in roadside ditches and discharge to Pond G1-1.

- Runoff from the eastern portion of the new NW 49th Street alignment will be collected in roadside ditches and discharge to Pond 49-1.

- Due to significant difference in existing ground elevations, roadway runoff south of Basin E and north of basin G1 could not be conveyed to the proposed ponds in the interchange. Therefore, the northern basin (designated as Basin G2) and southern basin (Basin D) will provide treatment and attenuation in the proposed roadside swales.

Runoff from I-75 is currently being treated in the existing roadside treatment swales with series of ditch blocks. The proposed interchange ramps will impact some of the existing swales and ditch blocks. The impacted swales and ditch blocks will be compensated by regrading the existing swales and creating new swales within the proposed right-of-way. Please refer to proposed condition drainage maps (**Figure 8**). Design details for swale grading, ditch blocks locations and pipe connections between swales and proposed ponds shall be analyzed during the final design. Water quality treatment and attenuation for the intersection can be accomplished in the proposed ponds and roadside dry retention swales. The ponds and dry retention swales with intermittent ditch block can provide more than required treatment and attenuation volume. Additional right-of-way acquisition for stormwater management facilities will be required for this project.

6.1 METHODOLOGY OF POND DETERMINATIONS

Based on the available information, only hydraulically feasible and environmentally permittable pond sites were considered for the final recommended pond locations. Potential pond sites were analyzed and evaluated using the following parameters:

- Hydrologic and hydraulic factors such as existing ground elevations, proposed roadway profile, soil types, and estimated seasonal high water table (SHWT) from geotechnical exploration, as well as nearby permitted ponds.
- Regulatory volume requirements for treatment and/or attenuation.
- Potential for impacts to:
    - Cultural resources
    - Historical resources

    - Adjoining land uses
    - Existing landscapes and/or aesthetic effects
    - Environmental resources such as wetlands and threatened/endangered species
    - Floodplain
    - Major utilities
- Potential for the presence of hazardous materials and/or contamination
- R/W and construction costs.

All pond locations which have been reviewed have little to no impact on the above listed parameters, with the exception for the potential for the presence of contaminants. The ponds proposed in the eastern portion of the project presents a medium risk of contaminants due to current/past land uses. More information can be found in the Contamination Screening Evaluation Report (CSER) submitted under different cover. Please note that rankings for potential impacts to the above noted parameters related to each stormwater alternative are included in the Pond Alternative Evaluation Matrix (**Page 20**).

6.2 PROPOSED DRAINAGE PATTERNS

Due to the natural topography and profile of existing I-75, six drainage basins were delineated. Beginning at the southern limits, basins were established as basins D, E, and F according to the originally permitted conditions. The eastern/western boundaries are adjusted as necessary to include the areas of the proposed ramps and ponds. The northern half of the project area (originally permitted as Basin G) was divided into G1 and G2, and an offsite basin was identified along the western and eastern alignments of the NW 49th Street overpass. Offsite drainage generally drains away from the proposed interchange and sheet flows into the depressional area to the east. These existing drainage boundaries will be preserved in the proposed conditions. Due to the landlocked nature of the basins and floodplains within the area, critical duration analysis should be performed during final design to comply with FDOT Rule Chapter 14-86 F.A.C. Note that the modeling for Basins F, G1, and G2 was performed consistent with the permitted conditions, and the nodes broken down in the original sub-basins. An aerial map depicting these sub-basins has been included with the post-development ICPR node-link diagram for clarity. Impacts to existing permitted facilities varies by basin, and the modeling approach is described in more detail below.

Basin D

Basin D limits remain unchanged. Basin D will continue to flow to permitted dry swales along the eastern right-of-way, and will stage up and pop off to a localized depressional area. These swales will be regraded within the proposed R/W to provide the additional volume required to accommodate the limited treatment/attenuation needs for this basin. See **Appendix A** for a conceptual section for the proposed swales. An equalizer pipe will be required to connect storage volumes on each side of the ramp. Volumetric calculations are provided in **Appendix C**.

Basin E

Overall, Basin E basin limits remain unchanged. The western boundary has been adjusted to include the southbound entrance ramp (Ramp D) in proposed Basin E, as well as the western alignment of NW 49th Ave and the portion of the southbound exit ramp (Ramp C) adjacent to Pond E-3. This basin will be collected and conveyed via a mix of open and closed conveyance to

a proposed stormwater pond (Pond E-3) located in the southwest quadrant of the proposed interchange. Runoff will be attenuated to match pre-development conditions, and the pond will outfall via piping into Basin G2. Based on the preliminary PD&E alignment of the ramp, it is expected that the majority of the historical storage provided in the permitted swale systems will be impacted, with insufficient right-of-way to restore these volumes. For this reason, ICPR modeling has been performed under the assumption that all runoff will reach the stormwater pond, and treatment requirements have been based on the pre-permitted conditions. These calculations are provided in **Appendix C**, with excerpts from the permit denoting the original volumes required/provided in **Appendix H**.

Basin F and F-Off

Basin F basin limits remain unchanged. The existing swale systems are not impacted by the PD&E alignment for proposed improvements, and will continue to function as originally designed/permitted to treat and attenuate runoff from mainline I-75. The ICPR model has been set up to model the permitted conditions, including the historical "pop off" into Basin G1. The northbound exit ramp (Ramp A) has been included in proposed Basin F-Off. This basin will be collected and conveyed via via a mix of open and closed conveyance to a proposed stormwater pond (Pond F-1) located in the southeast quadrant of the proposed interchange. Runoff will be attenuated to match pre-development conditions, and the pond outfall will be connected to Pond 49-1. As a conservative measure, stormwater treatment calculations include a portion of "untreated impervious" area from the SE end of the project. Once the final alignment/profile has been established during the design phase, an evaluation of the potential for regrading within the existing right-of-way to provide required regulatory volumes should be conducted.

Basin G1

Overall, Basin G1 basin limits remain unchanged. The eastern boundary has been adjusted to include the portion of the northbound entrance ramp (Ramp B) in proposed Basin G1. The permitted swales within this basin are not impacted, and will continue to provide treatment/attenuation as designed. The ICPR model has been set up to model the permitted conditions, however swale G3 will be reconfigured to pop off to the east into a proposed stormwater pond (Pond G1-1) located in the northeast quadrant of the proposed interchange. Runoff will be attenuated to match pre-development conditions at the outfall, and the pond will be connected to Depressional Area 1 via a proposed easement. As a conservative measure, stormwater treatment calculations include a portion of "untreated impervious" area from the northern end of the project. Once the final alignment/profile has been established during the design phase, an evaluation of the potential for regrading within the existing right-of-way to provide required regulatory volumes should be conducted.

Basin G2

Overall, Basin G2 basin limits remain unchanged. The eastern/western boundaries have been adjusted to include the portions of Ramps B and C within proposed Basin G2. This basin will continue to flow to permitted treatment swales along the eastern/western right-of-way and pop off into Depressional Area 2. These swales, as well as the original weir will be impacted by the proposed ramp. These swales will be regraded within the proposed right-of-way to provide the required treatment, attenuation, and floodplain compensation volumes, and the weir

reconstructed to maintain historic discharge location. See **Appendix A** for a typical section of the proposed swales. An equalizer pipe will be required to connect the storage volumes on each side of the ramp. Volumetric calculations are provided in **Appendix C**.

Basin 49

Beginning at the crest of the proposed bridge, the eastern alignment of the NW 49th Street overpass was identified as Basin 49. This basin bifurcates a large offsite area historically flowing into Depressional Area 1. While runoff from the eastern and northern portions of this basin will continue to flow unimpeded into this low area, runoff from the southwestern portion of this offsite area will be blocked by the proposed interchange. A cross drain (CD-4) is proposed to maintain discharge in accordance with the historical flow patterns. Runoff from the basin will be collected in a mix of open and closed conveyance systems and conveyed to a proposed stormwater pond (Pond 49-1) located in the northeast quadrant of the interchange. Runoff will be attenuated to match pre-development conditions, and the pond outfall will be connected to Depressional Area 2 via a proposed easement.

7.0 FLOODPLAIN & WETLAND INFORMATION

The Federal Emergency Management Agency (FEMA) has developed Flood Insurance Rate Maps (FIRM) for Marion County. There are no FEMA regulated floodways within the limits of the project. A small segment of the project crosses a FEMA designated Zone AE. The floodplain impact due to the interchange construction will be roughly 3.52 acre-ft. The floodplain encroachment into the project area happens mostly at the northbound entrance ramp to I-75 in the adjacent roadside swales and depressional areas.

Floodplain encroachment can be compensated within the proposed right-of-way in regraded swales with wider footprints to provide storage volume for water quality treatment, attenuation and compensation for floodplain impact. Please refer to **Figure 5** for FEMA floodplain and **Figure 9** for the impacted areas. Most of the project is located outside of the 100-yr floodplain boundary. Additional information is available in the Location Hydraulics report submitted under separate cover.

For wetland impact information please refer to the Natural Resources Evaluation Report submitted under separate cover.

8.0 STORMWATER MANAGEMENT ALTERNATIVES

The stormwater runoff will be routed to the proposed stormwater ponds and roadside dry retention swales for water quality treatment and attenuation. There are 6 basins delineated for this project in the proposed conditions. Multiple stormwater management approaches were considered for all basins, and 2 alternatives validated for each basin except for Basins D and G-2, where proposed treatment and attenuation will be contained within the FDOT right-of-way.

The proposed dry retention ponds and dry retention swales were located such that offsite runoff will not be intercepted by these treatment facilities, except as noted in the ICPR models/subbasin maps. Parcel sizes were established to provide room where grading may be needed to channel offsite runoff around the proposed pond berm. Seasonal highwater elevation for design of the treatment facilities was derived from preliminary geotechnical

exploration at or near the proposed pond locations. It should be noted that original geotechnical exploration was based on parclo interchange concepts, and a limited number of borings are located within the actual footprints of the revised pond locations. Design level geotechnical analysis should be performed during design phase to obtain accurate seasonal highwater elevations.

Permit data from existing ponds constructed in nearby projects was also considered where appropriate. Estimated seasonal high waters from these ponds ranges from 70' to 75'. The nearby mining pit water surface elevation is around 48 ft NAVD and the recently constructed NW 35th /NW 49th St county road Pond DRA B-6 used seasonal highwater table elevation of 47.5 ft NAVD for the roadway design. For this analysis a minimum distance of 1 foot above the estimated seasonal highwater table is used to establish the pond bottom. Generally, the water table profile follows the existing ground at the project site, which falls dramatically approaching the depressional areas.

A table with the ESHW elevations and estimated percolation is included below. Preliminary percolation tests performed within the project area yielded a low percolation rate for many of the borings. However, in the absence of pond design data, the percolation tests were performed 1 to 3 feet deep. Typically, these tests are performed near the proposed pond bottom elevation, which on average is 6-feet deep. It is recommended that additional geotechnical exploration be performed during the design phase based on the projected pond depths. SJRWMD criteria requires that dry ponds draw down treatment volumes within 72-hours and attenuation volume within 14-days. Preliminary recovery analysis indicates that the proposed ponds and swales will recover the treatment and attenuation volumes via percolation within regulatory timeframes. Ponds that do not meet the recovery criteria via percolation through native soils can demonstrate that a subsequent "stacked" design storm event can be contained without increase in discharge as compared to the pre-development basin conditions.

Table 4 – Preliminary Geotechnical Information Information

Pond	Pond Boring #	Reported ESHW	Average ESHW	Reported Vertical Hydraulic Conductivity	Average Vertical Hydraulic Conductivity
49-1	PBS-9 PBS-10 PBS-11	71.2 74.2 72.4	72.6	2 2 4	2.67
E-3	PBS-1 PBS-2 PBS-23 PBS-24	73.6 80.4 73.2 74.2	75.35	3 5 --- 40	16.00
F-1	PBS-13 PBS-14	69.5 82.9	76.2	2 4	3.00
G1-1	PBS-36 PBS-38	61.5 63.7	62.6	15 5	10.00

Based on the project location in a groundwater recharge and sensitive karst area, a minimum of 3-feet of unconsolidated soil material is required between the surface of the limestone bedrock

and the bottom and sides of the stormwater basin. In addition, the maximum basin depth must be less than 10-feet. During design, measures should be taken to prevent stormwater runoff from percolating directly into karst areas. Where feasible, pre-treatment in swales should be provided during design before discharging into the treatment ponds. Detailed geotechnical analysis should be performed during the design phase to identify any locations of karst concern. If karst formations are identified, consideration may be given to the placement of liners below the treatment facilities to avoid stormwater encroachment into limestone and the use of underdrain to discharge the pond into adjacent depressional areas consistent with existing drainage patterns.

Metric also investigated the possibility of purchasing flood rights for the additional runoff from basins 49, F, and G1 that could not be contained within reconstructed swales. Preliminary modeling and volume calculations based on the available LiDAR indicate that the runoff volumes will stage up and pop off into 2 adjacent depressions to the east and north east, requiring the purchase of flood rights in these areas as well. Further review indicates that if one pond is used, then runoff can be contained within depressional area 1 as in historical conditions. Modeling for the flood rights option is included in Appendix C. It should be noted that although the model includes Pond G1-1 as part of this option, it is anticipated that Pond F-1 or Pond 49-1 could be used with similar results. The current FEMA floodplain elevation is 69.70'. ICPR routings for the flood rights option with one pond show the stage rising to 72.37 for the 100-year/24-hour storm event. Due to limited geotechnical exploration within the depression, and as a conservative measure with respect to estimated right-of-way requirements, ponds are recommended. If additional survey and geotechnical data are obtained during the final design process, more detailed analysis of a flood rights alternative can be performed if desired.

Basin D

Basin D lies at the southern end (beginning) of the project. While the general trend of the I-75 mainline profile falls from south to north, there is a localized crest along the northbound exit ramp (Ramp A) that makes it infeasible to convey water from the beginning of the project north to the interchange. However, review of the ramp alignment and profile indicates that there is sufficient space within the proposed right-of-way to regrade the swales to replace impacted volumes and provide the required treatment and attenuation. As this alternative does not require any additional right-of-way, no offsite pond location was identified.

Basin E/F

Basins E & F were originally considered for combined stormwater management. Ponds E-1 (southwestern quadrant of the interchange) and E-2 (southeastern quadrant of the interchange) were reviewed for suitability. The ponds were determined to be inadequate to contain the runoff from the combined basins and they were subsequently split as described below.

Basin E

The original Pond E-1 was located in the southwestern quadrant of the interchange, using a Marion County owned parcel. Based on review of the preliminary geotechnical data, this

option was eliminated due to the reported soil types and parameters. Pond E-2 was renamed F-1 and is described below.

Ponds E-3 and E-4 were established as the viable Basin E alternatives. Pond E-3 is located in the northwestern quadrant of the interchange using both the Marion County owned parcel and an offsite pasture area. Pond E-4 (southwestern quadrant of the interchange) was expanded to include both the Marion County parcel and the Barracuda Boat Storage parcel. While both ponds are of an appropriate size to provide appropriate stormwater management, Pond E-4 would result in business damages. Thus, Pond E-3 is the recommended alternative for Basin E. Preliminary geotechnical data from borings PBS-1, PBS-2, PBS-23, and PBS-24 indicates an average ESHW of 75.35'. The proposed pond bottom is at 79.5'. This allows for enough room to get water from the low point of the proposed Ramp D, which is at 85.05', to the pond.

Basin F and F-Off

Stormwater management approaches reviewed for this basin include an offsite pond, treatment and attenuation within the existing permitted swales, and "flood rights" within the parcel containing the historic point of discharge for the area associated with the eastern portion of the interchange as described above.

While flood rights is a viable option as described above, Pond F-1 recommended, and is located in the southeastern quadrant of the interchange in an offsite pasture area. Basin F flows to swales located in the eastern right-of-way, which will not be affected by the design. Therefore, only Basin F-Off flows to Pond F-1. This pond is of an appropriate size to provide the regulatory volumes for Basin F-Off. Right-of-way will need to be acquired for the construction of this pond. Preliminary geotechnical data from borings PBS-13 and PBS-14 indicates an ESHW of 76.2' in the area of this pond. The proposed pond bottom is at 81.0'. This allows for enough room to get runoff from the low point of the proposed Ramp A, which is expected to be at or above at 88', to the pond.

Basin G1

Stormwater management approaches reviewed for this basin include an offsite pond, treatment and attenuation within the existing permitted swales, and "flood rights" within the parcel containing the historic point of discharge for the area associated with the eastern portion of the interchange as described above.

While flood rights is a viable option as described above, Pond G1-1 is recommended, and is located in the northeastern quadrant of the interchange in an offsite pasture area. Runoff from Basin G1 flows to swales located in the eastern right-of-way, conveniently located adjacent to Pond G1-1. Right-of-way will need to be acquired for the construction of this pond. Preliminary geotechnical data from borings PBS-36 and PBS-38 indicates an ESHW of 62.6' in the area of this pond. The proposed pond bottom is at 74.6'. This allows for enough room to get water from the lowest point of the proposed Ramp B, which is at 79.35', to the pond. The permitted swales within the existing right-of-way are not impacted by proposed improvements, and can remain in service, with the northern-most swale reconfigured to pop-off to the east instead of northward into Basin G2.

Basin 49

Stormwater management approaches reviewed for this basin include an offsite pond, treatment and attenuation within the existing permitted swales, and "flood rights" within the parcel containing the historic point of discharge for the area associated with the eastern portion of the interchange as described above.

While flood rights is a viable option as described above, Pond 49-1 is recommended, and is located in the parcel north east of the proposed interchange, adjacent to the existing depressional area in an offsite pasture area. This pond is of an appropriate size to provide the anticipated volume. Right-of-way will need to be acquired for the construction of this pond. Preliminary geotechnical data from borings PBS-9, PBS-10, and PBS-11 indicates an ESHW of 72.6' in the area of this pond. The proposed pond bottom is at 77.0'. This allows for enough room to get water from the low point of proposed eastern half of the proposed NW 49th Avenue, which is at 82.4', to the pond.

Basin G2

Basin G2 lies at the northern segment (end) of the project. Since the general trend of the I-75 mainline profile falls from south to north, it is infeasible to convey water from the end of the project south to the interchange. However, review of the ramp alignment and profile indicates that there is sufficient space within the proposed right-of-way to regrade the swales to replace impacted volumes, as well as to provide the additional treatment and attenuation volume required. While the precise delineation between Basins G1 and G2 can be established in final design, the boundary was established at a logical division of the individual cells of the swale treatment system(s). As this alternative does not require any additional right-of-way, an offsite pond was not identified.

For more information regarding Pond Sizing, including treatment and attenuation requirements and preliminary geotechnical exploration, please refer to analysis provided in **Appendix C**.

9.0 ENVIRONMENTAL LOOK AROUND

Marion County was contacted as part of the Environmental Look Around evaluation. The county is currently finalizing the design for NW 35th/ NW 49th Street Phase 2B project, which is expected to begin construction in FY 2021. The Phase 2B project will go thru the lime rock mine and the project will have a clean break or crest at the north end of the project where the future FDOT project will tie in. As in existing conditions, this will be the basin divide. All runoff south of the crest will be taken into the dry retention pond constructed for the Phase 2A project. Runoff from the FDOT improvements north of the crest will continue to flow northward and will be routed through the proposed FDOT facilities to the historic outfall. Please refer to meeting minutes in **Appendix L**. As part of the evaluation process, the area BMAPs were also investigated, and discussion held regarding the potential to participate in local agency projects as a means of achieving improvements in the levels of nutrient loading in the Silver Springs. Further review indicated that runoff from the project area flows to localized depressional areas with no surficial connection to the Priority Focus Area (PFA) associated with the Silver Springs watershed, and thus is not a contributory area. This was confirmed in a pre-application meeting with SJRWMD. Metric also investigated the possibility of purchasing flood rights as

described in Section 8 above. Based on the PD&E analysis, the proposed stormwater management approach for each basin is as described in Section 6 above.

10.0 CONCLUSIONS

The Pond Sitting Report has been prepared as part of a PD&E Study for the proposed I-75 and NW 49th St interchange project. The proposed interchange corridor consists of a new alignment, extending NW 49th Street across I-75. The recommended pond sites have been identified to:

- Minimize impacts to residential and commercial properties
- Minimize environmental impacts.
- Minimize floodplain impacts.
- Minimize cultural/sociological impacts

The proposed stormwater management plans include offsite dry retention ponds and roadside dry retention swales with intermittent ditch blocks. These measures will provide required treatment and attenuation volume. Additional right-of-way will be required for proposed pond sites. The recommended stormwater management facilities are not expected to have significant environmental, wildlife, floodplain, or cultural resource impacts. See the alternative evaluation matrix (**Table 6**) for specifics for each site.

The preliminary calculations used to support the recommendations are included in **Appendix C**. Please note that the recommendations are based on preliminary data and calculations, using reasonable engineering judgement and assumptions. The pond sizes and locations are subject to change during final design when detailed data becomes available including permeability rate of soils, estimated seasonal highwater elevations, and final profiles. **Table 5** below shows the summary of recommendations:

Table 5 - Summary of Stormwater Management Recommendations

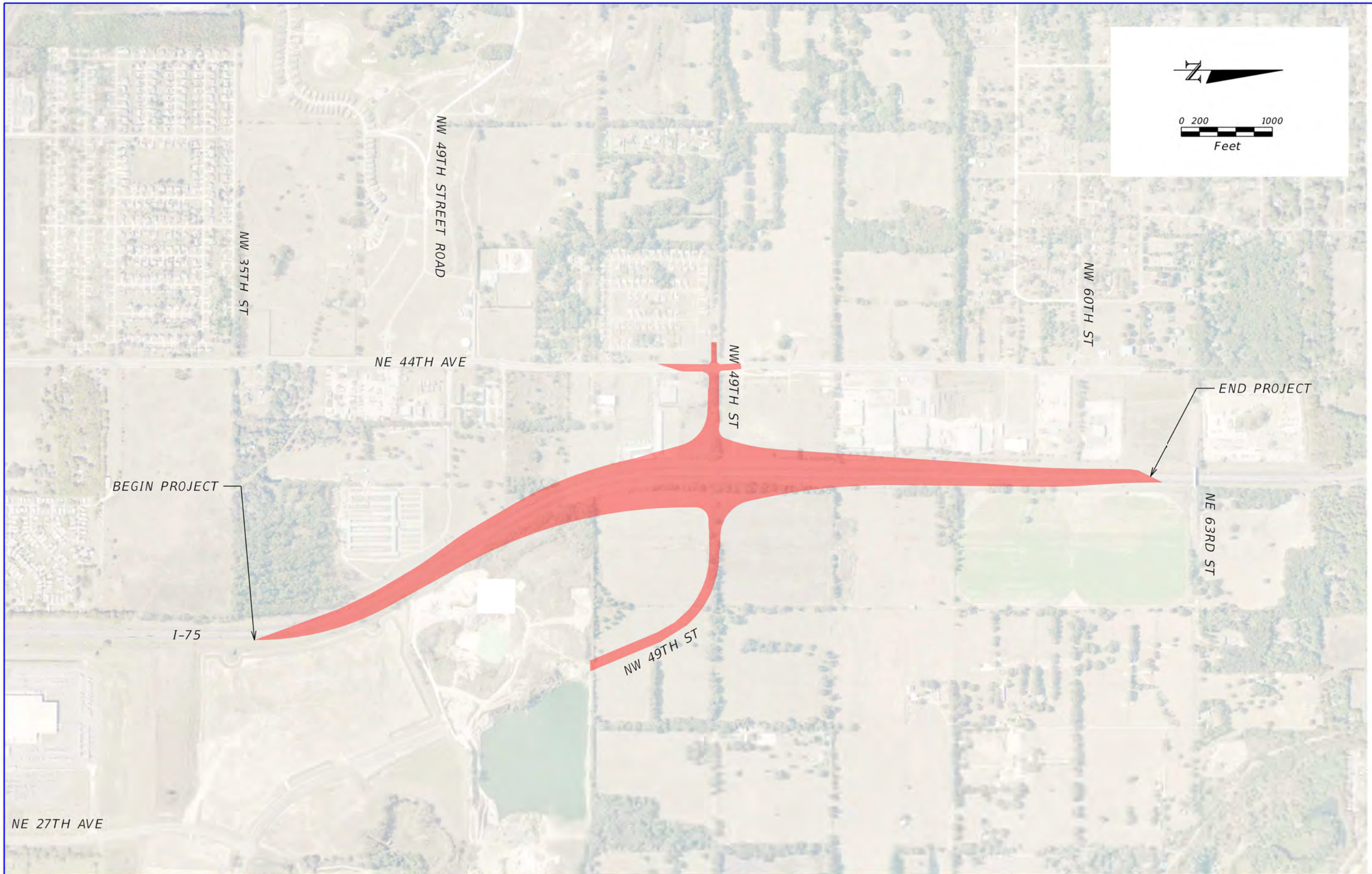
Basin	Recommended Ponds	Pond Selection Justification
D	Dry Retention Swales	The recommended dry retention swales are located within the proposed FDOT R/W. These swales will provide sufficient storage for treatment/attenuation.
E	Pond E-3	Pond E-3 is recommended and will provide volume sufficient for treatment /attenuation.
F	Pond F-1	Pond F-1 is recommended and will provide volume sufficient for treatment /attenuation.
G1	Pond G1-1	Pond G1-1 is recommended and will provide volume sufficient for treatment /attenuation.
G2	Dry Retention Swales	The recommended dry retention swales are located within the proposed FDOT R/W. These swales will provide sufficient storage for treatment, attenuation and floodplain compensation.
49	Pond 49-1	Pond 49-1 is recommended and will provide volume sufficient for treatment /attenuation.

Table-5 Alternative Evaluation Matrix

Basin	Pond Site Alternative	FEMA Flood Zone	Wetland Impacts (acres)	Arch. / Historical Impact Potential	Environmental Impact Risk	Threatened or Endangered Species Impacts	Hazardous Materials & Contamination Potential	Social Impact	Major Utility Conflict Potential (Y/N)	Existing Land Use	Land Use Impacts	Aethetics Impacts	Future Land Use	LRE Construction Cost	Rankings	Remarks
Basin D	Roadside Swales	None	None	None	Low	Not significant	Low	None	None	Cropland, Woods, Roadway	None	None	Roadway	Not Est.	1	Selected Alternative
Basin E	Pond E-3	None	None	Low	Low	Not significant	Low/Medium	None	None	Cropland, Woods	Low	Low	Roadway	$886K	1	Selected Alternative
	Pond E-4	None	None	Low	Low	Not significant	Low/Medium	None	None	Cropland, Woods, Commercial	High	Low	Roadway	$886K	2	
Basin F	Pond F-1	None	None	Low	Low	Not significant	Low/Medium	None	None	Cropland, Woods	Low	Low	Roadway	$457K	1	Selected Alternative
	Flood Rights	None	None	Low	Low	Not significant	Low/Medium	None	None	Cropland, Woods, Commercial	Low	Low	Roadway	N/A	2	
Basin G1	Pond G1-1	None	None	Low	Low	Not significant	Low/Medium	None	None	Cropland, Woods	Low	Low	Roadway	$886K	1	Selected Alternative
	Flood Rights	None	None	Low	Low	Not significant	Low/Medium	None	None	Cropland, Woods	Low	Low	Roadway	N/A	2	
Basin G2	Roadside Swales	AE	None	None	Low	Not significant	Low	None	None	Cropland, Woods, Roadway	None	None	Roadway	Not Est.	1	Selected Alternative
Basin 49	Pond 49-1	None	None	Low	Low	Not significant	Low/Medium	None	None	Cropland, Woods	Low	Low	Roadway	$457K	1	Selected Alternative
	Flood Rights	None	None	Low	Low	Not significant	Low/Medium	None	None	Cropland, Woods	Low	Low	Roadway	N/A	2	

APPENDIX A

Figures



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

METRIC ENGINEERING, INC.
13940 S.W. 136 STREET
SUITE 200
MIAMI, FLORIDA 33186
TEL. (305) 235-5098
FAX. (305) 235-5271
CERTIFICATE OF AUTHORIZATION 2294

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

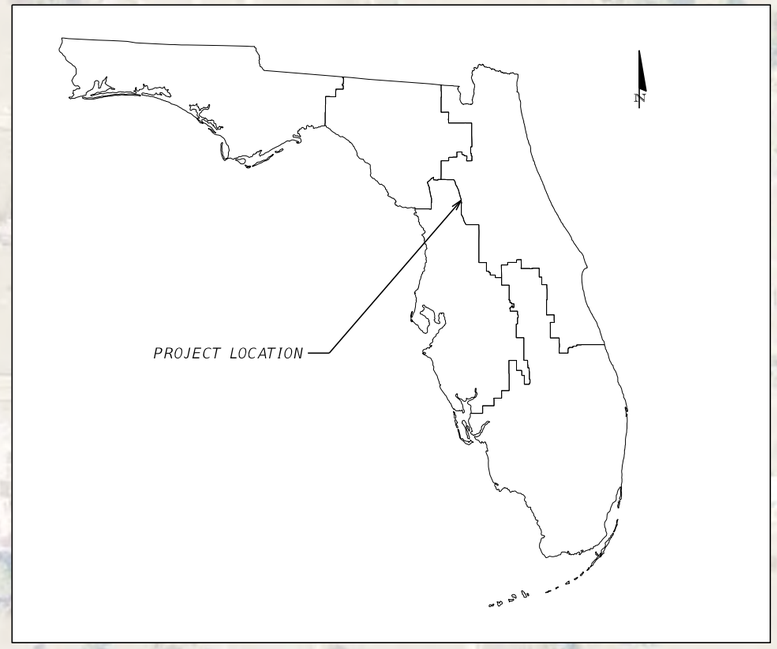
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
I-75	MARION	435209-1-22-01

PROJECT LOCATION MAP
FIGURE 1

SHEET NO. A-1

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N

0 150 600

Feet

NW 44TH AVE

NW 49TH ST

I-75

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

ST JOHNS RIVER WATER MANAGEMENT DISTRICT

WMD BOUNDARY

SOURCE: FDEP

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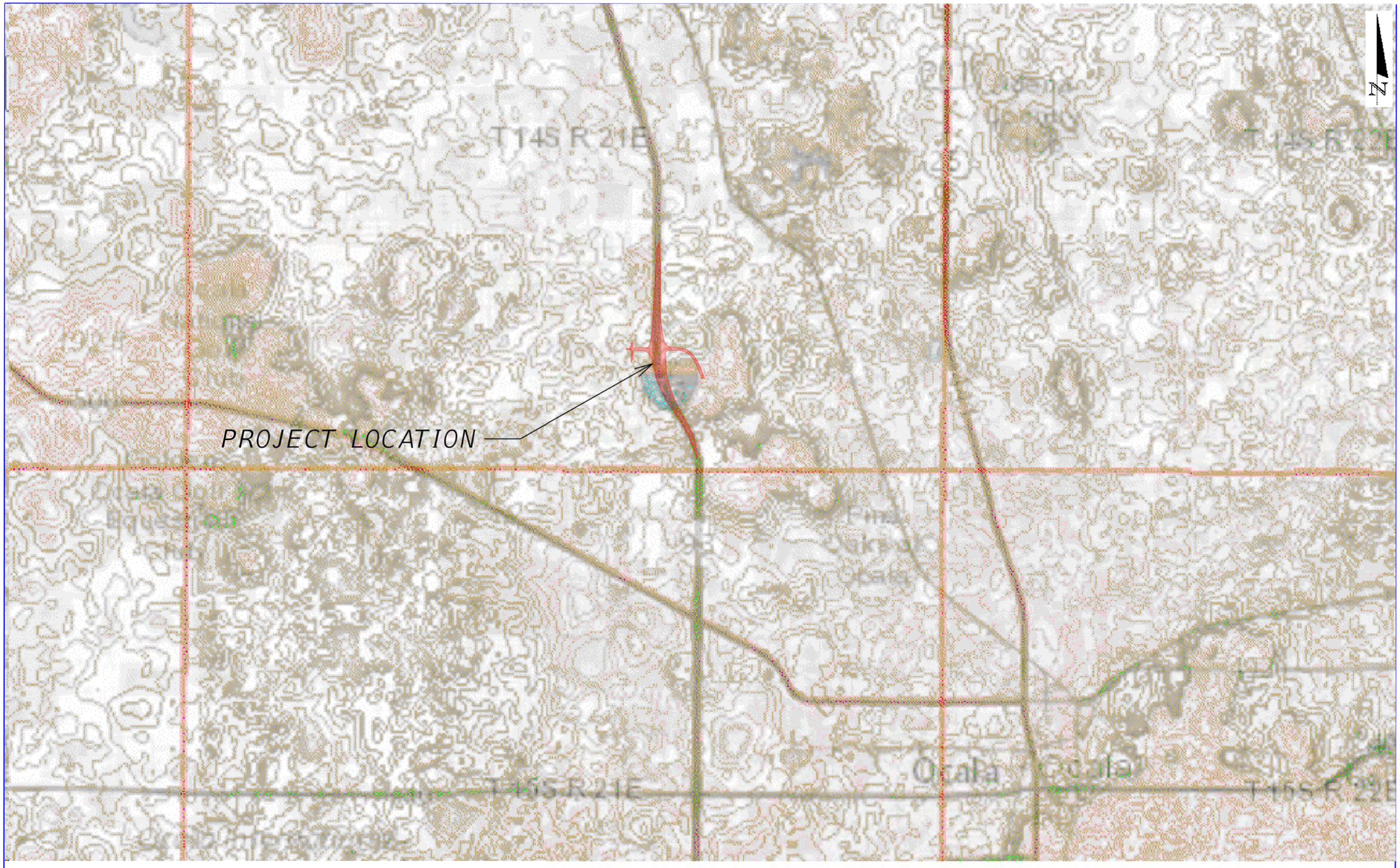
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
I-75	MARION	435209-1-22-01

WATER MANAGEMENT DISTRICT BOUNDARY MAP FIGURE 2

SHEET NO. A-2

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CERTIFICATE OF AUTHORIZATION 2294

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

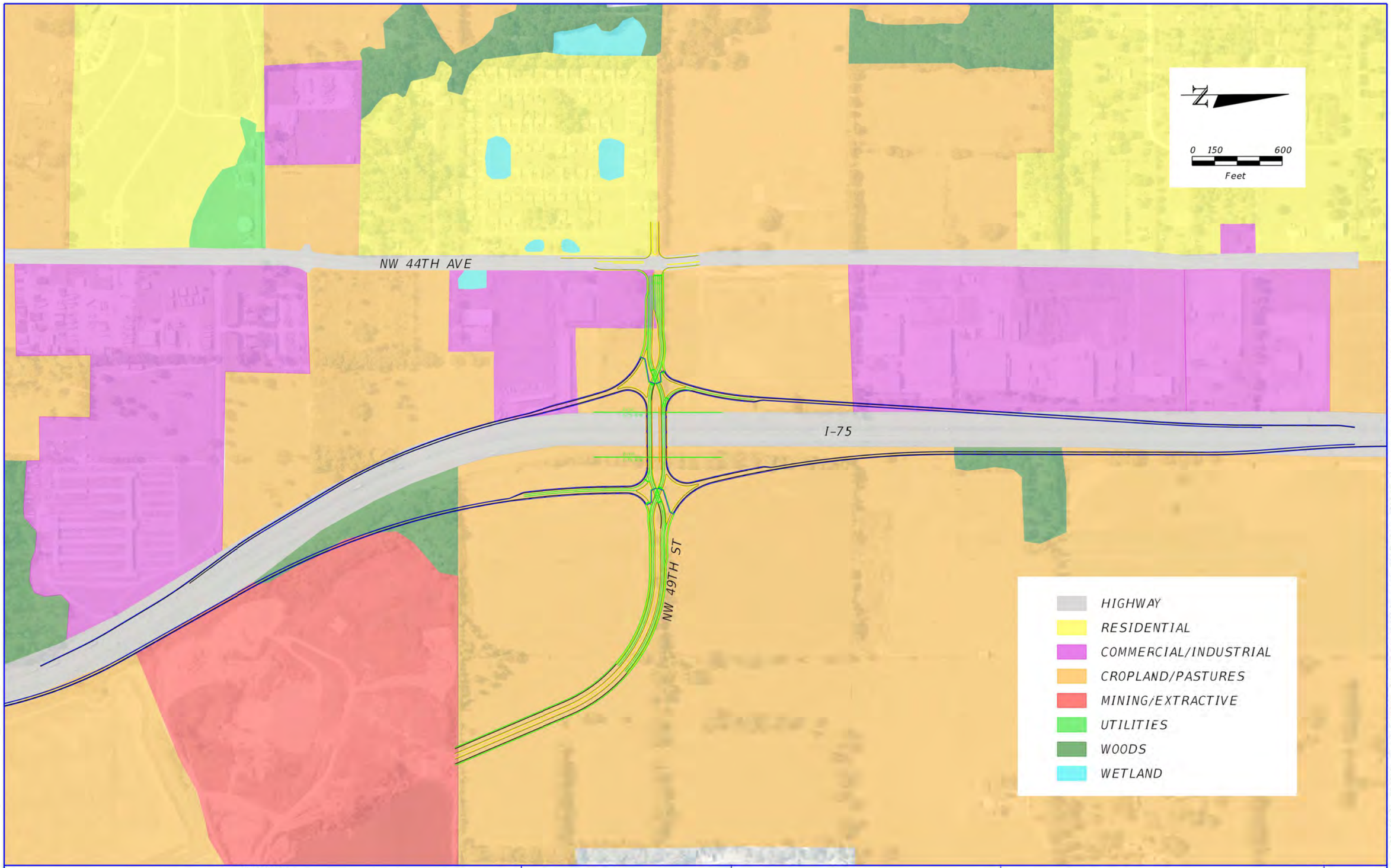
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
I-75	MARION	435209-1-22-01

USGS QUAD MAP
FIGURE 3

SHEET NO. A-3

Jillian.Berbakov 9/13/2020 9:41:48 AM J:\Drainage\I-75 @ 49th Street\Drainage\USGS_Map_EXHIBIT.DGN

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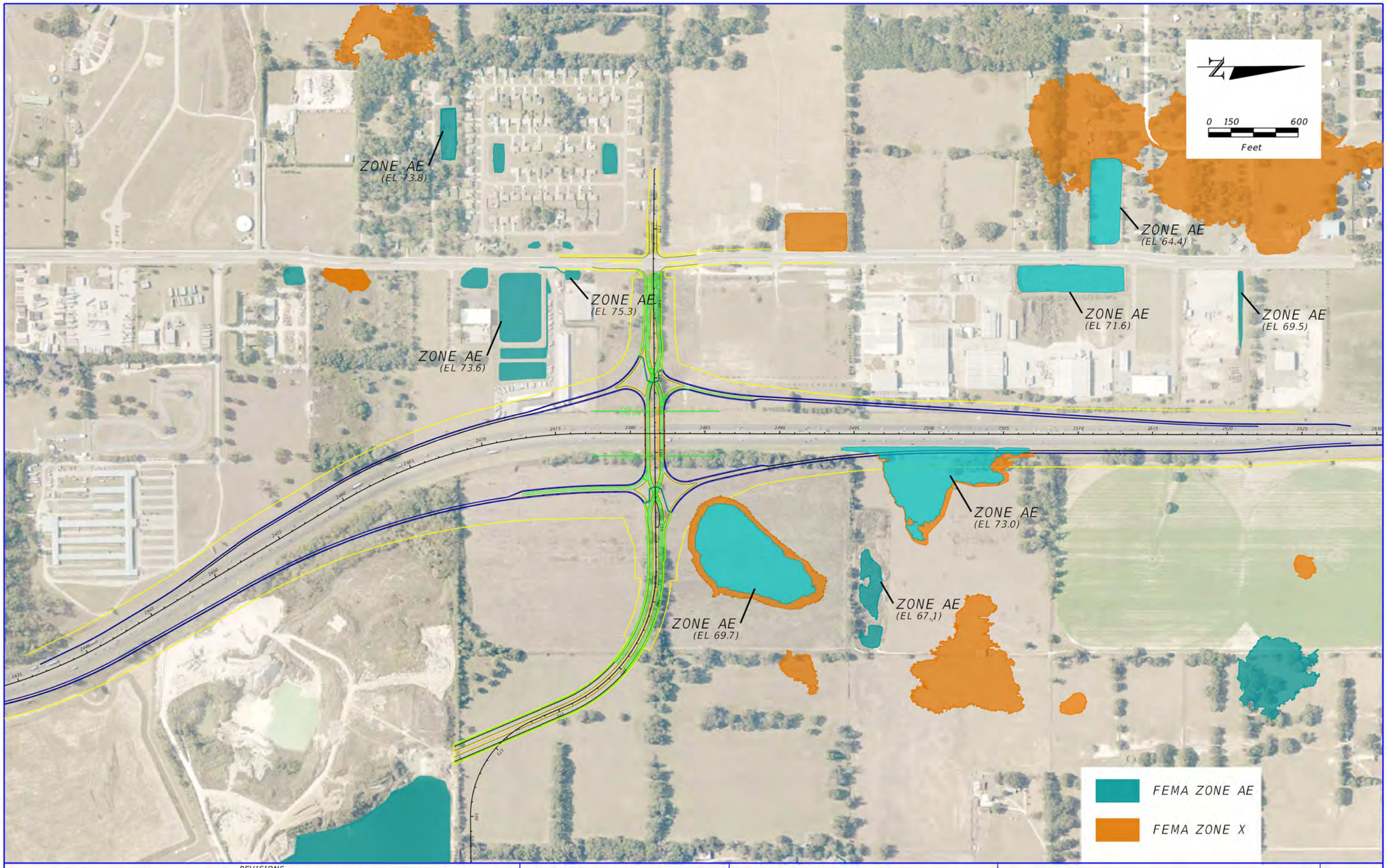
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
I-75	MARION	435209-1-22-01

LANDUSE MAP
FIGURE 4

SHEET NO. A-4

Jillian.Berbakov 10/9/2020 11:02:47 AM J:\Drairage\I-75 @ 49th Street\Drainage\LANDUSE_EXHIBIT.DGN



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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
I-75	MARION	435209-1-22-01

FEMA FLOODPLAIN MAP
FIGURE 5

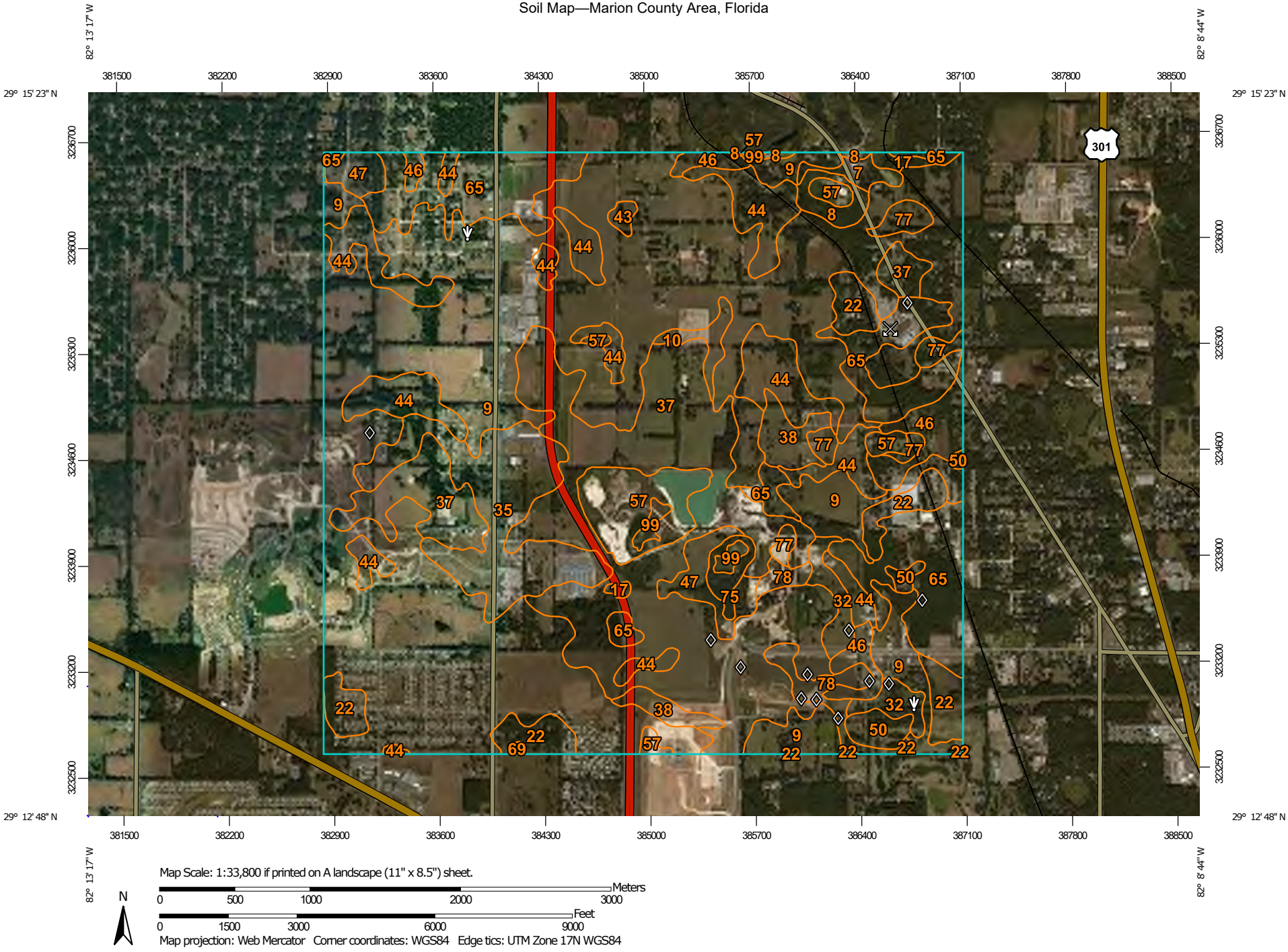
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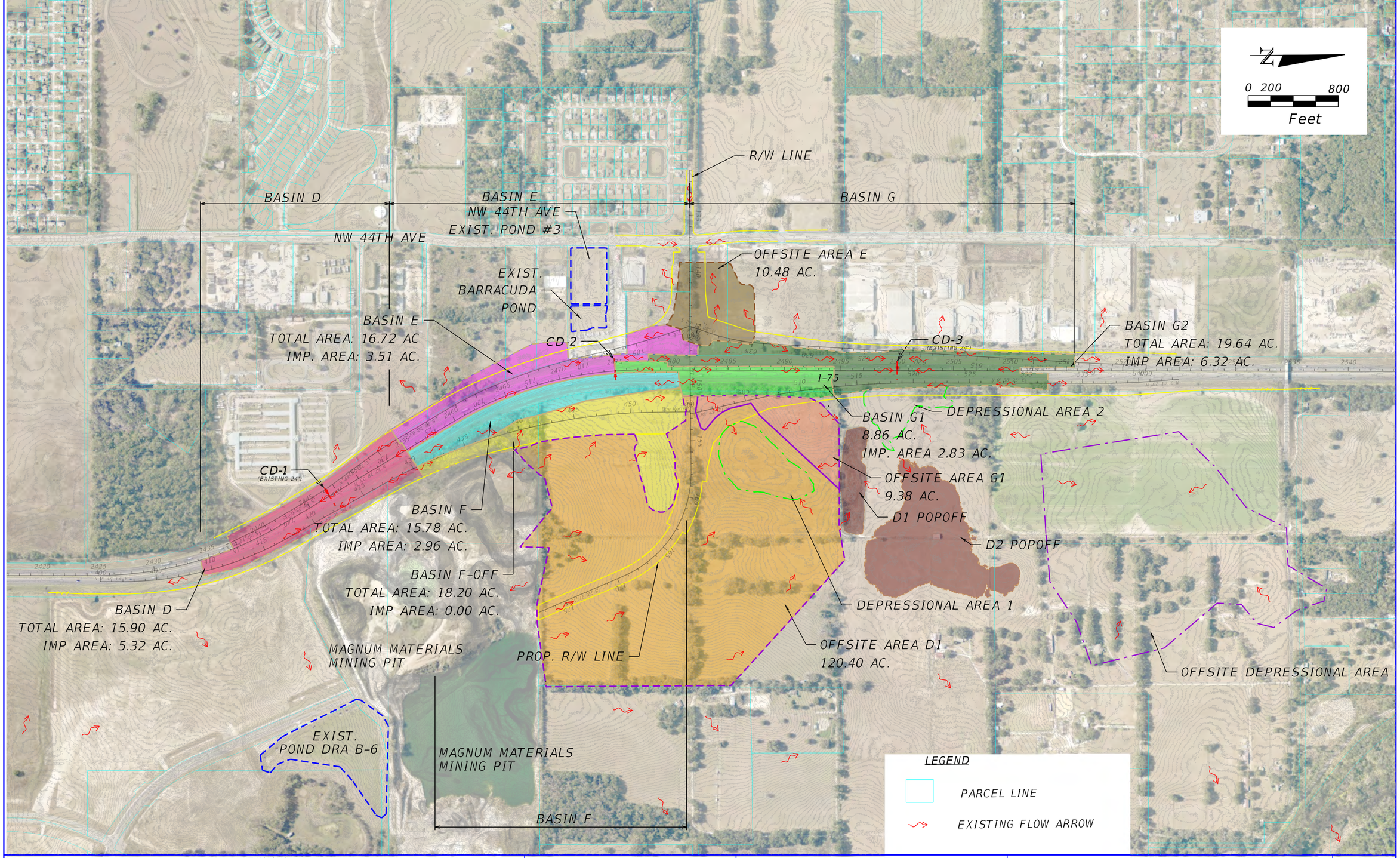
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FIGURE 6

Soil Map—Marion County Area, Florida





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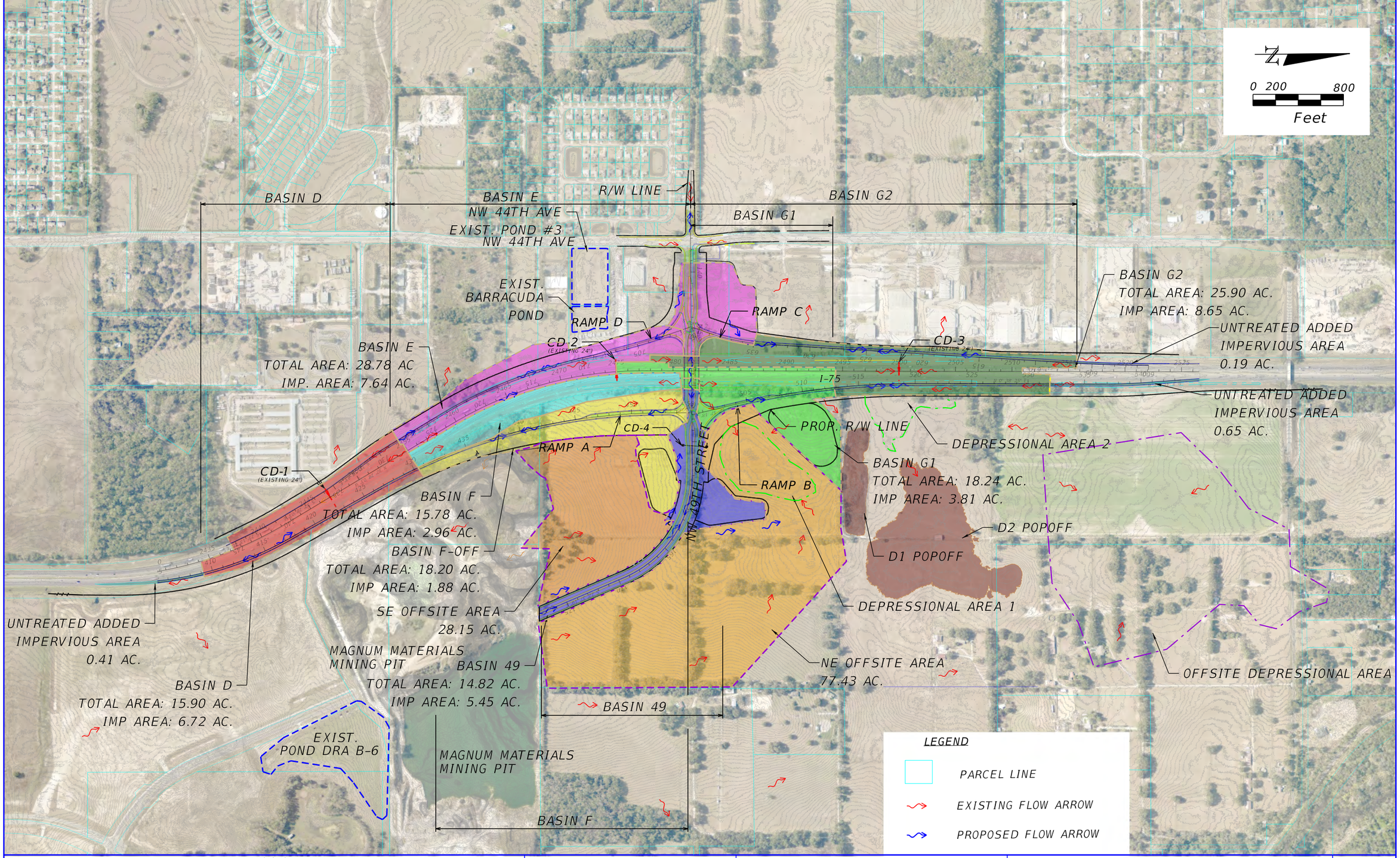
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ROAD NO.	COUNTY	FINANCIAL PROJECT ID
I-75	MARION	435209-1-22-01

$USERS $DATES $TIMES $FILES

PRE-DEVELOPMENT
DRAINAGE MAP
FIGURE 7

SHEET NO.
A-7



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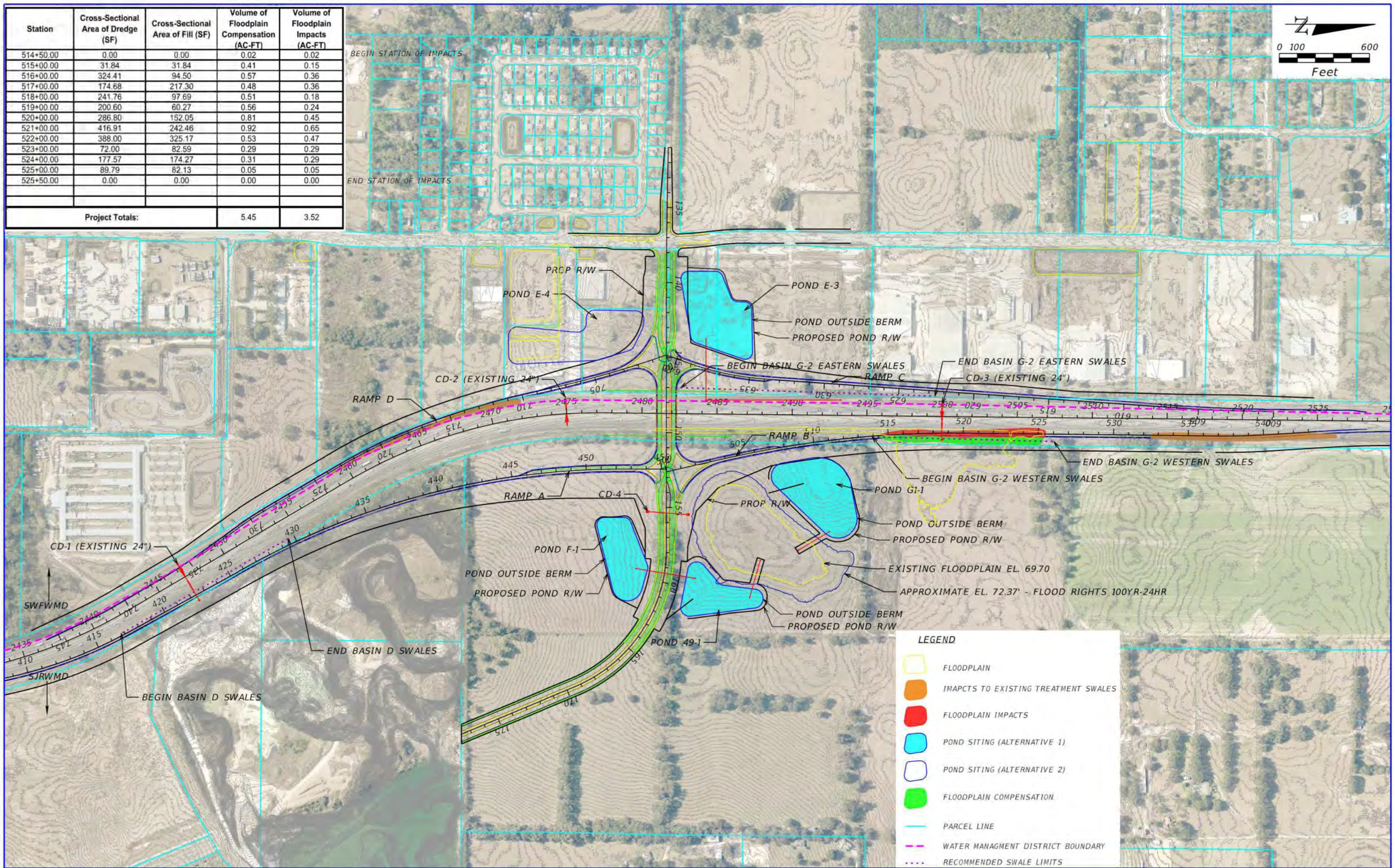
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
I-75	MARION	435209-1-22-01

$USERS $DATES $TIMES $FILES

POST-DEVELOPMENT DRAINAGE MAP FIGURE 8

SHEET NO.
A-8

Station	Cross-Sectional Area of Dredge (SF)	Cross-Sectional Area of Fill (SF)	Volume of Floodplain Compensation (AC-FT)	Volume of Floodplain Impacts (AC-FT)
514+50.00	0.00	0.00	0.02	0.02
515+00.00	31.84	31.84	0.41	0.15
516+00.00	324.41	94.50	0.57	0.36
517+00.00	174.68	217.30	0.48	0.36
518+00.00	241.76	97.69	0.51	0.18
519+00.00	200.60	60.27	0.56	0.24
520+00.00	286.80	152.05	0.81	0.45
521+00.00	416.91	242.46	0.92	0.65
522+00.00	388.00	325.17	0.53	0.47
523+00.00	72.00	82.59	0.29	0.29
524+00.00	177.57	174.27	0.31	0.29
525+00.00	89.79	82.13	0.05	0.05
525+50.00	0.00	0.00	0.00	0.00
Project Totals:			5.45	3.52



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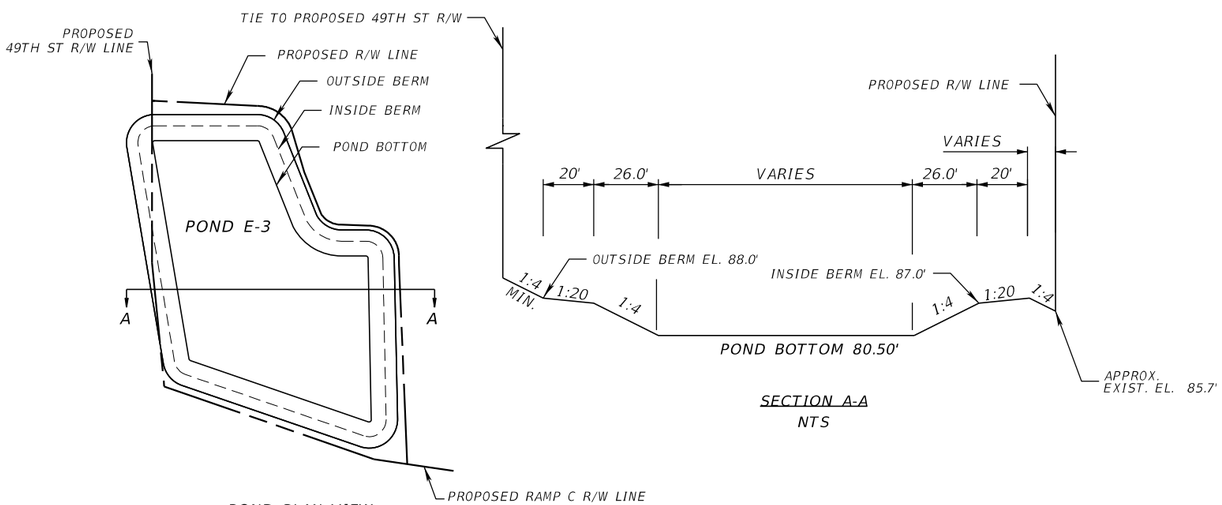
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
I-75	MARION	435209-1-22-01

$USER$ $DATE$ $TIME$ $FILE$

PROPOSED POND/ FLOODPLAIN COMPENSATION MAP FIGURE 9

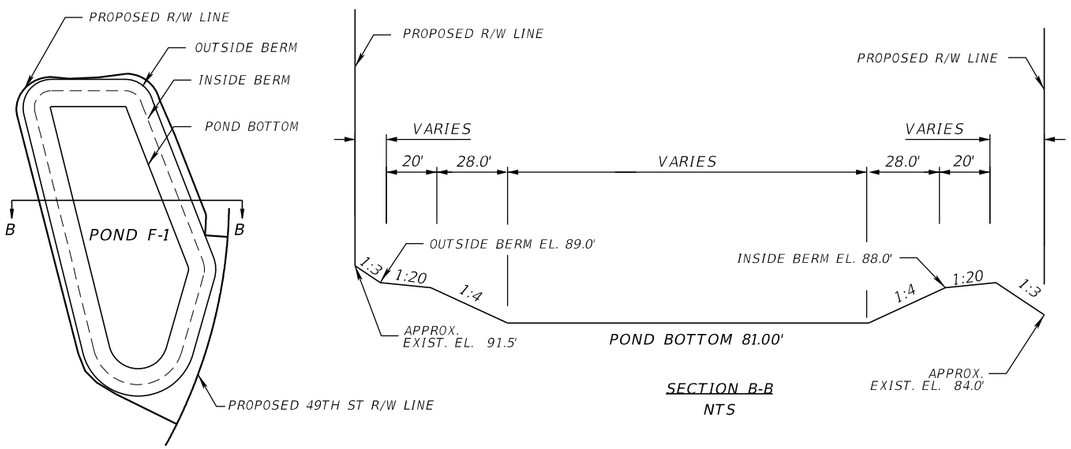
SHEET NO. A-9



POND PLAN VIEW
NTS

SECTION A-A
NTS

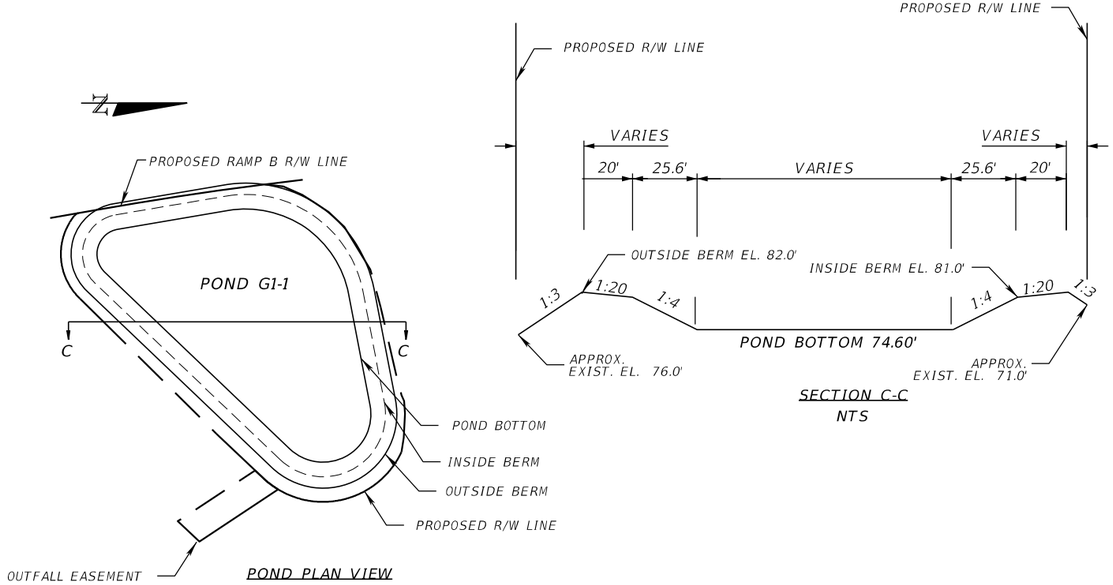
POND AREA = 4.55 AC. (TO OUTSIDE BERM)
R/W AREA = 5.80 AC.



POND PLAN VIEW
NTS

SECTION B-B
NTS

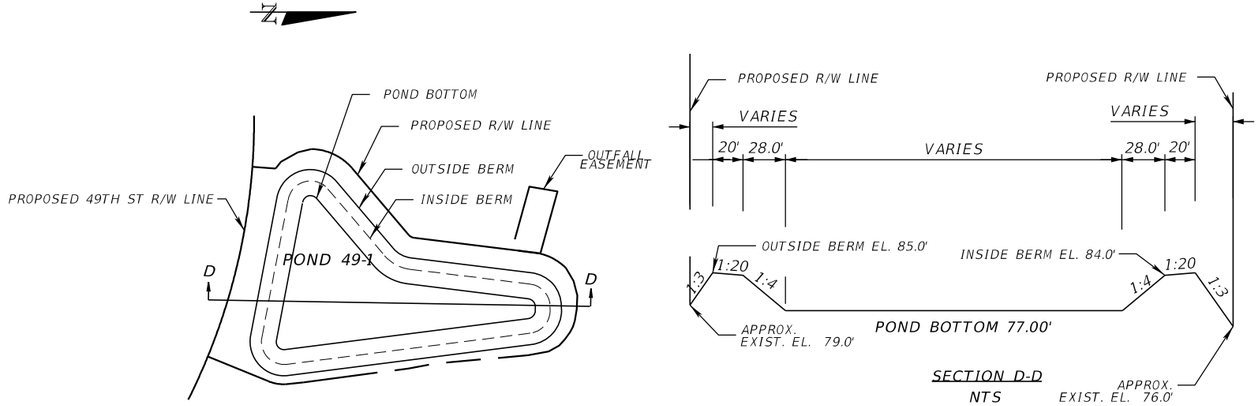
POND AREA = 2.94 AC. (TO OUTSIDE BERM)
R/W AREA = 3.41 AC.



SECTION C-C
NTS

POND PLAN VIEW
NTS

POND AREA = 4.60 AC. (TO OUTSIDE BERM)
R/W AREA = 5.29 AC.

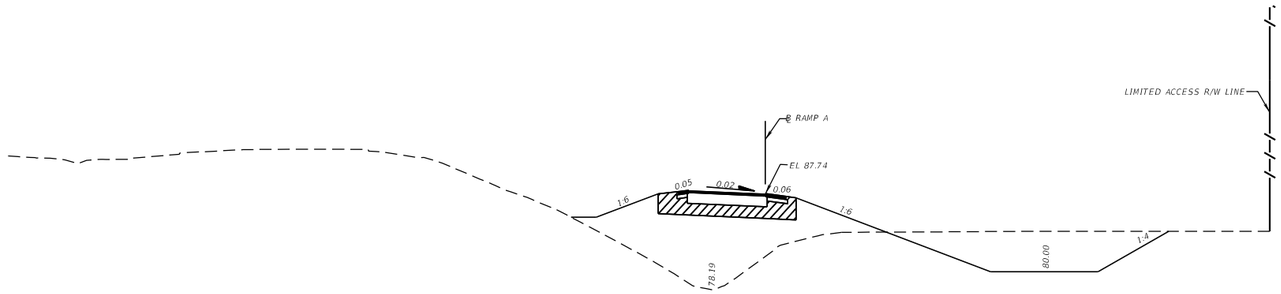


SECTION D-D
NTS

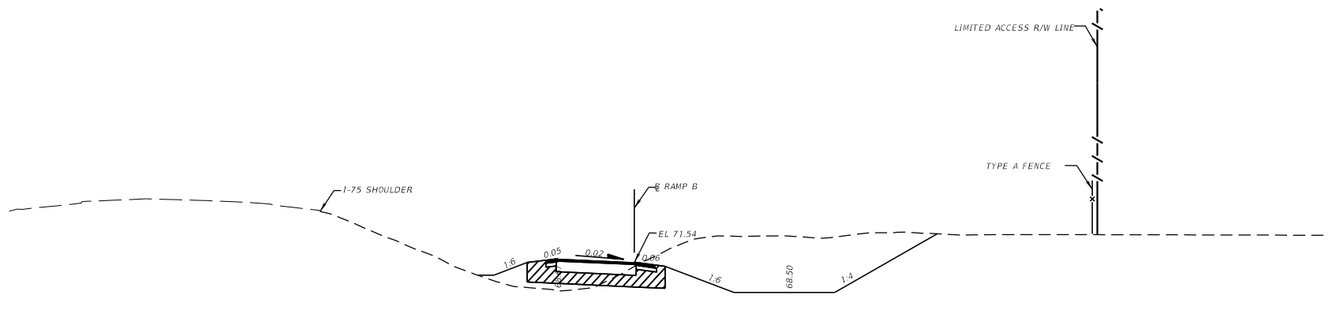
POND PLAN VIEW
NTS

POND AREA = 2.63 AC. (TO OUTSIDE BERM)
R/W AREA = 3.99 AC.

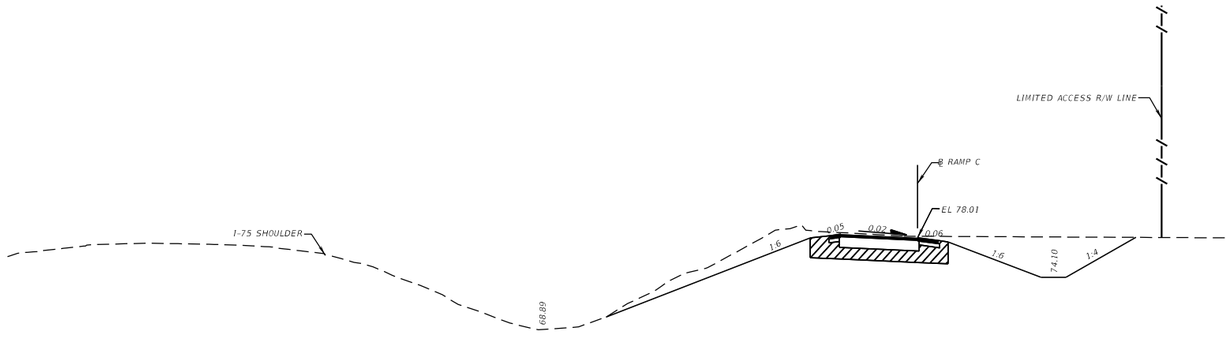
FIGURE 9A



REPRESENTATIVE SWALE SECTION
BASIN D - RAMP A
FIGURE 10



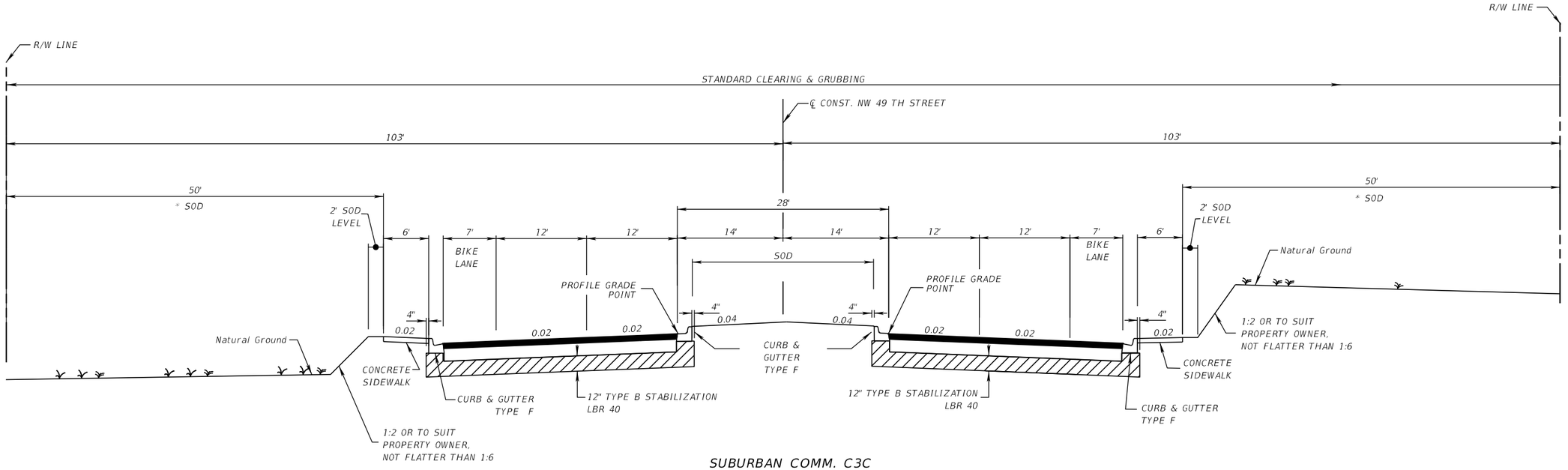
REPRESENTATIVE SWALE SECTION
BASIN G2 - RAMP B
FIGURE 11



REPRESENTATIVE SWALE SECTION
BASIN G2- RAMP C
FIGURE 12

APPENDIX B

Typical Sections



SUBURBAN COMM. C3C
TYPICAL SECTION
NW 49 STREET

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

METRIC ENGINEERING, INC.
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SUITE 200
MIAMI , FLORIDA 33186
TEL. (305) 235-5098
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FLORIDA CERT. NO. EB-0002294

● ENGINEERS
● PLANNERS

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
NA	MARION	435209-1-22-01

NW 49 STREET
TYPICAL SECTION

SHEET NO.
B-1

$USER$ $DATE$ $TIME$ $FILE$

APPENDIX C

Pond Sizing Calculations
Pre/Post-Development ICPR Model

Volumetric Pond Calculations

Project: I-75 & 49th St
Client: FDOT
Pond(s): Swales
Basin: Basin D

Computed By:	JPB
Checked By:	MAH
Date:	10/7/2020

Pre-Development

Total Basin Area	
Description	**Area (ac)**
I-75 (Basin D)	5.32
Pastureland (R/W)	10.58
Offsite Pastureland	0.00
TOTAL AREA	**15.90**

Existing Impervious Area	
Description	**Area (ac)**
Roadway, Guardrail Concrete Pad, etc.	5.32
TOTAL IMPERVIOUS AREA	**5.32**

ATTENUATION VOLUME ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	5.32	521.36
Pastureland	A	39	10.58	412.62
Water Bodies	A/D	100	0.00	0.00
		TOTAL	15.90	933.98
		COMPOSITE CN		**58.7**

ESTIMATE OF PRE-DEVELOPMENT RUNOFF VOLUME

Summary Table:

Design Storm	Agency	P (in)	S (in)	R (in)	Vr (ac-ft)
25 yr, 96 hr	SJRWMD	11.50	7.02	5.95	7.89
100 yr, 24 hr	FDOT	11.40	7.02	5.87	7.78
100 yr, 240 hr	FDOT	16.80	7.02	10.57	14.01

Example Calculations for the 25 yr, 96 hr

1) Soil Storage (S) — $S = (1000/CN) - 10$

Soil Storage (in)	S	7.02

2) Runoff (R) — $R = (P-0.2S)^2/(P+0.8S)$

Runoff (in)	R	5.95

3) Runoff Volume (Vr) — $Vr = R/12 * Area$

Runoff (ac-ft)	Vr	7.89

Post-Development

Total Basin Area	
Description	**Area (ac)**
Roadway, off-site areas, and ponds	15.90
TOTAL AREA	**15.90**

Proposed Total Impervious Area	
Description	**Area (ac)**
Proposed Added Pavement	1.40
Existing Impervious Area	5.32
TOTAL IMPERVIOUS AREA	**6.72**

Land Use Description/ Soil Name	Soil Group	CN	Area (ac)	Product
On-site Roadway	A/D	98	6.72	658.56
Off-site Roadway	A/D	98	0.00	0.00
Pastureland (R/W)	A	39	9.18	358.02
Off-site Pastureland	A	39	0.00	0.00
		TOTAL	15.90	1,016.58
		COMPOSITE CN		**63.9**

ESTIMATE OF POST DEVELOPMENT RUNOFF VOLUME

Summary Table:

Design Storm	Agency	P (in)	S (in)	R (in)	Vr (ac-ft)
25 yr, 96 hr	SJRWMD	11.50	5.64	6.72	8.90
100 yr, 24 hr	FDOT	11.40	5.64	6.63	8.79
100 yr, 240 hr	FDOT	16.80	5.64	11.52	15.27

Example Calculations for the 25 yr, 96 hr

1) Soil Storage (S)	$S = (1000/CN) - 10$	Soil Storage (in)	S	5.64
2) Runoff (R)	$R = (P-0.2S)^2/(P+0.8S)$	Runoff (in)	R	6.72
3) Runoff Volume (Vr)	$Vr = R/12 * Area$	Runoff (ac-ft)	Vr	8.90

SUMMARY OF ATTENUATION ESTIMATES

PRE-DEVELOPED CONDITION		POST DEVELOPED CONDITION	
AREA (AC):	15.90	AREA (AC):	15.90
CN:	58.7	CN:	63.9

AGENCY	DESIGN STORM	RUNOFF VOLUME (Vr)		
		PRE (AC-FT)	POST (AC-FT)	INCREASE (AC-FT)
SJRWMD	25 yr, 96 hr	7.89	8.90	1.01
FDOT	100 yr, 24 hr	7.78	8.79	1.01
FDOT	100 yr, 240 hr	14.01	15.27	1.26

MAXIMUM ATTENUATION VOLUME (AC-FT)	1.26

Project: I-75 & 49th St
Client: FDOT
Pond(s): Dry Retention
Basin: Basin E

Computed By:	JPB
Checked By:	MAH
Date:	10/7/2020

Pre-Development

Total Basin Area	
Description	**Area (ac)**
I-75	3.51
Pastureland (R/W)	13.21
Offsite Area E Pastureland	10.48
TOTAL AREA	**27.20**

Existing Impervious Area	
Description	**Area (ac)**
Roadway, Guardrail Concrete Pad, etc.	3.51
TOTAL IMPERVIOUS AREA	**3.51**

ATTENUATION VOLUME ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	3.51	343.98
Pastureland	A	39	23.69	923.91
Water Bodies	A/D	100	0.00	0.00
		TOTAL	27.20	1,267.89
		COMPOSITE CN		**46.6**

ESTIMATE OF PRE-DEVELOPMENT RUNOFF VOLUME

Summary Table:

Design Storm	Agency	P (in)	S (in)	R (in)	Vr (ac-ft)
25 yr, 96 hr	SJRWMD	11.50	11.45	4.10	9.30
100 yr, 24 hr	FDOT	11.40	11.45	4.04	9.15
100 yr, 240 hr	FDOT	16.80	11.45	8.11	18.38

Example Calculations for the 25 yr, 96 hr

1) Soil Storage (S) — $S = (1000/CN) - 10$

Soil Storage (in)	S	11.45

2) Runoff (R) — $R = (P-0.2S)^2/(P+0.8S)$

Runoff (in)	R	4.10

3) Runoff Volume (Vr) — $Vr = R/12 * Area$

Runoff (ac-ft)	Vr	9.30

Post-Development

Total Basin Area	
Description	**Area (ac)**
Roadway, off-site areas, and ponds	28.78
TOTAL AREA	**28.78**

Proposed Total Impervious Area	
Description	**Area (ac)**
Proposed Added Pavement	4.13
Existing Impervious Area	3.51
TOTAL IMPERVIOUS AREA	**7.64**

Land Use Description/ Soil Name	Soil Group	CN	Area (ac)	Product
On-site Roadway (I-75)	A/D	98	4.92	482.16
On-site Roadway (NW 49th Ave))	A/D	98	2.72	266.56
Pastureland (R/W)	A	39	21.14	824.46
Off-site Pastureland	A	39	0.00	0.00
		TOTAL	28.78	1,573.18
		COMPOSITE CN		**54.7**

ESTIMATE OF POST DEVELOPMENT RUNOFF VOLUME

Summary Table:

Design Storm	Agency	P (in)	S (in)	R (in)	Vr (ac-ft)
25 yr, 96 hr	SJRWMD	11.50	8.29	5.34	12.81
100 yr, 24 hr	FDOT	11.40	8.29	5.26	12.62
100 yr, 240 hr	FDOT	16.80	8.29	9.78	23.46

Example Calculations for the 25 yr, 96 hr

1) Soil Storage (S)	$S = (1000/CN) - 10$	Soil Storage (in)	S	8.29
2) Runoff (R)	$R = (P-0.2S)^2/(P+0.8S)$	Runoff (in)	R	5.34
3) Runoff Volume (Vr)	$Vr = R/12 * Area$	Runoff (ac-ft)	Vr	12.81

SUMMARY OF ATTENUATION ESTIMATES

PRE-DEVELOPED CONDITION

AREA (AC):	27.20
CN:	46.6

POST DEVELOPED CONDITION

AREA (AC):	28.78
CN:	54.7

AGENCY	DESIGN STORM	RUNOFF VOLUME (Vr)		
		PRE (AC-FT)	POST (AC-FT)	INCREASE (AC-FT)
SJRWMD	25 yr, 96 hr	9.30	12.81	3.50
FDOT	100 yr, 24 hr	9.15	12.62	3.47
FDOT	100 yr, 240 hr	18.38	23.46	5.08

MAXIMUM ATTENUATION VOLUME (AC-FT)	**5.08**

WATER QUALITY CALCULATIONS

Water Management District
Pollution Abatement Volume Requirement

Agency:	SJRWMD
Post Development Total Area (ac) =	28.78
Total Post Development Impervious Area (ac) =	7.64

Based on the existing soil types and their depth to SHWT (USGS), Metric is proposing a on-line dry retention facility.

Dry Retention (On-Line System) Treatment Criteria - 1.25" over impervious area or 0.5" over total area, whichever is greater, plus 0.5" over the total area for in-line systems

Water Quality Volume Required (Closed Basin):	**Ac-Ft**	
1) 0.5" of Runoff Over Total Area =	1.20	Governs
2) 1.25" of Runoff Over Impervious Area =	0.80	
3) Add 0.5" over the total area for an in-line system =	1.20	
4) 1.52 Ac-ft lost treatment from existing swales being filled [(1)] =	1.52	
POLLUTION ABATEMENT VOLUME REQUIRED =	**3.92**	

[(1)] Lost treatment is the reported required treatment from the existing permit

ESTIMATE POND RIGHT OF WAY REQUIREMENTS E-3

1) The depth available for the treatment and attenuation volumes is constrained to the front of berm elevation above the SHWT minus the freeboard.

2) The SHWT elevations for the purpose of pond sizing were established based on based on geotechnical information to be at 75.35'.

D= Pond Depth from top of Maint Berm to bottom=	6.50	ft
F = Freeboard =	1	ft
H = D - F =	5.5	ft

3) Sum the required treatment, flood compensation, and/or attenuation volumes to attain the Peak Pond Volume. Note that a negative attenuation volume reduces the required floodplain compensation volume.

Required Attenuation Volume =	5.08	ac-ft
Required Treatment Volume =	3.92	ac-ft
Total Treatment & Attenuation Volume Required =	**9.00**	**ac-ft**

4) For purposes of pond area calculations, assume a square pond.

Volume = LWH

where H = height (ft)

L = length of vertical sided pond (ft)

W = width of vertical sided pond (ft)

Since a square pond is being assumed, L = W. Therefore, Volume = L^2H

Volume =	9.00	ac-ft
H =	5.50	ft

$$9.00 = L^2 \times 5.5$$

Solving for L =	267.0	ft
Therefore W =	267.0	ft

5) Increase dimensions to account for side slopes and freeboard.

Add: x = [(Side Slopes x D) x 2] to each dimension (D=H+1)

Side slopes:	4	ft/ft
D:	6.50	ft
x =	52	ft
Length @ top of slope =	319	ft
Width @ top of slope =	319	ft

6) Add maintenance berms.

Assume 20' maintenance berm (add to each side)

Length w/maint Berm =	359	ft
Width w/maint. Berm =	359	ft
Total Area =	2.96	acre
Add 25% Contingency	3.70	acre

PRELIMINARY POND AREA REQUIRED FOR BASIN =	3.7	ACRE

Facility Type	Total Area (ac)
Dry Facility	4.6

Proposed Pond E-3: **4.6 acre**

Stage Storage Table for Pond E-3:

Stage (ft)	Depth (ft)	Area (ac)	Avg. Area (Ac)	ΔVolume (Ac-ft)	Cumulative Volume (Ac-ft)	
80.50	-	2.80	-	-	0.00	
81.81	1.31	2.99	0.20	3.92	3.92	Treatment V
82.20	0.39	3.04	3.02	1.19	5.10	Attenuation V
83.42	1.22	3.20	3.12	3.90	9.01	Total V
87.00	3.58	3.75	3.48	13.43	22.43	
88.00	1.00	4.55	4.15	4.15	26.58	

*Pond E-3 is located in the NW quadrant of the proposed interchange. Boring information shows the SHWT estimated at 75.35', using an average of borings PBS-1, PBS-2, PBS-23, and PBS-24.

ESTIMATE POND RIGHT OF WAY REQUIREMENTS E-4

1) The depth available for the treatment and attenuation volumes is constrained to the front of berm elevation above the SHWT minus the freeboard.

2) The SHWT elevations for the purpose of pond sizing were established based on based on geotechnical information to be at 79.1'.

D= Pond Depth from top of Maint Berm to bottom=	4.90	ft
F = Freeboard =	1	ft
H = D - F =	3.9	ft

3) Sum the required treatment, flood compensation, and/or attenuation volumes to attain the Peak Pond Volume. Note that a

Required Attenuation Volume =	5.43	ac-ft
Required Treatment Volume =	3.78	ac-ft
Total Treatment & Attenuation Volume Required =	**9.22**	**ac-ft**

4) For purposes of pond area calculations, assume a square pond.

Volume = LWH

where H = height (ft)

L = length of vertical sided pond (ft)

W = width of vertical sided pond (ft)

Since a square pond is being assumed, L = W. Therefore, Volume = L^2H

Volume =	9.22	ac-ft
H =	3.90	ft

$9.22 = L^2 \times 3.9$

Solving for L =	320.9	ft
Therefore W =	320.9	ft

5) Increase dimensions to account for side slopes and freeboard.

Add: x = [(Side Slopes x D) x 2] to each dimension

Side slopes:	4	ft/ft
D:	4.90	ft
x =	39.2	ft
Length @ top of slope =	360	ft
Width @ top of slope =	360	ft

6) Add maintenance berms.

Assume 20' maintenance berm (add to each side)

Length w/maint Berm =	400	ft
Width w/maint. Berm =	400	ft
Total Area =	3.67	acre
Add 25% Contingency	4.59	acre

PRELIMINARY POND AREA REQUIRED FOR BASIN =	4.6	ACRE

Facility Type	Total Area (ac)
Dry Facility	5.1

Proposed Pond E-4: **5.1** **acre**

Stage Storage Table for Pond E-4:

Stage (ft)	Depth (ft)	Area (ac)	Avg. Area (Ac)	ΔVolume (Ac-ft)	Cumulative Volume (Ac-ft)	
80.10	-	3.28	-	-	0.00	
81.16	1.06	3.58	3.43	3.79	3.79	Attenuation V
81.63	0.47	3.66	3.62	1.72	5.52	Treatment V
82.60	0.97	3.82	3.74	3.71	9.22	Total V
84.00	1.40	4.04	3.93	5.66	14.88	
85.00	1.00	5.06	4.55	4.55	19.43	

*Pond E-4 is located in the SW quadrant of the proposed interchange in the existing Barracuda Boat Storage parcel as well as the county owned parcel. Boring information from PBS-19 and PBS-20, along with permitted information from the existing Barracuda Pond, shows the SHWT estimated at 79.1'.

Project: I-75 & 49th St
Client: FDOT
Pond(s): Dry Retention
Basin: Basin F-OFF

Computed By:	JPB
Checked By:	MAH
Date:	10/7/2020

Pre-Development

Total Basin Area	
Description	**Area (ac)**
I-75	0.00
Pastureland (R/W)	18.20
Offsite Pastureland	0.00
TOTAL AREA	**18.20**

Existing Impervious Area	
Description	**Area (ac)**
Roadway, Guardrail Concrete Pad, etc.	0.00
TOTAL IMPERVIOUS AREA	**0.00**

ATTENUATION VOLUME ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.00	0.00
Pastureland	A	39	18.20	709.80
Water Bodies	A/D	100	0.00	0.00
		TOTAL	18.20	709.80
		COMPOSITE CN		**39.0**

ESTIMATE OF PRE-DEVELOPMENT RUNOFF VOLUME

Summary Table:

Design Storm	Agency	P (in)	S (in)	R (in)	Vr (ac-ft)
25 yr, 96 hr	SJRWMD	11.50	15.64	2.92	4.43
100 yr, 24 hr	FDOT	11.40	15.64	2.86	4.34
100 yr, 240 hr	FDOT	16.80	15.64	6.38	9.67

Example Calculations for the 25 yr, 96 hr

1) Soil Storage (S) — $S = (1000/CN) - 10$

Soil Storage (in)	S	15.64

2) Runoff (R) — $R = (P-0.2S)^2/(P+0.8S)$

Runoff (in)	R	2.92

3) Runoff Volume (Vr) — $Vr = R/12 * Area$

Runoff (ac-ft)	Vr	4.43

Post-Development

Total Basin Area	
Description	**Area (ac)**
Roadway, off-site areas, and ponds	18.20
TOTAL AREA	**18.20**

Proposed Total Impervious Area	
Description	**Area (ac)**
Proposed Added Pavement (Treated)	1.88
Existing Impervious Area	0.00
TOTAL IMPERVIOUS AREA	**1.88**

Land Use Description/ Soil Name	Soil Group	CN	Area (ac)	Product
On-site Roadway	A/D	98	1.88	184.24
Pastureland (R/W)	A	39	16.32	636.48
Off-site Pastureland	A	39	0.00	0.00
		TOTAL	18.20	820.72
			COMPOSITE CN	**45.1**

ESTIMATE OF POST DEVELOPMENT RUNOFF VOLUME

Summary Table:

Design Storm	Agency	P (in)	S (in)	R (in)	Vr (ac-ft)
25 yr, 96 hr	SJRWMD	11.50	12.18	3.87	5.87
100 yr, 24 hr	FDOT	11.40	12.18	3.80	5.77
100 yr, 240 hr	FDOT	16.80	12.18	7.77	11.79

Example Calculations for the 25 yr, 96 hr

1) Soil Storage (S) — $S = (1000/CN) - 10$

Soil Storage (in)	S	12.18

2) Runoff (R) — $R = (P-0.2S)^2/(P+0.8S)$

Runoff (in)	R	3.87

3) Runoff Volume (Vr) — $Vr = R/12 * Area$

Runoff (ac-ft)	Vr	5.87

SUMMARY OF ATTENUATION ESTIMATES

PRE-DEVELOPED CONDITION

AREA (AC):	18.20
CN:	39.0

POST DEVELOPED CONDITION

AREA (AC):	18.20
CN:	45.1

AGENCY	DESIGN STORM	RUNOFF VOLUME (Vr)		
		PRE (AC-FT)	POST (AC-FT)	INCREASE (AC-FT)
SJRWMD	25 yr, 96 hr	4.43	5.87	1.44
FDOT	100 yr, 24 hr	4.34	5.77	1.43
FDOT	100 yr, 240 hr	9.67	11.79	2.12

MAXIMUM ATTENUATION VOLUME (AC-FT)	**2.12**

WATER QUALITY CALCULATIONS

Water Management District
Pollution Abatement Volume Requirement

Agency:	SJRWMD
Post Development Total Area (ac) =	18.20
Total Post Development Impervious Area (ac) [1] =	2.29

[1] Includes additional 0.41 ac of untreated impervious from SE end of project

Based on the existing soil types and their depth to SHWT (USGS), Metric is proposing a on-line dry retention facility.

Dry Retention (On-Line System) Treatment Criteria - 1.25" over impervious area or 0.5" over total area, whichever is greater, plus 0.5" over the total area for in-line systems

Water Quality Volume Required (Closed Basin):	**Ac-Ft**	
1) 0.5" of Runoff Over Total Area =	0.76	Governs
2) 1.25" of Runoff Over Impervious Area =	0.24	
3) Add 0.5" over the total area for an in-line system =	0.76	
POLLUTION ABATEMENT VOLUME REQUIRED =	**1.52**	

ESTIMATE POND RIGHT OF WAY REQUIREMENTS F-1

1) The depth available for the treatment and attenuation volumes is constrained to the front of berm elevation above the SHWT minus the freeboard.

2) The SHWT elevations for the purpose of pond sizing were established based on based on geotechnical information to be at 76.2'.

D= Pond Depth from top of Maint Berm to bottom=	7.00	ft
F = Freeboard =	1.00	ft
H = D - F =	6	ft

3) Sum the required treatment, flood compensation, and/or attenuation volumes to attain the Peak Pond Volume. Note that a negative attenuation volume reduces the required floodplain compensation volume.

Required Attenuation Volume =	2.12	ac-ft
Required Treatment Volume =	1.52	ac-ft
Total Treatment & Attenuation Volume Required =	**3.64**	**ac-ft**

4) For purposes of pond area calculations, assume a square pond.

Volume = LWH

where H = height (ft)

L = length of vertical sided pond (ft)

W = width of vertical sided pond (ft)

Since a square pond is being assumed, L = W. Therefore, Volume = L^2H

Volume =	3.64	ac-ft
H =	6.00	ft

$6.00 = L^2 \times 6$

Solving for L =	208.7	ft
Therefore W =	208.7	ft

5) Increase dimensions to account for side slopes and freeboard.

Add: x = [(Side Slopes x D) x 2] to each dimension (D=H+1)

Side slopes:	4	ft/ft
D:	7.00	ft
x =	56	ft
Length @ top of slope =	265	ft
Width @ top of slope =	265	ft

6) Add maintenance berms.

Assume 20' maintenance berm (add to each side)

Length w/maint Berm =	305	ft
Width w/maint. Berm =	305	ft
Total Area =	2.13	acre
Add 25% Contingency	2.66	acre

PRELIMINARY POND AREA REQUIRED FOR BASIN =	2.7	ACRE

Facility Type	Total Area (ac)
Dry Facility	2.9

Proposed Pond F-1: **2.9 acre**

Stage Storage Table for Pond F-1:

Stage (ft)	Depth (ft)	Area (ac)	Avg. Area (Ac)	∆Volume (Ac-ft)	Cumulative Volume (Ac-ft)	
81.00	-	1.50	-	-	0.00	
81.95	0.95	1.60	1.55	1.52	1.52	Treatment V
82.32	0.37	1.65	1.62	0.61	2.13	Attenuation V
83.58	1.26	1.78	1.71	2.24	4.37	Total V
88.00	4.42	2.30	2.04	10.17	14.54	
89.00	1.00	2.94	2.62	2.62	17.16	

*Pond F-1 is located SE of the proposed interchange. Boring information shows the SHWT estimated at 76.2', using an average of borings PBS-13 and PBS-14.

Project: I-75 & 49th St
Client: FDOT
Pond(s): Dry Retention
Basin: Basin G1

Computed By:	JPB
Checked By:	MAH
Date:	10/7/2020

Pre-Development

Total Basin Area	
Description	**Area (ac)**
I-75	2.83
Pastureland (R/W)	6.03
Offsite Area G1 Pastureland	9.38
TOTAL AREA	**18.24**

Existing Impervious Area	
Description	**Area (ac)**
Roadway, Guardrail Concrete Pad, etc.	2.83
TOTAL IMPERVIOUS AREA	**2.83**

ATTENUATION VOLUME ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	2.83	277.34
Grassed/Open Area (Good)	D	80	0.00	0.00
Pastureland	A	39	15.41	600.99
Water Bodies	A/D	100	0.00	0.00
		TOTAL	18.24	878.33
		COMPOSITE CN		**48.2**

ESTIMATE OF PRE-DEVELOPMENT RUNOFF VOLUME

Summary Table:

Design Storm	Agency	P (in)	S (in)	R (in)	Vr (ac-ft)
25 yr, 96 hr	SJRWMD	11.50	10.77	4.34	6.60
100 yr, 24 hr	FDOT	11.40	10.77	4.27	6.49
100 yr, 240 hr	FDOT	16.80	10.77	8.44	12.83

Example Calculations for the 25 yr, 96 hr

1) Soil Storage (S) — $S = (1000/CN) - 10$ — Soil Storage (in) S = 10.77

2) Runoff (R) — $R = (P-0.2S)^2/(P+0.8S)$ — Runoff (in) R = 4.34

3) Runoff Volume (Vr) — $Vr = R/12 * Area$ — Runoff (ac-ft) Vr = 6.60

Post-Development

Total Basin Area	
Description	**Area (ac)**
Roadway, off-site areas, and ponds	18.24
TOTAL AREA	**18.24**

Proposed Total Impervious Area	
Description	**Area (ac)**
Proposed Added Pavement (Treated)	0.98
Existing Impervious Area	2.83
TOTAL IMPERVIOUS AREA	**3.81**

Land Use Description/ Soil Name	Soil Group	CN	Area (ac)	Product
On-site Roadway	A/D	98	3.81	373.38
Pastureland (R/W)	A	39	14.43	562.77
Off-site Pastureland	A	39	0.00	0.00
		TOTAL	18.24	936.15
		COMPOSITE CN		**51.3**

ESTIMATE OF POST DEVELOPMENT RUNOFF VOLUME

Summary Table:

Design Storm	Agency	P (in)	S (in)	R (in)	Vr (ac-ft)
25 yr, 96 hr	SJRWMD	11.50	9.48	4.83	7.34
100 yr, 24 hr	FDOT	11.40	9.48	4.76	7.23
100 yr, 240 hr	FDOT	16.80	9.48	9.11	13.84

Example Calculations for the 25 yr, 96 hr

1) Soil Storage (S) — $S = (1000/CN) - 10$ — Soil Storage (in) S = 9.48

2) Runoff (R) — $R = (P-0.2S)^2/(P+0.8S)$ — Runoff (in) R = 4.83

3) Runoff Volume (Vr) — $Vr = R/12 * Area$ — Runoff (ac-ft) Vr = 7.34

SUMMARY OF ATTENUATION ESTIMATES

PRE-DEVELOPED CONDITION

AREA (AC): 18.24
CN: 48.2

POST DEVELOPED CONDITION

AREA (AC): 18.24
CN: 51.3

AGENCY	DESIGN STORM	RUNOFF VOLUME (Vr)		
		PRE (AC-FT)	POST (AC-FT)	INCREASE (AC-FT)
SJRWMD	25 yr, 96 hr	6.60	7.34	0.74
FDOT	100 yr, 24 hr	6.60	7.34	0.74
FDOT	100 yr, 240 hr	12.83	13.84	1.01

MAXIMUM ATTENUATION VOLUME (AC-FT)	1.01

WATER QUALITY CALCULATIONS

Water Management District
Pollution Abatement Volume Requirement

Agency:	SJRWMD
Post Development Total Area (ac) =	18.24
Total Post Development Impervious Area (ac) [(1)] =	4.65

[(1)] Includes additional 0.65 ac of untreated impervious from NE end of project and 0.19 ac of untreated impervious from NW end

Based on the existing soil types and their depth to SHWT (USGS), Metric is proposing a on-line dry retention facility.

Dry Retention (On-Line System) Treatment Criteria - 1.25" over impervious area or 0.5" over total area, whichever is greater, plus 0.5" over the total area for in-line systems

Water Quality Volume Required (Closed Basin):	**Ac-Ft**	
1) 0.5" of Runoff Over Total Area =	0.76	Governs
2) 1.25" of Runoff Over Impervious Area =	0.48	
3) Add 0.5" over the total area for an in-line system =	0.76	
POLLUTION ABATEMENT VOLUME REQUIRED =	**1.52**	

ESTIMATE POND RIGHT OF WAY REQUIREMENTS G1-1

1) The depth available for the treatment and attenuation volumes is constrained to the front of berm elevation above the SHWT minus the freeboard.

2) The SHWT elevations for the purpose of pond sizing were established based on based on geotechnical information to be at 62.6'.

D= Pond Depth from top of Maint Berm to bottom=	6.40	ft
F = Freeboard =	1	ft
H = D - F =	5.4	ft

3) Sum the required treatment, flood compensation, and/or attenuation volumes to attain the Peak Pond Volume. Note that a negative attenuation volume reduces the required floodplain compensation volume.

Required Attenuation Volume =	1.01	ac-ft
Required Treatment Volume =	1.52	ac-ft
Total Treatment & Attenuation Volume Required =	**2.53**	**ac-ft**

4) For purposes of pond area calculations, assume a square pond.

Volume = LWH

where	H =	height (ft)
	L =	length of vertical sided pond (ft)
	0	width of vertical sided pond (ft)

Since a square pond is being assumed, L = W. Therefore, Volume = L^2H

Volume =	2.53	ac-ft
H =	5.4	ft

$2.53 = L^2 \times 5.4$

Solving for L =	142.9	ft
Therefore W =	142.9	ft

5) Increase dimensions to account for side slopes and freeboard.

Add: x = [(Side Slopes x D) x 2] to each dimension (D=H+1)

Side slopes:	4	ft/ft
D:	6.40	ft
x =	51.2	ft
Length @ top of slope =	194	ft
Width @ top of slope =	194	ft

6) Add maintenance berms.

Assume 20' maintenance berm (add to each side)

Length w/maint Berm =	234	ft
Width w/maint. Berm =	234	ft
Total Area =	1.26	acre
Add 25% Contingency	1.57	acre

PRELIMINARY POND AREA REQUIRED FOR BASIN =	1.6	ACRE

Facility Type	Total Area (ac)
Dry Facility	4.6

Proposed Pond G1-1: **4.6 acre**

Stage Storage Table for Pond G1-1:

Stage (ft)	Depth (ft)	Area (ac)	Avg. Area (Ac)	ΔVolume (Ac-ft)	Cumulative Volume (Ac-ft)	
74.60	-	2.93	-	-	0.00	
74.94	0.34	2.97	2.95	1.01	1.01	Attenuation V
75.11	0.17	3.00	2.99	0.51	1.52	Treatment V
75.44	0.33	3.10	3.05	1.02	2.54	Total V
81.00	5.56	3.86	3.48	21.46	24.00	
82.00	1.00	4.60	4.23	4.23	28.23	

*Pond G1-1 is located in the northern portion of the parcel located NE of the proposed interchange. Boring information shows the SHWT estimated at 62.6', using an average of borings PBS-36 and PBS-38.

Project: I-75 & 49th St
Client: FDOT
Pond(s): Dry Retention
Basin: Basin 49

Computed By:	JPB
Checked By:	MAH
Date:	10/7/2020

Pre-Development

Total Basin Area	
Description	**Area (ac)**
I-75	0.00
Pastureland (R/W)	14.82
Offsite Pastureland	0.00
TOTAL AREA	**14.82**

Existing Impervious Area	
Description	**Area (ac)**
Roadway, Guardrail Concrete Pad, etc.	0.00
TOTAL IMPERVIOUS AREA	**0.00**

ATTENUATION VOLUME ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.00	0.00
Grassed/Open Area (Good)	D	80	0.00	0.00
Pastureland	A	39	14.82	577.98
Water Bodies	A/D	100	0.00	0.00
		TOTAL	14.82	577.98
		COMPOSITE CN		**39.0**

ESTIMATE OF PRE-DEVELOPMENT RUNOFF VOLUME

Summary Table:

Design Storm	Agency	P (in)	S (in)	R (in)	Vr (ac-ft)
25 yr, 96 hr	SJRWMD	11.50	15.64	2.92	3.60
100 yr, 24 hr	FDOT	11.40	15.64	2.86	3.53
100 yr, 240 hr	FDOT	16.80	15.64	6.38	7.88

Example Calculations for the 25 yr, 96 hr

1) Soil Storage (S) — $S = (1000/CN) - 10$

Soil Storage (in)	S	15.64

2) Runoff (R) — $R = (P-0.2S)^2/(P+0.8S)$

Runoff (in)	R	2.92

3) Runoff Volume (Vr) — $Vr = R/12 * Area$

Runoff (ac-ft)	Vr	3.60

Post-Development

Total Basin Area	
Description	**Area (ac)**
Roadway, off-site areas, and ponds	14.82
TOTAL AREA	**14.82**

Proposed Total Impervious Area	
Description	**Area (ac)**
Proposed Added Pavement	5.45
TOTAL IMPERVIOUS AREA	**5.45**

Land Use Description/ Soil Name	Soil Group	CN	Area (ac)	Product
On-site Roadway	A/D	98	5.45	534.10
Pastureland (R/W)	A	39	9.37	365.43
Offsie Pastureland	A	39	0.00	0.00
		TOTAL	14.82	899.53
		COMPOSITE CN		**60.7**

ESTIMATE OF POST DEVELOPMENT RUNOFF VOLUME

Summary Table:

Design Storm	Agency	P (in)	S (in)	R (in)	Vr (ac-ft)
25 yr, 96 hr	SJRWMD	11.50	6.48	6.24	7.71
100 yr, 24 hr	FDOT	11.40	6.48	6.16	7.61
100 yr, 240 hr	FDOT	16.80	6.48	10.94	13.51

Example Calculations for the 25 yr, 96 hr

1) Soil Storage (S) — $S = (1000/CN) - 10$ — Soil Storage (in) S = 6.48

2) Runoff (R) — $R = (P-0.2S)^2/(P+0.8S)$ — Runoff (in) R = 6.24

3) Runoff Volume (Vr) — $Vr = R/12 * Area$ — Runoff (ac-ft) Vr = 7.71

SUMMARY OF ATTENUATION ESTIMATES

PRE-DEVELOPED CONDITION

AREA (AC):	14.82
CN:	39.0

POST DEVELOPED CONDITION

AREA (AC):	14.82
CN:	60.7

AGENCY	DESIGN STORM	RUNOFF VOLUME (Vr)		
		PRE (AC-FT)	POST (AC-FT)	INCREASE (AC-FT)
SJRWMD	25 yr, 96 hr	3.60	7.71	4.11
FDOT	100 yr, 24 hr	3.53	7.61	4.07
FDOT	100 yr, 240 hr	7.88	13.51	5.63

MAXIMUM ATTENUATION VOLUME (AC-FT)	5.63

WATER QUALITY CALCULATIONS

Water Management District
Pollution Abatement Volume Requirement

Agency:	SJRWMD
Post Development Total Area (ac) =	14.82
Total Post Development Impervious Area (ac) =	5.45

Based on the existing soil types and their depth to SHWT (USGS), Metric is proposing a on-line dry retention facility.

Dry Retention (On-Line System) Treatment Criteria - 1.25" over impervious area or 0.5" over total area, whichever is greater, plus 0.5" over the total area for in-line systems

Water Quality Volume Required (Closed Basin):	**Ac-Ft**	
1) 0.5" of Runoff Over Total Area =	0.62	Governs
2) 1.25" of Runoff Over Impervious Area =	0.57	
3) Add 0.5" over the total area for an in-line system =	0.62	
POLLUTION ABATEMENT VOLUME REQUIRED =	**1.24**	

ESTIMATE POND RIGHT OF WAY REQUIREMENTS 49-1

1) The depth available for the treatment and attenuation volumes is constrained to the front of berm elevation above the SHWT minus the freeboard.

2) The SHWT elevations for the purpose of pond sizing were established based on based on geotechnical information to be at 72.6'.

D= Pond Depth from top of Maint Berm to bottom=	7.00	ft
F = Freeboard =	1	ft
H = D - F =	6	ft

3) Sum the required treatment, flood compensation, and/or attenuation volumes to attain the Peak Pond Volume. Note that a negative attenuation volume reduces the required floodplain compensation volume.

Required Attenuation Volume =	5.63	ac-ft
Required Treatment Volume =	1.24	ac-ft
Total Treatment & Attenuation Volume Required =	**6.87**	**ac-ft**

4) For purposes of pond area calculations, assume a square pond.

Volume = LWH

where H = height (ft)

L = length of vertical sided pond (ft)

W = width of vertical sided pond (ft)

Since a square pond is being assumed, L = W. Therefore, Volume = L^2H

Volume =	6.87	ac-ft	
H =	6	ft	
	6.00 =	L^2 x	6
Solving for L =	208.7	ft	
Therefore W =	208.7	ft	

5) Increase dimensions to account for side slopes and freeboard.

Add: x = [(Side Slopes x D) x 2] to each dimension (D=H+1)

Side slopes:	4	ft/ft
D:	7.00	ft
x =	56	ft
Length @ top of slope =	265	ft
Width @ top of slope =	265	ft

6) Add maintenance berms.

Assume 20' maintenance berm (add to each side)

Length w/maint Berm =	305	ft
Width w/maint. Berm =	305	ft
Total Area =	2.13	acre
Add 25% Contingency	2.66	acre

PRELIMINARY POND AREA REQUIRED FOR BASIN = 2.7 ACRE

Facility Type	Total Area (ac)
Dry Facility	2.6

Proposed Pond 49-1: **2.6 acre**

Stage Storage Table for Pond 49-1:

Stage (ft)	Depth (ft)	Area (ac)	Avg. Area (Ac)	ΔVolume (Ac-ft)	Cumulative Volume (Ac-ft)	
77.00	-	1.13	-	-	0.00	
78.00	1.00	1.25	1.19	1.25	1.25	Treatment V
80.79	2.79	1.57	1.41	4.38	5.63	Attenuation V
81.53	0.74	1.68	1.63	1.24	6.87	Total V
84.00	2.47	1.96	1.82	4.84	11.71	
85.00	1.00	2.63	2.30	2.30	14.01	

*Pond 49-1 is located in the parcel NE of the proposed interchange, adjacent to the existing depressional area. Boring information shows the SHWT estimated at 72.6', using an average of borings PBS-9, PBS-10, and PBS-11.

Project: I-75 & 49th St
Client: FDOT
Pond(s): Swales
Basin: Basin G2

Computed By:	JPB
Checked By:	MAH
Date:	10/7/2020

Pre-Development

Total Basin Area	
Description	**Area (ac)**
I-75	6.32
Pastureland (R/W)	13.32
Offsite Pastureland	0.00
TOTAL AREA	**19.64**

Existing Impervious Area	
Description	**Area (ac)**
Roadway, Guardrail Concrete Pad, etc.	6.32
TOTAL IMPERVIOUS AREA	**6.32**

ATTENUATION VOLUME ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	6.32	619.36
Grassed/Open Area (Good)	D	80	0.00	0.00
Pastureland	A	39	13.32	519.48
Water Bodies	A/D	100	0.00	0.00
		TOTAL	19.64	1,138.84
		COMPOSITE CN		**58.0**

ESTIMATE OF PRE-DEVELOPMENT RUNOFF VOLUME

Summary Table:

Design Storm	Agency	P (in)	S (in)	R (in)	Vr (ac-ft)
25 yr, 96 hr	SJRWMD	11.50	7.25	5.84	9.56
100 yr, 24 hr	FDOT	11.40	7.25	5.76	9.42
100 yr, 240 hr	FDOT	16.80	7.25	10.43	17.07

Example Calculations for the 25 yr, 96 hr

1) Soil Storage (S) — $S = (1000/CN) - 10$ — Soil Storage (in) S = 7.25

2) Runoff (R) — $R = (P-0.2S)^2/(P+0.8S)$ — Runoff (in) R = 5.84

3) Runoff Volume (Vr) — $Vr = R/12 * Area$ — Runoff (ac-ft) Vr = 9.56

Post-Development

Total Basin Area	
Description	**Area (ac)**
Roadway, off-site areas, and ponds	25.90
TOTAL AREA	**25.90**

Proposed Impervious Area	
Description	**Area (ac)**
Proposed Pavement	8.65
TOTAL IMPERVIOUS AREA	**8.65**

Land Use Description/ Soil Name	Soil Group	CN	Area (ac)	Product
On-site Roadway	A/D	98	8.65	847.70
Off-site Roadway	A/D	98	0.00	0.00
Pastureland (R/W)	A	39	17.25	672.75
Off-site Pastureland	A	39	0.00	0.00
		TOTAL	25.90	1,520.45
		COMPOSITE CN		**58.7**

ESTIMATE OF POST DEVELOPMENT RUNOFF VOLUME

Summary Table:

Design Storm	Agency	P (in)	S (in)	R (in)	Vr (ac-ft)
25 yr, 96 hr	SJRWMD	11.50	7.03	5.95	12.84
100 yr, 24 hr	FDOT	11.40	7.03	5.86	12.66
100 yr, 240 hr	FDOT	16.80	7.03	10.57	22.80

Example Calculations for the 25 yr, 96 hr

1) Soil Storage (S)	$S = (1000/CN) - 10$	Soil Storage (in)	S	7.03
2) Runoff (R)	$R = (P-0.2S)^2/(P+0.8S)$	Runoff (in)	R	5.95
3) Runoff Volume (Vr)	$Vr = R/12 * Area$	Runoff (ac-ft)	Vr	12.84

SUMMARY OF ATTENUATION ESTIMATES

PRE-DEVELOPED CONDITION		POST DEVELOPED CONDITION	
AREA (AC):	19.64	AREA (AC):	25.90
CN:	58.0	CN:	58.7

AGENCY	DESIGN STORM	RUNOFF VOLUME (Vr)		
		PRE (AC-FT)	POST (AC-FT)	INCREASE (AC-FT)
SJRWMD	25 yr, 96 hr	9.56	12.84	3.28
FDOT	100 yr, 24 hr	9.56	12.84	3.28
FDOT	100 yr, 240 hr	17.07	22.80	5.73

MAXIMUM ATTENUATION VOLUME (AC-FT)	**5.73**

PRE-DEVELOPMENT

Pre-Development Tc & CN Calculations

Time of Concentration, Tc & Curve Number, CN Calculations

BASIN: **OFFSITE D1 (EX)**

Sheet __1__ of __1_ Proj. I-75&49th
Computed By: __JPB__ Date: _9/07/2020_
Checked By: __MAH__ Date: _10/08/2020_

Tc Calculations:

Sheet Flow

				Segment ID:	AB				
1.	Surface description (table 3-1, TR-55)				Grass				
2.	Manning's Roughness coefficient, n (table 3-1, TR-55)				0.15				
3.	Two year 24 hour rainfall, P2		in		4.8				
4.	Flow length, L (total L< 300 ft)		ft		300				
5.	Land slope , s	Begin Elev.	ft		129.0				
		End Elev.	ft		123.0				
	Slope = (E1-E2)/L	Slope	ft/ft		0.020				
6.	Tt = (0.007*(nL)^0.8)/((P2^0.5)(s^0.4)) * 60	Compute Tt	min.		19.27	+		=	19.3

Shallow Concentrated Flow

				Segment ID:	BC				
7.	Surface description (paved or unpaved)				unpaved				
	Velocity Coefficient K (Paved = 20.328, Unpaved = 16.1345)				20.328				
8.	Flow length, L		ft		2650				
9.	Watercourse slope, S	Begin Elev.	ft		123.0				
		End Elev.	ft		69.0				
	Slope = (E1-E2)/L	Slope	ft/ft		0.020				
10.	Average velocity, V (V = K*S^0.5)		ft/s		2.90				
11.	Tt = L/(60*V)	Compute Tt	min.		15.2	+		=	15.2

Channel Flow

				Segment ID:	CD				
14.	Hydraulic radius, R = A / WP		ft		0.00				
15.	Flow length, L		ft		500				
16.	Slope, s	Begin Elev.	ft		32.0				
		End Elev.	ft		31.0				
	Slope = (E1-E2)/L	Slope	ft/ft		0.002				
17.	Manning's roughness coefficient, n (table 3-1, TR-55)				0.15				
18.	V = (1.49*R^.67*s^0.5)/N		ft/s		0.00				
19.	Tt = L/(60*V)	Compute Tt	min.		0.0	+		=	0.0

20.	Total of 6, 11 and 19			=	34.5 min.
	Minimum Time of Concentration	minimum:	10.0 min.		
	Time of Concentration			**34.5**	**min.**
				0.6	**hr**

CN Calculations:

Land Use Description	Soil Group	CN	Area (ac.)	Product
Impervious Areas	A/D	98	0.00	0.00
Pastureland	A	39	120.40	4695.60
Water Bodies	A/D	100	0.00	0.00
		TOTALS:	120.40	4695.60
			COMPOSITE CN =	**39.0**

Time of Concentration, Tc & Curve Number, CN Calculations

BASIN: **F-OFF (EX)**

Sheet __1__ of __1_ Proj. I-75&49th
Computed By: __JPB__ Date: _9/07/2020_
Checked By: __MAH__ Date: _10/08/2020_

Tc Calculations:

Sheet Flow

				Segment ID:	AB				
1.	Surface description (table 3-1, TR-55)				Grass				
2.	Manning's Roughness coefficient, n (table 3-1, TR-55)				0.15				
3.	Two year 24 hour rainfall, P2		in		4.8				
4.	Flow length, L (total L< 300 ft)		ft		300				
5.	Land slope , s	Begin Elev.	ft		110.0				
		End Elev.	ft		107.0				
	Slope = (E1-E2)/L	Slope	ft/ft		0.010				
6.	Tt = (0.007*(nL)^0.8)/((P2^0.5)(s^0.4)) * 60	Compute Tt	min.		25.42	+		=	25.4

Shallow Concentrated Flow

				Segment ID:	BC				
7.	Surface description (paved or unpaved)				unpaved				
	Velocity Coefficient K (Paved = 20.328, Unpaved = 16.1345)				20.328				
8.	Flow length, L		ft		2125				
9.	Watercourse slope, S	Begin Elev.	ft		107.0				
		End Elev.	ft		80.0				
	Slope = (E1-E2)/L	Slope	ft/ft		0.013				
10.	Average velocity, V (V = K*S^0.5)		ft/s		2.29				
11.	Tt = L/(60*V)	Compute Tt	min.		15.5	+		=	15.5

Channel Flow

				Segment ID:	CD				
14.	Hydraulic radius, R = A / WP		ft		0.00				
15.	Flow length, L		ft		500				
16.	Slope, s	Begin Elev.	ft		32.0				
		End Elev.	ft		31.0				
	Slope = (E1-E2)/L	Slope	ft/ft		0.002				
17.	Manning's roughness coefficient, n (table 3-1, TR-55)				0.15				
18.	V = (1.49*R^.67*s^0.5)/N		ft/s		0.00				
19.	Tt = L/(60*V)	Compute Tt	min.		0.0	+		=	0.0

20.	Total of 6, 11 and 19			=	40.9 min.
	Minimum Time of Concentration	minimum:	10.0 min.		
	Time of Concentration			**40.9**	**min.**
				0.7	**hr**

CN Calculations:

Land Use Description	Soil Group	CN	Area (ac.)	Product
Impervious Areas	A/D	98	0.00	0.00
Pastureland	A	39	18.20	709.80
Water Bodies	A/D	100	0.00	0.00
		TOTALS:	18.20	709.80
			COMPOSITE CN =	**39.0**

Time of Concentration, Tc & Curve Number, CN Calculations

BASIN: **OFFSITE G-1 (EX)**

Sheet __1__ of __1_ Proj. I-75&49th
Computed By: __JPB__ Date: _9/07/2020_
Checked By: __MAH__ Date: _10/08/2020_

Tc Calculations:

Sheet Flow

				Segment ID:	AB				
1.	Surface description (table 3-1, TR-55)				Grass				
2.	Manning's Roughness coefficient, n (table 3-1, TR-55)				0.15				
3.	Two year 24 hour rainfall, P2		in		4.8				
4.	Flow length, L (total L< 300 ft)		ft		300				
5.	Land slope , s	Begin Elev.	ft		83.0				
		End Elev.	ft		80.0				
	Slope = (E1-E2)/L	Slope	ft/ft		0.010				
6.	Tt = (0.007*(nL)^0.8)/((P2^0.5)(s^0.4)) * 60	Compute Tt	min.		25.42	+		=	25.4

Shallow Concentrated Flow

				Segment ID:	BC				
7.	Surface description (paved or unpaved)				unpaved				
	Velocity Coefficient K (Paved = 20.328, Unpaved = 16.1345)				20.328				
8.	Flow length, L		ft		60				
9.	Watercourse slope, S	Begin Elev.	ft		83.0				
		End Elev.	ft		74.0				
	Slope = (E1-E2)/L	Slope	ft/ft		0.150				
10.	Average velocity, V (V = K*S^0.5)		ft/s		7.87				
11.	Tt = L/(60*V)	Compute Tt	min.		0.1	+		=	0.1

Channel Flow

				Segment ID:	CD				
14.	Hydraulic radius, R = A / WP		ft		0.00				
15.	Flow length, L		ft		500				
16.	Slope, s	Begin Elev.	ft		32.0				
		End Elev.	ft		31.0				
	Slope = (E1-E2)/L	Slope	ft/ft		0.002				
17.	Manning's roughness coefficient, n (table 3-1, TR-55)				0.15				
18.	V = (1.49*R^.67*s^0.5)/N		ft/s		0.00				
19.	Tt = L/(60*V)	Compute Tt	min.		0.0	+		=	0.0

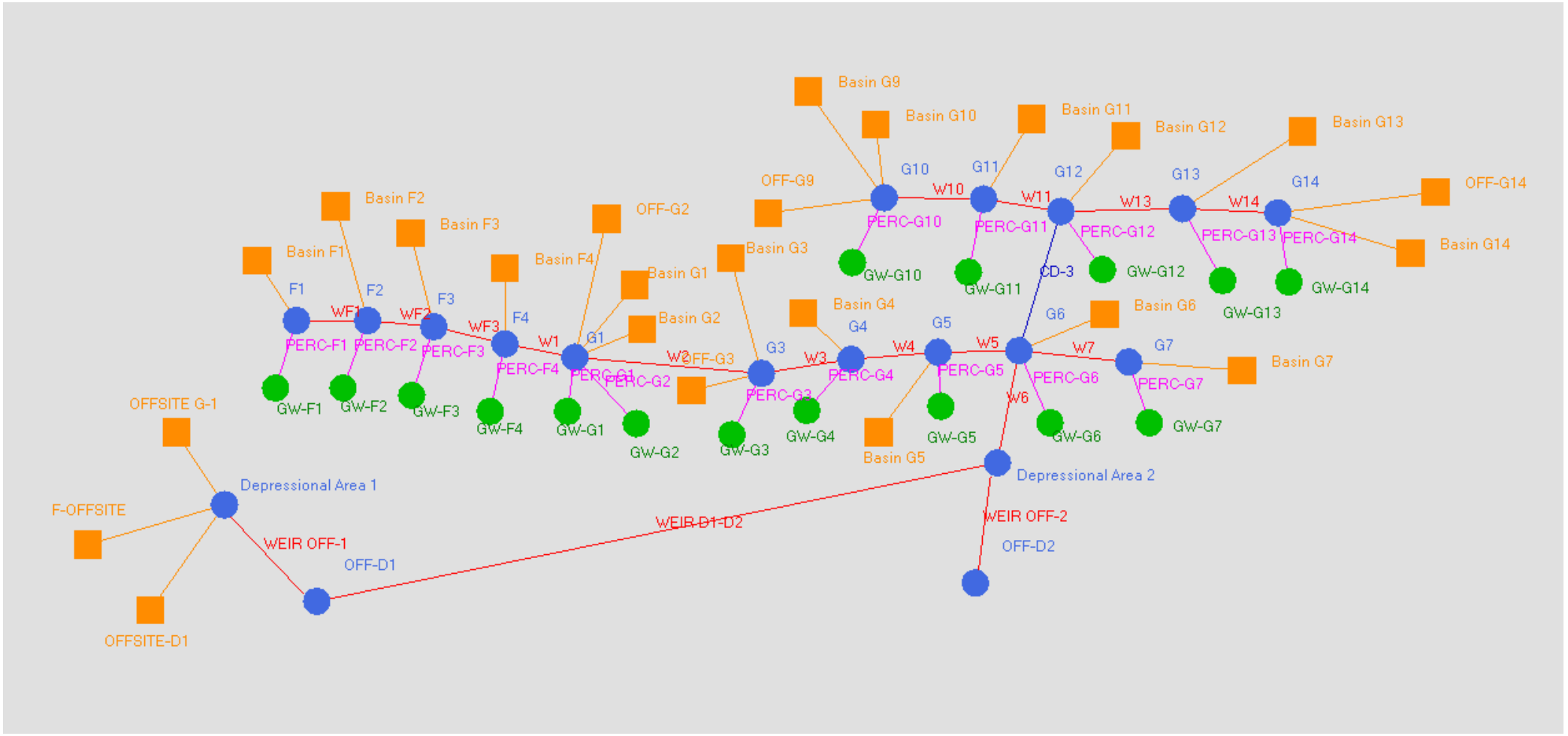
20.	Total of 6, 11 and 19							=	25.5 min.
	Minimum Time of Concentration			minimum:	10.0	min.			
	Time of Concentration								**25.5 min.**
									0.4 hr

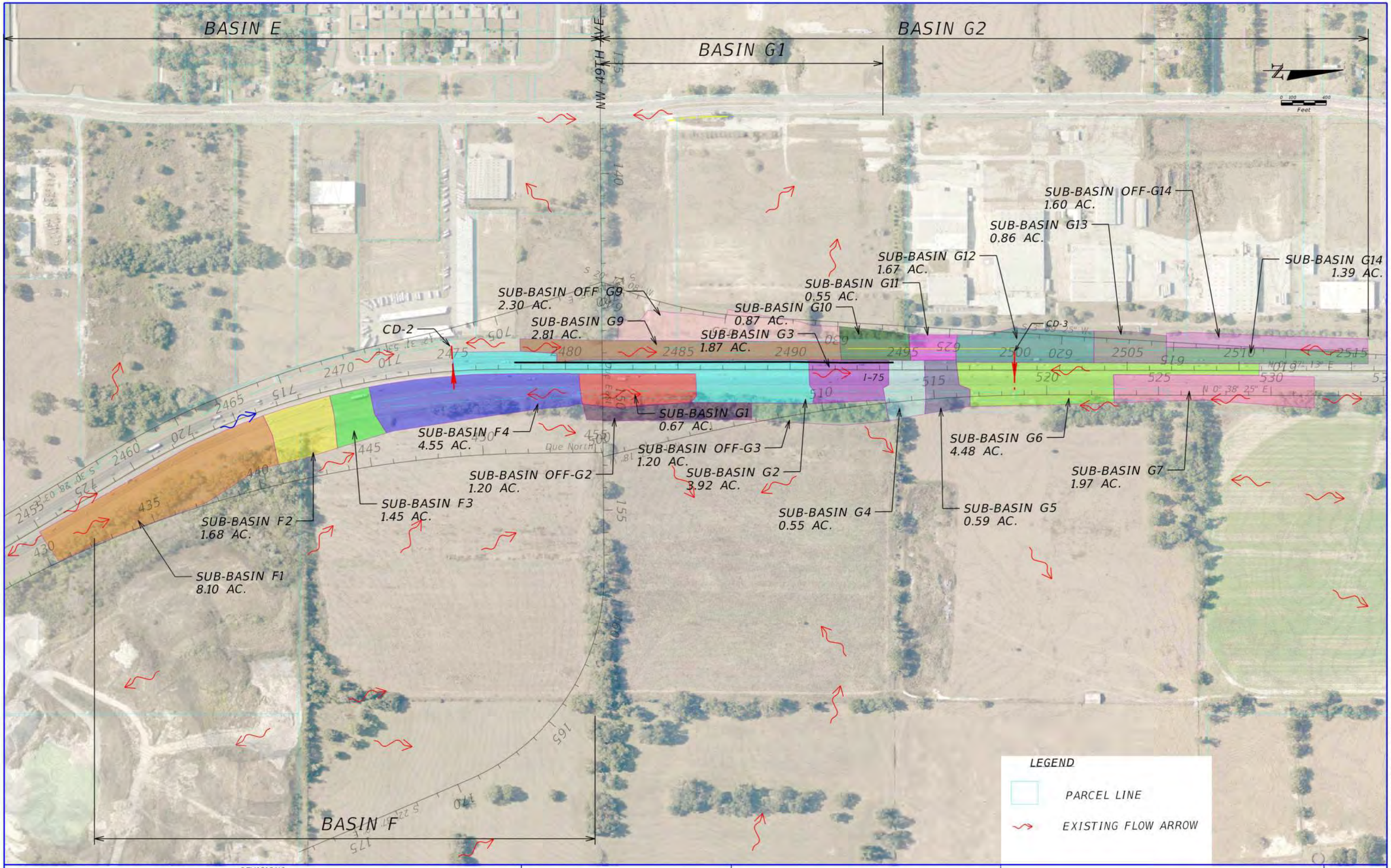
CN Calculations:

Land Use Description	Soil Group	CN	Area (ac.)	Product
Impervious Areas	A/D	98	0.00	0.00
Pastureland	A	39	9.38	365.82
Water Bodies	A/D	100	0.00	0.00
		TOTALS:	9.38	365.82
			COMPOSITE CN =	**39.0**

PRE-DEVELOPMENT
ICPR MODEL

Pre-Development ICPR Layout





REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

METRIC ENGINEERING, INC.
13940 S.W. 136 STREET
SUITE 200
MIAMI, FLORIDA 33186
TEL. (305) 235-5098
FAX. (305) 235-5271
CERTIFICATE OF AUTHORIZATION 2294

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
I-75	MARION	435209-1-22-01

$USER$ $DATE$ $TIME$ $FILE$

PRE-DEVELOPMENT
ICPR SUB-BASIN DRAINAGE MAP
(BASINS F, G1, & G2)

SHEET NO.
C-35

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

Pre-Development
ICPR Input

Manual Basin: Basin F1

Scenario: Pre-Development
Node: F1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
8.1000	Basin F1	Basin F1	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin F2

Scenario: Pre-Development
Node: F2
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.6800	Basin F2	Basin F2	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin F3

Scenario: Pre-Development
Node: F3
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.4500	Basin F3	Basin F3	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin F4

Scenario: Pre-Development

Node: F4
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
4.5500	Basin F4	Basin F4	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin G1

Scenario: Pre-Development
Node: G1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.6700	Basin G1	Basin G1	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin G10

Scenario: Pre-Development
Node: G10
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.8700	Basin G9/10	Basin G9/10	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin G11

Scenario: Pre-Development
Node: G11
Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.5500	Basin G11	Basin G11	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin G12

Scenario: Pre-Development
Node: G12
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.6700	Basin G12	Basin G12	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin G13

Scenario: Pre-Development
Node: G13
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.8600	Basin G13	Basin G13	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin G14

Scenario: Pre-Development
Node: G14
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min

Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.3900	Basin G14	Basin G14	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin G2

Scenario: Pre-Development
Node: G1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
3.9200	Basin G2	Basin G2	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin G3

Scenario: Pre-Development
Node: G3
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.8700	Basin G3	Basin G3	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin G4

Scenario: Pre-Development
Node: G4
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr

Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.5500	Basin G4	Basin G4	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin G5

Scenario: Pre-Development
Node: G5
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.5900	Basin G5	Basin G5	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin G6

Scenario: Pre-Development
Node: G6
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
4.4800	Basin G6	Basin G6	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin G7

Scenario: Pre-Development
Node: G7
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.9700	Basin G7/8	Basin G7/8	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin G9

Scenario: Pre-Development
Node: G10
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
2.8100	Basin G9/10	Basin G9/10	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: F-OFFSITE

Scenario: Pre-Development
Node: Depressional Area 1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 40.9000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
18.2000	OFFSITE	OFFSITE	

Comment:

Manual Basin: OFF-G14

Scenario: Pre-Development
Node: G14
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.6000	OFF G14	OFF G14	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: OFF-G2

Scenario: Pre-Development
Node: G1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.2000	OFF G2	OFF G2	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: OFF-G3

Scenario: Pre-Development
Node: G3
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.2000	OFF G3	OFF G3	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: OFF-G9

Scenario: Pre-Development
Node: G10
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
2.3000	OFF G9	OFF G9	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: OFFSITE G-1

Scenario: Pre-Development
Node: Depressional Area 1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 25.5000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
9.3800	OFFSITE	OFFSITE	

Comment:

Manual Basin: OFFSITE-D1

Scenario: Pre-Development
Node: Depressional Area 1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 34.5000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
120.4000	OFFSITE	OFFSITE	

Comment:

Curve Number: CurveNumbers [Set]

Land Cover Zone	Soil Zone	Curve Number [dec]
Basin 49	Basin 49	39.0
Basin E	Basin E	48.2
Basin F-Off	Basin F-Off	39.0
Basin F1	Basin F1	56.0
Basin F2	Basin F2	58.0
Basin F3	Basin F3	59.1
Basin F4	Basin F4	58.7
Basin G1	Basin G1	62.9
Basin G1-1	Basin G1-1	48.2
Basin G11	Basin G11	63.3
Basin G12	Basin G12	63.1
Basin G13	Basin G13	63.2
Basin G14	Basin G14	63.1
Basin G2	Basin G2	73.6
Basin G3	Basin G3	76.0
Basin G4	Basin G4	63.3
Basin G5	Basin G5	63.1

Land Cover Zone	Soil Zone	Curve Number [dec]
Basin G6	Basin G6	77.6
Basin G7/8	Basin G7/8	63.2
Basin G9/10	Basin G9/10	57.7
OFF G14	OFF G14	49.0
OFF G2	OFF G2	49.0
OFF G3	OFF G3	49.0
OFF G9	OFF G9	49.0
OFFSITE	OFFSITE	39.0

Node: Depressional Area 1

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 66.00 ft
Warning Stage: 73.00 ft

Stage [ft]	Area [ac]	Area [ft2]
66.00	0.1200	5227
67.00	1.7600	76666
68.00	3.4700	151153
69.00	5.5900	243500
70.00	7.6700	334105
71.00	9.6700	421225
72.00	11.8100	514444
73.00	13.8600	603742

Comment:

Node: Depressional Area 2

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 67.00 ft
Warning Stage: 73.50 ft

Stage [ft]	Area [ac]	Area [ft2]
67.00	0.1000	4356
68.00	0.2800	12197
69.00	0.4200	18295
70.00	0.8100	35284
71.00	2.3300	101495
72.00	3.7100	161608
73.00	6.0200	262231
74.00	35.8000	1559448

Comment:

Node: F1

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 84.07 ft
Warning Stage: 86.47 ft

Stage [ft]	Area [ac]	Area [ft2]
84.07	0.0000	0
84.37	0.0220	958
84.67	0.0340	1481
84.97	0.0480	2091
85.27	0.0630	2744
85.57	0.0810	3528
85.87	0.0990	4312
86.17	0.1190	5184
86.47	0.1400	6098

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: F2

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 82.07 ft
Warning Stage: 85.07 ft

Stage [ft]	Area [ac]	Area [ft2]
82.07	0.0000	0
82.37	0.0840	3659
82.67	0.0980	4269
82.97	0.1120	4879
83.27	0.1260	5489
83.57	0.1400	6098
83.87	0.1550	6752
84.17	0.1710	7449
84.47	0.1860	8102
85.07	0.2240	9757

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: F3

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 80.07 ft
Warning Stage: 83.67 ft

Stage [ft]	Area [ac]	Area [ft2]
80.07	0.0000	0

Stage [ft]	Area [ac]	Area [ft2]
80.47	0.0850	3703
80.87	0.1030	4487
81.27	0.1210	5271
81.67	0.1390	6055
82.07	0.1580	6882
82.47	0.1780	7754
82.87	0.1980	8625
83.27	0.2210	9627
83.67	0.2460	10716

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: F4

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 77.07 ft
Warning Stage: 80.97 ft

Stage [ft]	Area [ac]	Area [ft2]
77.07	0.0000	0
77.57	0.3020	13155
78.07	0.3660	15943
78.57	0.4320	18818
79.07	0.4990	21736
79.57	0.5670	24699
80.07	0.6360	27704
80.57	0.7060	30753
80.97	0.7760	33803

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G1

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 74.07 ft
Warning Stage: 77.87 ft

Stage [ft]	Area [ac]	Area [ft2]
74.07	0.0000	0
74.47	0.2840	12371
74.87	0.3600	15682
75.27	0.4370	19036
75.67	0.5140	22390
76.07	0.5920	25788
76.47	0.6840	29795
76.87	0.7770	33846
77.27	0.8730	38028

Stage [ft]	Area [ac]	Area [ft2]
77.87	1.0210	44475

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G10

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 71.57 ft
Warning Stage: 74.77 ft

Stage [ft]	Area [ac]	Area [ft2]
71.57	0.0000	0
71.67	0.0410	1786
72.37	0.0600	2614
72.77	0.0810	3528
73.17	0.1020	4443
73.57	0.1350	5881
73.97	0.1480	6447
74.37	0.1760	7667
74.77	0.2060	8973

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G11

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 70.07 ft
Warning Stage: 73.27 ft

Stage [ft]	Area [ac]	Area [ft2]
70.07	0.0000	0
70.47	0.0500	2178
70.87	0.0630	2744
71.27	0.0780	3398
71.67	0.0940	4095
72.07	0.1110	4835
72.47	0.1300	5663
72.87	0.1500	6534
73.27	0.1730	7536

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G12

Scenario: Pre-Development

Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 68.07 ft
Warning Stage: 72.27 ft

Stage [ft]	Area [ac]	Area [ft2]
68.07	0.0000	0
68.67	0.2040	8886
69.27	0.2680	11674
69.87	0.3340	14549
70.47	0.4040	17598
71.07	0.4760	20735
71.67	0.5500	23958
72.27	0.6320	27530

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G13

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 70.07 ft
Warning Stage: 73.67 ft

Stage [ft]	Area [ac]	Area [ft2]
70.07	0.0000	0
70.47	0.0580	2526
70.87	0.0780	3398
71.27	0.1000	4356
71.67	0.1220	5314
72.07	0.1460	6360
72.47	0.1710	7449
72.87	0.1990	8668
73.67	0.2620	11413

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G14

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 74.07 ft
Warning Stage: 75.67 ft

Stage [ft]	Area [ac]	Area [ft2]
74.07	0.0000	0
74.27	0.0320	1394
74.47	0.0430	1873
74.67	0.0560	2439
74.87	0.0700	3049

Stage [ft]	Area [ac]	Area [ft2]
75.07	0.0850	3703
75.27	0.0990	4312
75.47	0.1140	4966
75.67	0.1280	5576

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G3

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 72.57 ft
Warning Stage: 75.07 ft

Stage [ft]	Area [ac]	Area [ft2]
72.57	0.0000	0
72.87	0.0340	1481
73.17	0.0490	2134
73.47	0.0640	2788
73.77	0.0810	3528
74.07	0.0980	4269
74.37	0.1180	5140
74.67	0.1400	6098
75.07	0.1690	7362

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G4

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 71.07 ft
Warning Stage: 74.07 ft

Stage [ft]	Area [ac]	Area [ft2]
71.07	0.0000	0
71.47	0.0540	2352
71.87	0.0670	2919
72.27	0.0820	3572
72.67	0.0990	4312
73.07	0.1180	5140
73.47	0.1390	6055
73.87	0.1610	7013
74.07	0.1710	7449

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G5

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 68.07 ft
Warning Stage: 71.97 ft

Stage [ft]	Area [ac]	Area [ft2]
68.07	0.0000	0
68.57	0.0570	2483
69.07	0.0740	3223
69.57	0.0930	4051
70.07	0.1140	4966
70.57	0.1370	5968
71.07	0.1610	7013
71.57	0.1880	8189
71.97	0.2100	9148

Comment:

Node: G6

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 66.57 ft
Warning Stage: 70.47 ft

Stage [ft]	Area [ac]	Area [ft2]
66.57	0.0000	0
67.07	0.1740	7579
67.57	0.2250	9801
68.07	0.2780	12110
68.57	0.3080	13416
69.07	0.3900	16988
69.57	0.4490	19558
70.07	0.5090	22172
70.47	0.5680	24742

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G7

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 71.07 ft
Warning Stage: 75.67 ft

Stage [ft]	Area [ac]	Area [ft2]
71.07	0.0000	0
71.47	0.0840	3659

Stage [ft]	Area [ac]	Area [ft2]
71.87	0.1010	4400
72.27	0.1180	5140
72.67	0.1360	5924
73.07	0.1560	6795
73.47	0.1770	7710
73.87	0.2010	8756
74.27	0.2260	9845
74.67	0.2520	10977

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-F1

Scenario: Pre-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 79.07 ft
Warning Stage: 86.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	79.07
0	0	0	96.0000	79.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-F2

Scenario: Pre-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 78.07 ft
Warning Stage: 84.57 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	78.07
0	0	0	96.0000	78.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-F3

Scenario: Pre-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 74.07 ft
Warning Stage: 83.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	74.07
0	0	0	96.0000	74.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-F4

Scenario: Pre-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 72.07 ft
Warning Stage: 80.77 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	72.07
0	0	0	96.0000	72.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G1

Scenario: Pre-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 71.07 ft
Warning Stage: 78.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	71.07
0	0	0	96.0000	71.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G10

Scenario: Pre-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 67.07 ft
Warning Stage: 74.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	67.07
0	0	0	96.0000	67.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G11

Scenario: Pre-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 66.07 ft
Warning Stage: 72.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	66.07
0	0	0	96.0000	66.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G12

Scenario: Pre-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 62.07 ft
Warning Stage: 70.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	62.07
0	0	0	96.0000	62.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G13

Scenario: Pre-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 62.07 ft
Warning Stage: 73.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	62.07
0	0	0	96.0000	62.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G14

Scenario: Pre-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 68.07 ft
Warning Stage: 75.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	68.07
0	0	0	96.0000	68.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G2

Scenario: Pre-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 69.07 ft
Warning Stage: 75.57 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	69.07
0	0	0	96.0000	69.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G3

Scenario: Pre-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 66.07 ft
Warning Stage: 74.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	66.07
0	0	0	96.0000	66.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G4

Scenario: Pre-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 66.07 ft
Warning Stage: 73.07 ft

Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	66.07
0	0	0	96.0000	66.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G5

Scenario: Pre-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 63.07 ft
Warning Stage: 71.57 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	63.07
0	0	0	96.0000	63.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G6

Scenario: Pre-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 61.07 ft
Warning Stage: 70.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	61.07
0	0	0	96.0000	61.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G7

Scenario: Pre-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 63.07 ft
Warning Stage: 73.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	63.07
0	0	0	96.0000	63.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: OFF-D1

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 66.00 ft
Warning Stage: 73.00 ft

Stage [ft]	Area [ac]	Area [ft2]
66.00	1.0100	43996
67.00	1.4500	63162
70.00	2.6800	116741
71.00	2.9000	126324
72.00	3.6100	157252
73.00	3.8500	167706

Comment: Represents offsite pop-off location for Depressional Area 1

Node: OFF-D2

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 69.00 ft
Warning Stage: 73.50 ft

Stage [ft]	Area [ac]	Area [ft2]
69.00	0.0500	2178
70.00	2.0700	90169
71.00	7.7400	337154
72.00	13.5300	589367
73.00	20.5600	895594

Comment: Represents offsite pop-off location for Depressional Area 2

Pipe Link: CD-3

Scenario: Pre-Development
From Node: G12
To Node: G6
Link Count: 1
Flow Direction: Both
Damping: 0.0000 ft
Length: 170.00 ft
FHWA Code: 1
Entr Loss Coef: 0.50
Exit Loss Coef: 0.00

Upstream		Downstream	
Invert:	70.07 ft	Invert:	69.51 ft
Manning's N:	0.0120	Manning's N:	0.0120
Geometry: Circular		Geometry: Circular	
Max Depth:	2.00 ft	Max Depth:	2.00 ft
Bottom Clip			
Default:	0.00 ft	Default:	0.00 ft
Op Table:		Op Table:	
Ref Node:		Ref Node:	
Manning's N:	0.0000	Manning's N:	0.0000
Top Clip			

Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 ft	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Percolation Link: PERC-F1

Scenario:	Pre-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	F1		
To Node:	GW-F1	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	404.00 ft
Flow Direction:	Both	Perimeter 2:	744.11 ft
Aquifer Base Elevation:	72.07 ft	Perimeter 3:	2369.04 ft
Water Table Elevation:	79.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	4.500 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	3.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	7.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-F2

Scenario:	Pre-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	F2		
To Node:	GW-F2	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	577.50 ft
Flow Direction:	Both	Perimeter 2:	1046.16 ft
Aquifer Base Elevation:	71.07 ft	Perimeter 3:	2007.42 ft
Water Table Elevation:	78.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	4.500 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	3.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	6.50 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-F3

Scenario:	Pre-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	F3		
To Node:	GW-F3	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	511.30 ft
Flow Direction:	Both	Perimeter 2:	772.42 ft
Aquifer Base Elevation:	68.07 ft	Perimeter 3:	1676.56 ft
Water Table Elevation:	74.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft

Horizontal Conductivity:	31.500 fpd		
Vertical Conductivity:	21.000 fpd	# of Cells P1 to P2:	10
Fillable Porosity:	0.200	# of Cells P2 to P3:	45
Layer Thickness:	9.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-F4

Scenario:	Pre-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	F4		
To Node:	GW-F4	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	1552.00 ft
Flow Direction:	Both	Perimeter 2:	1835.49 ft
Aquifer Base Elevation:	64.07 ft	Perimeter 3:	2483.08 ft
Water Table Elevation:	72.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	31.500 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	21.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	8.75 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-G1

Scenario:	Pre-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G1		
To Node:	GW-G1	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	402.66 ft
Flow Direction:	Both	Perimeter 2:	718.56 ft
Aquifer Base Elevation:	65.07 ft	Perimeter 3:	1228.10 ft
Water Table Elevation:	71.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	29.250 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	19.500 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	7.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-G10

Scenario:	Pre-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G10		
To Node:	GW-G10	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	530.00 ft
Flow Direction:	Both	Perimeter 2:	887.78 ft
Aquifer Base Elevation:	60.07 ft	Perimeter 3:	2693.05 ft
Water Table Elevation:	67.07 ft	Distance P1 to P2:	50.00 ft

Annual Recharge Rate:	0 ipy		
Horizontal Conductivity:	27.000 fpd	Distance P2 to P3:	450.00 ft
Vertical Conductivity:	18.000 fpd	# of Cells P1 to P2:	10
Fillable Porosity:	0.200	# of Cells P2 to P3:	45
Layer Thickness:	7.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-G11

Scenario:	Pre-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G11		
To Node:	GW-G11	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	342.66 ft
Flow Direction:	Both	Perimeter 2:	667.49 ft
Aquifer Base Elevation:	60.07 ft	Perimeter 3:	1633.47 ft
Water Table Elevation:	66.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	27.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	18.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	6.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-G12

Scenario:	Pre-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G12		
To Node:	GW-G12	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	1115.14 ft
Flow Direction:	Both	Perimeter 2:	1448.86 ft
Aquifer Base Elevation:	55.07 ft	Perimeter 3:	2502.20 ft
Water Table Elevation:	62.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	27.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	18.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	8.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-G13

Scenario:	Pre-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G13		
To Node:	GW-G13	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	555.00 ft
Flow Direction:	Both	Perimeter 2:	864.01 ft
Aquifer Base Elevation:	55.07 ft	Perimeter 3:	1904.77 ft

Water Table Elevation:	62.07 ft		
Annual Recharge Rate:	0 ipy	Distance P1 to P2:	50.00 ft
Horizontal Conductivity:	27.000 fpd	Distance P2 to P3:	450.00 ft
Vertical Conductivity:	18.000 fpd	# of Cells P1 to P2:	10
Fillable Porosity:	0.200	# of Cells P2 to P3:	45
Layer Thickness:	11.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-G14

Scenario:	Pre-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G14		
To Node:	GW-G14	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	628.00 ft
Flow Direction:	Both	Perimeter 2:	971.81 ft
Aquifer Base Elevation:	61.07 ft	Perimeter 3:	2791.16 ft
Water Table Elevation:	68.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	27.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	18.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	7.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-G2

Scenario:	Pre-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G1		
To Node:	GW-G2	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	1519.00 ft
Flow Direction:	Both	Perimeter 2:	1853.22 ft
Aquifer Base Elevation:	63.07 ft	Perimeter 3:	2399.61 ft
Water Table Elevation:	69.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	29.250 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	19.500 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	6.50 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-G3

Scenario:	Pre-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G3		
To Node:	GW-G3	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	538.50 ft
Flow Direction:	Both	Perimeter 2:	864.99 ft

Aquifer Base Elevation:	58.07 ft		
Water Table Elevation:	66.07 ft	Perimeter 3:	1471.16 ft
Annual Recharge Rate:	0 ipy	Distance P1 to P2:	50.00 ft
Horizontal Conductivity:	29.250 fpd	Distance P2 to P3:	450.00 ft
Vertical Conductivity:	19.500 fpd	# of Cells P1 to P2:	10
Fillable Porosity:	0.200	# of Cells P2 to P3:	45
Layer Thickness:	8.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-G4

Scenario:	Pre-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G4		
To Node:	GW-G4	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	351.34 ft
Flow Direction:	Both	Perimeter 2:	634.78 ft
Aquifer Base Elevation:	57.07 ft	Perimeter 3:	1231.54 ft
Water Table Elevation:	66.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	29.250 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	19.500 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	7.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-G5

Scenario:	Pre-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G5		
To Node:	GW-G5	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	368.00 ft
Flow Direction:	Both	Perimeter 2:	703.05 ft
Aquifer Base Elevation:	55.07 ft	Perimeter 3:	1460.06 ft
Water Table Elevation:	63.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	27.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	18.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	8.50 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-G6

Scenario:	Pre-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G6		
To Node:	GW-G6	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	1116.66 ft

Flow Direction:	Both		
Aquifer Base Elevation:	55.07 ft	Perimeter 2:	1470.67 ft
Water Table Elevation:	61.07 ft	Perimeter 3:	2425.32 ft
Annual Recharge Rate:	0 ipy	Distance P1 to P2:	50.00 ft
Horizontal Conductivity:	27.000 fpd	Distance P2 to P3:	450.00 ft
Vertical Conductivity:	18.000 fpd	# of Cells P1 to P2:	10
Fillable Porosity:	0.200	# of Cells P2 to P3:	45
Layer Thickness:	9.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-G7

Scenario:	Pre-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G7		
To Node:	GW-G7	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	381.00 ft
Flow Direction:	Both	Perimeter 2:	758.48 ft
Aquifer Base Elevation:	57.07 ft	Perimeter 3:	2600.17 ft
Water Table Elevation:	63.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	27.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	18.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	10.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Weir Link: W1

Scenario:	Pre-Development	**Bottom Clip**	
From Node:	F4	Default:	0.00 ft
To Node:	G1	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	79.87 ft	**Discharge Coefficients**	
Control Elevation:	79.87 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W10

Scenario:	Pre-Development	**Bottom Clip**	

From Node:	G10		
To Node:	G11	Default:	0.00 ft
Link Count:	1	Op Table:	
Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Broad Crested Vertical	Default:	0.00 ft
Geometry Type:	Trapezoidal	Op Table:	
Invert:	74.07 ft	Ref Node:	
Control Elevation:	74.07 ft	Discharge Coefficients	
Max Depth:	999.00 ft	Weir Default:	3.200
Extrapolation Method:	Normal Projection	Weir Table:	
Bottom Width:	10.00 ft	Orifice Default:	0.600
Left Slope:	10.000 (h:v)	Orifice Table:	
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W11

Scenario:	Pre-Development	Bottom Clip	
From Node:	G11	Default:	0.00 ft
To Node:	G12	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	72.07 ft	Discharge Coefficients	
Control Elevation:	72.07 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W13

Scenario:	Pre-Development	Bottom Clip	
From Node:	G13	Default:	0.00 ft
To Node:	G12	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	72.97 ft	Discharge Coefficients	
Control Elevation:	72.97 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W14

Scenario:	Pre-Development
From Node:	G14
To Node:	G13
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Trapezoidal
Invert:	75.07 ft
Control Elevation:	75.07 ft
Max Depth:	999.00 ft
Extrapolation Method:	Normal Projection
Bottom Width:	10.00 ft
Left Slope:	10.000 (h:v)
Right Slope:	10.000 (h:v)

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W2

Scenario:	Pre-Development
From Node:	G1
To Node:	G3
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Trapezoidal
Invert:	75.57 ft
Control Elevation:	75.57 ft
Max Depth:	999.00 ft
Extrapolation Method:	Normal Projection
Bottom Width:	10.00 ft
Left Slope:	10.000 (h:v)
Right Slope:	10.000 (h:v)

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W3

Scenario:	Pre-Development
From Node:	G3
To Node:	G4
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Trapezoidal

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Invert:	74.07 ft
Control Elevation:	74.07 ft
Max Depth:	999.00 ft
Extrapolation Method:	Normal Projection
Bottom Width:	10.00 ft
Left Slope:	10.000 (h:v)
Right Slope:	10.000 (h:v)

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W4

Scenario:	Pre-Development
From Node:	G4
To Node:	G5
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Trapezoidal
Invert:	73.07 ft
Control Elevation:	73.07 ft
Max Depth:	999.00 ft
Extrapolation Method:	Normal Projection
Bottom Width:	10.00 ft
Left Slope:	10.000 (h:v)
Right Slope:	10.000 (h:v)

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W5

Scenario:	Pre-Development
From Node:	G5
To Node:	G6
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Trapezoidal
Invert:	70.77 ft
Control Elevation:	70.77 ft
Max Depth:	999.00 ft
Extrapolation Method:	Normal Projection
Bottom Width:	10.00 ft
Left Slope:	10.000 (h:v)
Right Slope:	10.000 (h:v)

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W6

Scenario:	Pre-Development

Bottom Clip

From Node:	G6
To Node:	Depressional Area 2
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Trapezoidal
Invert:	69.27 ft
Control Elevation:	69.27 ft
Max Depth:	999.00 ft
Extrapolation Method:	Normal Projection
Bottom Width:	30.00 ft
Left Slope:	10.000 (h:v)
Right Slope:	10.000 (h:v)

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W7

Scenario:	Pre-Development
From Node:	G7
To Node:	G6
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Trapezoidal
Invert:	73.07 ft
Control Elevation:	73.07 ft
Max Depth:	999.00 ft
Extrapolation Method:	Normal Projection
Bottom Width:	10.00 ft
Left Slope:	10.000 (h:v)
Right Slope:	10.000 (h:v)

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: WEIR D1-D2

Scenario:	Pre-Development
From Node:	OFF-D1
To Node:	Depressional Area 2
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	74.00 ft
Control Elevation:	74.00 ft
Cross Section:	X-D1-D2

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: WEIR OFF-1

Scenario:	Pre-Development	**Bottom Clip**	
From Node:	Depressional Area 1	Default:	0.00 ft
To Node:	OFF-D1	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	73.00 ft	**Discharge Coefficients**	
Control Elevation:	73.00 ft	Weir Default:	2.800
Cross Section:	X-OFF-1-W	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment: represents elevation at which the depression overtops to the adjacent offsite depressional area to the north

Weir Link: WEIR OFF-2

Scenario:	Pre-Development	**Bottom Clip**	
From Node:	Depressional Area 2	Default:	0.00 ft
To Node:	OFF-D2	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	73.50 ft	**Discharge Coefficients**	
Control Elevation:	73.50 ft	Weir Default:	2.800
Cross Section:	X-OFF-2-W	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment: represents elevation at which the depression overtops to the adjacent offsite depressional area to the east

Weir Link: WF1

Scenario:	Pre-Development	**Bottom Clip**	
From Node:	F1	Default:	0.00 ft
To Node:	F2	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	86.07 ft	**Discharge Coefficients**	
Control Elevation:	86.07 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: WF2

Scenario:	Pre-Development	**Bottom Clip**	
From Node:	F2	Default:	0.00 ft
To Node:	F3	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	84.57 ft	**Discharge Coefficients**	
Control Elevation:	84.57 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: WF3

Scenario:	Pre-Development	**Bottom Clip**	
From Node:	F3	Default:	0.00 ft
To Node:	F4	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	82.87 ft	**Discharge Coefficients**	
Control Elevation:	82.87 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Simulation: 100yr-10day

Scenario:	Pre-Development
Run Date/Time:	10/8/2020 1:57:03 PM
Program Version:	ICPR4 4.04.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	240.0000

Hydrology [sec]	Surface Hydraulics [sec]

Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: CurveNumbers
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Basins

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Manual Basin Rain Opt: Global
Rainfall Name: ~FDOT-240
Rainfall Amount: 16.80 in
Storm Duration: 240.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 100yr-24hr

Scenario: Pre-Development
Run Date/Time: 10/8/2020 1:59:43 PM
Program Version: ICPR4 4.04.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:

Extern Hydrograph Set:

Curve Number Set: CurveNumbers

Green-Ampt Set:

Vertical Layers Set:

Impervious Set: Basins

Tolerances & Options

Time Marching: SAOR

Max Iterations: 6

Over-Relax Weight Fact: 0.5 dec

dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Manual Basin Rain Opt: Global

Rainfall Name: ~FLMOD

Rainfall Amount: 11.40 in

Storm Duration: 24.0000 hr

Dflt Damping (1D): 0.0050 ft

Min Node Srf Area (1D): 100 ft2

Energy Switch (1D): Energy

Comment:

Simulation: 10yr-24hr

Scenario: Pre-Development
Run Date/Time: 10/8/2020 2:13:10 PM
Program Version: ICPR4 4.04.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: CurveNumbers
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Basins

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
IA Recovery Time: 24.0000 hr

dZ Tolerance:	0.0010 ft	Manual Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	7.68 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 25yr-24hr-SJRWMD

Scenario: Pre-Development
Run Date/Time: N/A
Program Version: N/A

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: CurveNumbers

Green-Ampt Set:	
Vertical Layers Set:	
Impervious Set:	Basins

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Manual Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	8.25 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 25yr-24hr-SWFWMD

Scenario:	Pre-Development
Run Date/Time:	10/8/2020 2:01:21 PM
Program Version:	ICPR4 4.04.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: CurveNumbers
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Basins

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Manual Basin Rain Opt: Global
Rainfall Name: ~FLMOD
Rainfall Amount: 8.40 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 25yr-96hr

Scenario: Pre-Development
Run Date/Time: 10/8/2020 2:02:32 PM
Program Version: ICPR4 4.04.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	240.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: CurveNumbers
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Basins

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Manual Basin Rain Opt: Global
Rainfall Name: ~SJRWMD-96
Rainfall Amount: 11.50 in
Storm Duration: 96.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Pre-Development
ICPR Output

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Depressional Area 1	100yr-10day	73.00	73.82	0.0009	54.69	12.70	603742
Depressional Area 1	100yr-24hr	73.00	72.10	0.0010	226.32	0.00	523657
Depressional Area 1	10yr-24hr	73.00	69.72	0.0010	61.85	0.00	309108
Depressional Area 1	25yr-24hr	73.00	70.22	0.0010	87.60	0.00	352946
Depressional Area 1	25yr-96hr	73.00	72.16	0.0010	211.94	0.00	528895
Depressional Area 2	100yr-10day	73.50	71.00	0.0010	10.42	0.67	101219
Depressional Area 2	100yr-24hr	73.50	71.13	0.0010	53.42	1.30	109123
Depressional Area 2	10yr-24hr	73.50	67.31	0.0004	1.13	0.00	6822
Depressional Area 2	25yr-24hr	73.50	68.50	0.0010	6.90	0.00	15239
Depressional Area 2	25yr-96hr	73.50	70.57	0.0010	36.18	0.75	73182

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]
Pre-Development	25yr-96hr	Depressional Area 1	236.2505	72.24	36.96
Pre-Development	25yr-96hr	Depressional Area 1	236.5021	72.24	36.96
Pre-Development	25yr-96hr	Depressional Area 1	236.7570	72.24	36.96
Pre-Development	25yr-96hr	Depressional Area 1	237.0039	72.24	36.96
Pre-Development	25yr-96hr	Depressional Area 1	237.2518	72.24	36.96
Pre-Development	25yr-96hr	Depressional Area 1	237.5024	72.24	36.96
Pre-Development	25yr-96hr	Depressional Area 1	237.7533	72.24	36.96
Pre-Development	25yr-96hr	Depressional Area 1	238.0012	72.24	36.96
Pre-Development	25yr-96hr	Depressional Area 1	238.2558	72.24	36.96
Pre-Development	25yr-96hr	Depressional Area 1	238.5035	72.24	36.96
Pre-Development	25yr-96hr	Depressional Area 1	238.7533	72.24	36.96
Pre-Development	25yr-96hr	Depressional Area 1	239.0027	72.24	36.96
Pre-Development	25yr-96hr	Depressional Area 1	239.2553	72.24	36.96
Pre-Development	25yr-96hr	Depressional Area 1	239.5002	72.24	36.96
Pre-Development	25yr-96hr	Depressional Area 1	239.7540	72.24	36.96
Pre-Development	25yr-96hr	Depressional Area 1	240.0043	72.24	36.96

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]
Pre-Development	100yr-10day	Depressional Area 1	236.2553	73.87	79.61
Pre-Development	100yr-10day	Depressional Area 1	236.5053	73.88	79.68
Pre-Development	100yr-10day	Depressional Area 1	236.7553	73.88	79.75
Pre-Development	100yr-10day	Depressional Area 1	237.0053	73.88	79.81
Pre-Development	100yr-10day	Depressional Area 1	237.2553	73.89	79.88
Pre-Development	100yr-10day	Depressional Area 1	237.5053	73.89	79.95
Pre-Development	100yr-10day	Depressional Area 1	237.7553	73.90	80.01
Pre-Development	100yr-10day	Depressional Area 1	238.0053	73.90	80.08
Pre-Development	100yr-10day	Depressional Area 1	238.2553	73.90	80.14
Pre-Development	100yr-10day	Depressional Area 1	238.5053	73.91	80.21
Pre-Development	100yr-10day	Depressional Area 1	238.7553	73.91	80.28
Pre-Development	100yr-10day	Depressional Area 1	239.0053	73.91	80.34
Pre-Development	100yr-10day	Depressional Area 1	239.2553	73.92	80.41
Pre-Development	100yr-10day	Depressional Area 1	239.5053	73.92	80.48
Pre-Development	100yr-10day	Depressional Area 1	239.7553	73.93	80.54
Pre-Development	100yr-10day	Depressional Area 1	240.0053	73.93	80.61

POST-DEVELOPMENT

Post-Development Tc & CN Calculations

Time of Concentration, Tc

BASIN: **49**

Sheet __1__ of __6__ Proj. I-75&49th
Computed By: __JPB__ Date: _9/11/2020_
Checked By: __MAH__ Date: _10/08/2020_

Tc Calculations:

Sheet Flow

				Segment ID:	AB				
1.	Surface description (table 3-1, TR-55)				Grass				
2.	Manning's Roughness coefficient, n (table 3-1, TR-55)				0.15				
3.	Two year 24 hour rainfall, P2		in		4.8				
4.	Flow length, L (total L< 300 ft)		ft		200				
5.	Land slope , s	Begin Elev.	ft		104.0				
		End Elev.	ft		78.0				
	Slope = (E1-E2)/L	Slope	ft/ft		0.130				
6.	Tt = (0.007*(nL)^0.8)/((P2^0.5)(s^0.4)) * 60	Compute Tt	min.		6.59	+		=	6.6

Shallow Concentrated Flow

				Segment ID:	BC				
7.	Surface description (paved or unpaved)				unpaved				
	Velocity Coefficient K (Paved = 20.328, Unpaved = 16.1345)				20.328				
8.	Flow length, L		ft		150				
9.	Watercourse slope, S	Begin Elev.	ft		78.0				
		End Elev.	ft		77.0				
	Slope = (E1-E2)/L	Slope	ft/ft		0.007				
10.	Average velocity, V (V = K*S^0.5)		ft/s		1.66				
11.	Tt = L/(60*V)	Compute Tt	min.		1.5	+		=	1.5

Channel Flow

				Segment ID:	CD				
14.	Hydraulic radius, R = A / WP		ft		0.00				
15.	Flow length, L		ft		500				
16.	Slope, s	Begin Elev.	ft		32.0				
		End Elev.	ft		31.0				
	Slope = (E1-E2)/L	Slope	ft/ft		0.002				
17.	Manning's roughness coefficient, n (table 3-1, TR-55)				0.15				
18.	V = (1.49*R^.67*s^0.5)/N		ft/s		0.00				
19.	Tt = L/(60*V)	Compute Tt	min.		0.0	+		=	0.0

20.	Total of 6, 11 and 19						=	8.1 min.
	Minimum Time of Concentration			minimum:	10.0	min.		
	Time of Concentration							**10.0 min.**
								0.2 hr

Time of Concentration, Tc & Curve Number, CN Calculations

BASIN: **F-OFF**

Sheet __1__ of __6__ Proj. I-75&49th
Computed By: __JPB__ Date: _9/11/2020_
Checked By: __MAH__ Date: _10/08/2020_

Tc Calculations:

Sheet Flow

				Segment ID:	AB				
1.	Surface description (table 3-1, TR-55)				Grass				
2.	Manning's Roughness coefficient, n (table 3-1, TR-55)				0.15				
3.	Two year 24 hour rainfall, P2			in	4.8				
4.	Flow length, L (total L< 300 ft)			ft	300				
5.	Land slope , s		Begin Elev.	ft	84.0				
			End Elev.	ft	83.0				
	Slope = (E1-E2)/L		Slope	ft/ft	0.003				
6.	Tt = (0.007*(nL)^0.8)/((P2^0.5)(s^0.4)) * 60		Compute Tt	min.	39.45	+		=	39.5

Shallow Concentrated Flow

				Segment ID:	BC				
7.	Surface description (paved or unpaved)				unpaved				
	Velocity Coefficient K (Paved = 20.328, Unpaved = 16.1345)				20.328				
8.	Flow length, L			ft	1820				
9.	Watercourse slope, S		Begin Elev.	ft	83.0				
			End Elev.	ft	81.0				
	Slope = (E1-E2)/L		Slope	ft/ft	0.001				
10.	Average velocity, V (V = K*S^0.5)			ft/s	0.67				
11.	Tt = L/(60*V)		Compute Tt	min.	45.0	+		=	45.0

Channel Flow

				Segment ID:	CD				
14.	Hydraulic radius, R = A / WP			ft	0.00				
15.	Flow length, L			ft	500				
16.	Slope, s		Begin Elev.	ft	32.0				
			End Elev.	ft	31.0				
	Slope = (E1-E2)/L		Slope	ft/ft	0.002				
17.	Manning's roughness coefficient, n (table 3-1, TR-55)				0.15				
18.	V = (1.49*R^.67*s^0.5)/N			ft/s	0.00				
19.	Tt = L/(60*V)		Compute Tt	min.	0.0	+		=	0.0

20.	Total of 6, 11 and 19					=	84.5 min.
	Minimum Time of Concentration		minimum:	10.0	min.		
	Time of Concentration						**84.5 min.**
							1.4 hr

Time of Concentration, Tc & Curve Number, CN Calculations

BASIN: **E**

Sheet __1__ of __6__ Proj. I-75&49th
Computed By: __JPB__ Date: _9/11/2020_
Checked By: __MAH__ Date: _10/08/2020_

Tc Calculations:

Sheet Flow

				Segment ID:	AB				
1.	Surface description (table 3-1, TR-55)				Grass				
2.	Manning's Roughness coefficient, n (table 3-1, TR-55)				0.15				
3.	Two year 24 hour rainfall, P2			in	4.8				
4.	Flow length, L (total L< 300 ft)			ft	300				
5.	Land slope , s		Begin Elev.	ft	91.0				
			End Elev.	ft	89.0				
	Slope = (E1-E2)/L		Slope	ft/ft	0.007				
6.	Tt = (0.007*(nL)^0.8)/((P2^0.5)(s^0.4)) * 60		Compute Tt	min.	29.90	+		=	29.9

Shallow Concentrated Flow

				Segment ID:	BC				
7.	Surface description (paved or unpaved)				unpaved				
	Velocity Coefficient K (Paved = 20.328, Unpaved = 16.1345)				20.328				
8.	Flow length, L			ft	2080				
9.	Watercourse slope, S		Begin Elev.	ft	89.0				
			End Elev.	ft	81.0				
	Slope = (E1-E2)/L		Slope	ft/ft	0.004				
10.	Average velocity, V (V = K*S^0.5)			ft/s	1.26				
11.	Tt = L/(60*V)		Compute Tt	min.	27.5	+		=	27.5

Channel Flow

				Segment ID:	CD				
14.	Hydraulic radius, R = A / WP			ft	0.50				
15.	Flow length, L			ft	300				
16.	Slope, s		Begin Elev.	ft	81.0				
			End Elev.	ft	80.5				
	Slope = (E1-E2)/L		Slope	ft/ft	0.002				
17.	Manning's roughness coefficient, n (table 3-1, TR-55)				0.15				
18.	V = (1.49*R^.67*s^0.5)/N			ft/s	0.25				
19.	Tt = L/(60*V)		Compute Tt	min.	19.6	+		=	19.6

20.	Total of 6, 11 and 19					=	77.0 min.
	Minimum Time of Concentration	minimum:	10.0	min.			
	Time of Concentration						**77.0 min.**
							1.3 hr

Time of Concentration, Tc & Curve Number, CN Calculations

BASIN: **G1-Pond**

Sheet __1__ of __6__ Proj. I-75&49th
Computed By: __JPB__ Date: _9/11/2020_
Checked By: __MAH__ Date: _10/08/2020_

Tc Calculations:

Sheet Flow

				Segment ID:	AB				
1.	Surface description (table 3-1, TR-55)				Grass				
2.	Manning's Roughness coefficient, n (table 3-1, TR-55)				0.15				
3.	Two year 24 hour rainfall, P2			in	4.8				
4.	Flow length, L (total L< 300 ft)			ft	220				
5.	Land slope , s		Begin Elev.	ft	75.0				
			End Elev.	ft	74.6				
	Slope = (E1-E2)/L		Slope	ft/ft	0.002				
6.	Tt = (0.007*(nL)^0.8)/((P2^0.5)(s^0.4)) * 60		Compute Tt	min.	39.23	+		=	39.2

Shallow Concentrated Flow

				Segment ID:	BC				
7.	Surface description (paved or unpaved)				unpaved				
	Velocity Coefficient K (Paved = 20.328, Unpaved = 16.1345)				20.328				
8.	Flow length, L			ft	0				
9.	Watercourse slope, S		Begin Elev.	ft	90.0				
			End Elev.	ft	75.0				
	Slope = (E1-E2)/L		Slope	ft/ft	0.000				
10.	Average velocity, V (V = K*S^0.5)			ft/s	0.00				
11.	Tt = L/(60*V)		Compute Tt	min.	0.0	+		=	0.0

Channel Flow

				Segment ID:	CD				
14.	Hydraulic radius, R = A / WP			ft	0.00				
15.	Flow length, L			ft	500				
16.	Slope, s		Begin Elev.	ft	32.0				
			End Elev.	ft	31.0				
	Slope = (E1-E2)/L		Slope	ft/ft	0.002				
17.	Manning's roughness coefficient, n (table 3-1, TR-55)				0.15				
18.	V = (1.49*R^.67*s^0.5)/N			ft/s	0.00				
19.	Tt = L/(60*V)		Compute Tt	min.	0.0	+		=	0.0

20.	Total of 6, 11 and 19				=	39.2 min.
	Minimum Time of Concentration	minimum:	10.0	min.		
	Time of Concentration					**39.2 min.**
						0.7 hr

Time of Concentration, Tc & Curve Number, CN Calculations

BASIN: **NE-OFFSITE**

Sheet __1__ of __6__ Proj. I-75&49th
Computed By: __JPB__ Date: _9/11/2020_
Checked By: __MAH__ Date: _10/08/2020_

Tc Calculations:

Sheet Flow

				Segment ID:	AB				
1.	Surface description (table 3-1, TR-55)				Grass				
2.	Manning's Roughness coefficient, n (table 3-1, TR-55)				0.15				
3.	Two year 24 hour rainfall, P2			in	4.8				
4.	Flow length, L (total L< 300 ft)			ft	300				
5.	Land slope , s		Begin Elev.	ft	129.0				
			End Elev.	ft	123.0				
	Slope = (E1-E2)/L		Slope	ft/ft	0.020				
6.	Tt = (0.007*(nL)^0.8)/((P2^0.5)(s^0.4)) * 60		Compute Tt	min.	19.27	+		=	19.3

Shallow Concentrated Flow

				Segment ID:	BC				
7.	Surface description (paved or unpaved)				unpaved				
	Velocity Coefficient K (Paved = 20.328, Unpaved = 16.1345)				20.328				
8.	Flow length, L			ft	2650				
9.	Watercourse slope, S		Begin Elev.	ft	123.0				
			End Elev.	ft	69.0				
	Slope = (E1-E2)/L		Slope	ft/ft	0.020				
10.	Average velocity, V (V = K*S^0.5)			ft/s	2.90				
11.	Tt = L/(60*V)		Compute Tt	min.	15.2	+		=	15.2

Channel Flow

				Segment ID:	CD				
14.	Hydraulic radius, R = A / WP			ft	0.00				
15.	Flow length, L			ft	500				
16.	Slope, s		Begin Elev.	ft	32.0				
			End Elev.	ft	31.0				
	Slope = (E1-E2)/L		Slope	ft/ft	0.002				
17.	Manning's roughness coefficient, n (table 3-1, TR-55)				0.15				
18.	V = (1.49*R^.67*s^0.5)/N			ft/s	0.00				
19.	Tt = L/(60*V)		Compute Tt	min.	0.0	+		=	0.0

20.	Total of 6, 11 and 19						=	34.5 min.
	Minimum Time of Concentration		minimum:	10.0	min.			
	Time of Concentration							**34.5 min.**
								0.6 hr

Time of Concentration, Tc & Curve Number, CN Calculations

BASIN: **SE-OFFSITE**

Sheet __1__ of __6__ Proj. I-75&49th
Computed By: __JPB__ Date: _9/11/2020_
Checked By: __MAH__ Date: _10/08/2020_

Tc Calculations:

Sheet Flow

				Segment ID:	AB				
1.	Surface description (table 3-1, TR-55)				Grass				
2.	Manning's Roughness coefficient, n (table 3-1, TR-55)				0.15				
3.	Two year 24 hour rainfall, P2		in		4.8				
4.	Flow length, L (total L< 300 ft)		ft		300				
5.	Land slope , s	Begin Elev.	ft		112.0				
		End Elev.	ft		107.0				
	Slope = (E1-E2)/L	Slope	ft/ft		0.017				
6.	Tt = (0.007*(nL)^0.8)/((P2^0.5)(s^0.4)) * 60	Compute Tt	min.		20.72	+		=	20.7

Shallow Concentrated Flow

				Segment ID:	BC				
7.	Surface description (paved or unpaved)				unpaved				
	Velocity Coefficient K (Paved = 20.328, Unpaved = 16.1345)				20.328				
8.	Flow length, L		ft		1775				
9.	Watercourse slope, S	Begin Elev.	ft		107.0				
		End Elev.	ft		79.0				
	Slope = (E1-E2)/L	Slope	ft/ft		0.016				
10.	Average velocity, V (V = K*S^0.5)		ft/s		2.55				
11.	Tt = L/(60*V)	Compute Tt	min.		11.6	+		=	11.6

Channel Flow

				Segment ID:	CD				
14.	Hydraulic radius, R = A / WP		ft		0.00				
15.	Flow length, L		ft		500				
16.	Slope, s	Begin Elev.	ft		32.0				
		End Elev.	ft		31.0				
	Slope = (E1-E2)/L	Slope	ft/ft		0.002				
17.	Manning's roughness coefficient, n (table 3-1, TR-55)				0.15				
18.	V = (1.49*R^.67*s^0.5)/N		ft/s		0.00				
19.	Tt = L/(60*V)	Compute Tt	min.		0.0	+		=	0.0

20.	Total of 6, 11 and 19						=	32.3 min.
	Minimum Time of Concentration			minimum:	10.0	min.		
	Time of Concentration						**32.3**	**min.**
							0.5	**hr**

Curve Number, CN Calculations

Project: I-75 & 49th St
Client: FDOT
Basin: Sub-Basin G1

Computed By: JPB
Checked By: MAH
Date: 10/5/2020

Pre-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.19	18.62
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	0.48	23.52
Water Bodies	A/D	100	0.00	0.00
		TOTAL	0.67	42.14
			COMPOSITE CN	**62.9**

Post-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.19	18.62
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	0.48	23.52
Water Bodies	A/D	100	0.00	0.00
		TOTAL	0.67	42.14
			COMPOSITE CN	**62.9**

Curve Number, CN Calculations

Project: I-75 & 49th St
Client: FDOT
Basin: Sub-Basin G2

Computed By:	JPB
Checked By:	MAH
Date:	10/5/2020

Pre-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	1.97	193.06
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	1.95	95.55
Water Bodies	A/D	100	0.00	0.00
		TOTAL	3.92	288.61
			COMPOSITE CN	**73.6**

Post-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	1.97	193.06
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	1.95	95.55
Water Bodies	A/D	100	0.00	0.00
		TOTAL	3.92	288.61
			COMPOSITE CN	**73.6**

Curve Number, CN Calculations

Project: I-75 & 49th St
Client: FDOT
Basin: Sub-Basin G2-OFF

Computed By:	JPB
Checked By:	MAH
Date:	10/5/2020

Pre-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.00	0.00
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	1.20	58.80
Water Bodies	A/D	100	0.00	0.00
		TOTAL	1.20	58.80
			COMPOSITE CN	**49.0**

Post-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.65	63.70
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	2.55	124.95
Water Bodies	A/D	100	0.00	0.00
		TOTAL	3.20	188.65
			COMPOSITE CN	**59.0**

Curve Number, CN Calculations

Project: I-75 & 49th St
Client: FDOT
Basin: Sub-Basin G3

Computed By:	JPB
Checked By:	MAH
Date:	10/5/2020

Pre-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	1.03	100.94
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	0.84	41.16
Water Bodies	A/D	100	0.00	0.00
		TOTAL	1.87	142.10
			COMPOSITE CN	**76.0**

Post-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	1.03	100.94
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	0.84	41.16
Water Bodies	A/D	100	0.00	0.00
		TOTAL	1.87	142.10
			COMPOSITE CN	**76.0**

Curve Number, CN Calculations

Project: I-75 & 49th St
Client: FDOT
Basin: Sub-Basin G3-OFF

Computed By:	JPB
Checked By:	MAH
Date:	10/5/2020

Pre-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.00	0.00
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	1.20	58.80
Water Bodies	A/D	100	0.00	0.00
		TOTAL	1.20	58.80
			COMPOSITE CN	**49.0**

Post-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.32	31.36
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	1.22	59.78
Water Bodies	A/D	100	0.00	0.00
		TOTAL	1.54	91.14
			COMPOSITE CN	**59.2**

Curve Number, CN Calculations

Project: I-75 & 49th St
Client: FDOT
Basin: Sub-Basin G4

Computed By: JPB
Checked By: MAH
Date: 10/5/2020

Pre-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.16	15.68
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	0.39	19.11
Water Bodies	A/D	100	0.00	0.00
		TOTAL	0.55	34.79
			COMPOSITE CN	**63.3**

Post-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.25	24.11
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	0.32	15.68
Water Bodies	A/D	100	0.00	0.00
		TOTAL	0.57	39.79
			COMPOSITE CN	**70.3**

Curve Number, CN Calculations

Project: I-75 & 49th St
Client: FDOT
Basin: Sub-Basin G5

Computed By:	JPB
Checked By:	MAH
Date:	10/5/2020

Pre-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.17	16.66
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	0.42	20.58
Water Bodies	A/D	100	0.00	0.00
		TOTAL	0.59	37.24
			COMPOSITE CN	**63.1**

Post-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.26	25.48
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	0.48	23.52
Water Bodies	A/D	100	0.00	0.00
		TOTAL	0.74	49.00
			COMPOSITE CN	**66.2**

Curve Number, CN Calculations

Project: I-75 & 49th St
Client: FDOT
Basin: Sub-Basin G6

Computed By:	JPB
Checked By:	MAH
Date:	10/5/2020

Pre-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	2.61	255.78
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	1.87	91.63
Water Bodies	A/D	100	0.00	0.00
		TOTAL	4.48	347.41
			COMPOSITE CN	**77.5**

Post-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	2.92	286.16
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	2.32	113.68
Water Bodies	A/D	100	0.00	0.00
		TOTAL	5.24	399.84
			COMPOSITE CN	**76.3**

Curve Number, CN Calculations

Project: I-75 & 49th St
Client: FDOT
Basin: Sub-Basin G7

Computed By: JPB
Checked By: MAH
Date: 10/5/2020

Pre-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.57	55.86
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	1.40	68.60
Water Bodies	A/D	100	0.00	0.00
		TOTAL	1.97	124.46
			COMPOSITE CN	**63.2**

Post-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	1.00	98.00
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	2.28	111.72
Water Bodies	A/D	100	0.00	0.00
		TOTAL	3.28	209.72
			COMPOSITE CN	**63.9**

Curve Number, CN Calculations

Project: I-75 & 49th St
Client: FDOT
Basin: Sub-Basin G9

Computed By: JPB
Checked By: MAH
Date: 10/5/2020

Pre-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.50	49.00
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	2.31	113.19
Water Bodies	A/D	100	0.00	0.00
		TOTAL	2.81	162.19
			COMPOSITE CN	**57.7**

Post-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.50	49.00
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	2.31	113.19
Water Bodies	A/D	100	0.00	0.00
		TOTAL	2.81	162.19
			COMPOSITE CN	**57.7**

Curve Number, CN Calculations

Project: I-75 & 49th St
Client: FDOT
Basin: Sub-Basin G9-OFF

Computed By: JPB
Checked By: MAH
Date: 10/5/2020

Pre-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.00	0.00
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	1.20	58.80
Water Bodies	A/D	100	0.00	0.00
		TOTAL	1.20	58.80
			COMPOSITE CN	**49.0**

Post-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.30	29.20
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	2.77	135.73
Water Bodies	A/D	100	0.00	0.00
		TOTAL	3.07	164.93
			COMPOSITE CN	**53.8**

Curve Number, CN Calculations

Project: I-75 & 49th St
Client: FDOT
Basin: Sub-Basin G10

Computed By:	JPB
Checked By:	MAH
Date:	10/5/2020

Pre-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.15	14.99
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	0.71	34.94
Water Bodies	A/D	100	0.00	0.00
		TOTAL	0.87	49.93
			COMPOSITE CN	**57.7**

Post-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.30	29.40
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	1.09	53.56
Water Bodies	A/D	100	0.00	0.00
		TOTAL	1.39	82.96
			COMPOSITE CN	**59.6**

Curve Number, CN Calculations

Project: I-75 & 49th St
Client: FDOT
Basin: Sub-Basin G11

Computed By:	JPB
Checked By:	MAH
Date:	10/5/2020

Pre-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.16	15.68
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	0.39	19.11
Water Bodies	A/D	100	0.00	0.00
		TOTAL	0.55	34.79
			COMPOSITE CN	**63.3**

Post-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.27	26.46
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	0.64	31.36
Water Bodies	A/D	100	0.00	0.00
		TOTAL	0.91	57.82
			COMPOSITE CN	**63.5**

Curve Number, CN Calculations

Project: I-75 & 49th St
Client: FDOT
Basin: Sub-Basin G12

Computed By:	JPB
Checked By:	MAH
Date:	10/5/2020

Pre-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.48	47.04
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	1.19	58.31
Water Bodies	A/D	100	0.00	0.00
		TOTAL	1.67	105.35
			COMPOSITE CN	**63.1**

Post-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.93	91.53
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	1.30	63.70
Water Bodies	A/D	100	0.00	0.00
		TOTAL	2.23	155.23
			COMPOSITE CN	**69.5**

Curve Number, CN Calculations

Project: I-75 & 49th St
Client: FDOT
Basin: Sub-Basin G13

Computed By: JPB
Checked By: MAH
Date: 10/5/2020

Pre-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.25	24.50
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	0.61	29.89
Water Bodies	A/D	100	0.00	0.00
		TOTAL	0.86	54.39
			COMPOSITE CN	**63.2**

Post-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.41	40.18
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	0.83	40.67
Water Bodies	A/D	100	0.00	0.00
		TOTAL	1.24	80.85
			COMPOSITE CN	**65.2**

Curve Number, CN Calculations

Project: I-75 & 49th St
Client: FDOT
Basin: Sub-Basin G14

Computed By:	JPB
Checked By:	MAH
Date:	10/5/2020

Pre-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.40	39.20
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	0.99	48.51
Water Bodies	A/D	100	0.00	0.00
		TOTAL	1.39	87.71
			COMPOSITE CN	**63.1**

Post-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.40	39.20
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	0.99	48.51
Water Bodies	A/D	100	0.00	0.00
		TOTAL	1.39	87.71
			COMPOSITE CN	**63.1**

Curve Number, CN Calculations

Project: I-75 & 49th St
Client: FDOT
Basin: Sub-Basin G14-OFF

Computed By:	JPB
Checked By:	MAH
Date:	10/5/2020

Pre-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.00	0.00
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	1.60	78.40
Water Bodies	A/D	100	0.00	0.00
		TOTAL	1.60	78.40
			COMPOSITE CN	**49.0**

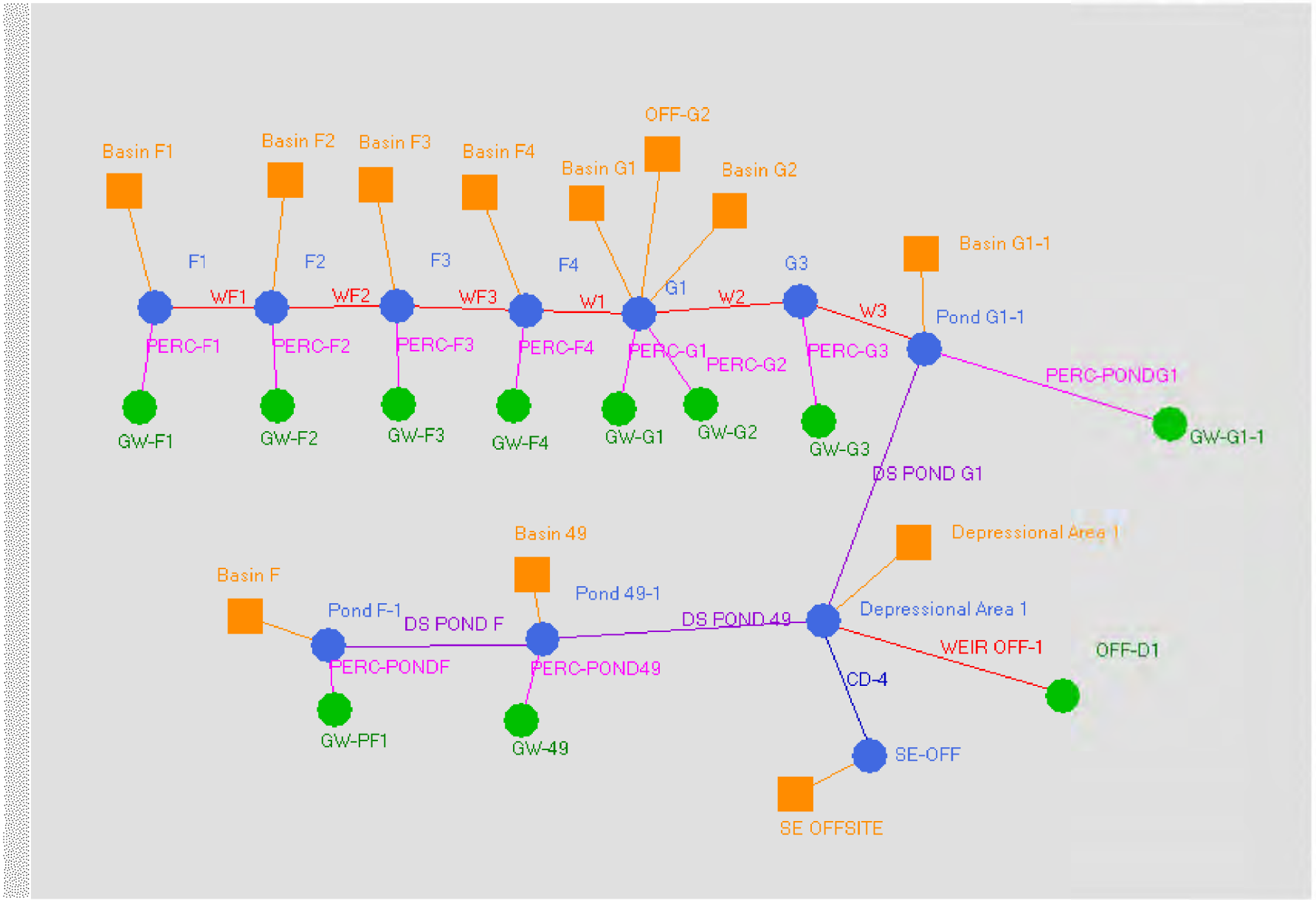
Post-Development

SUB-BASIN ANALYSIS - CURVE NUMBER ESTIMATE

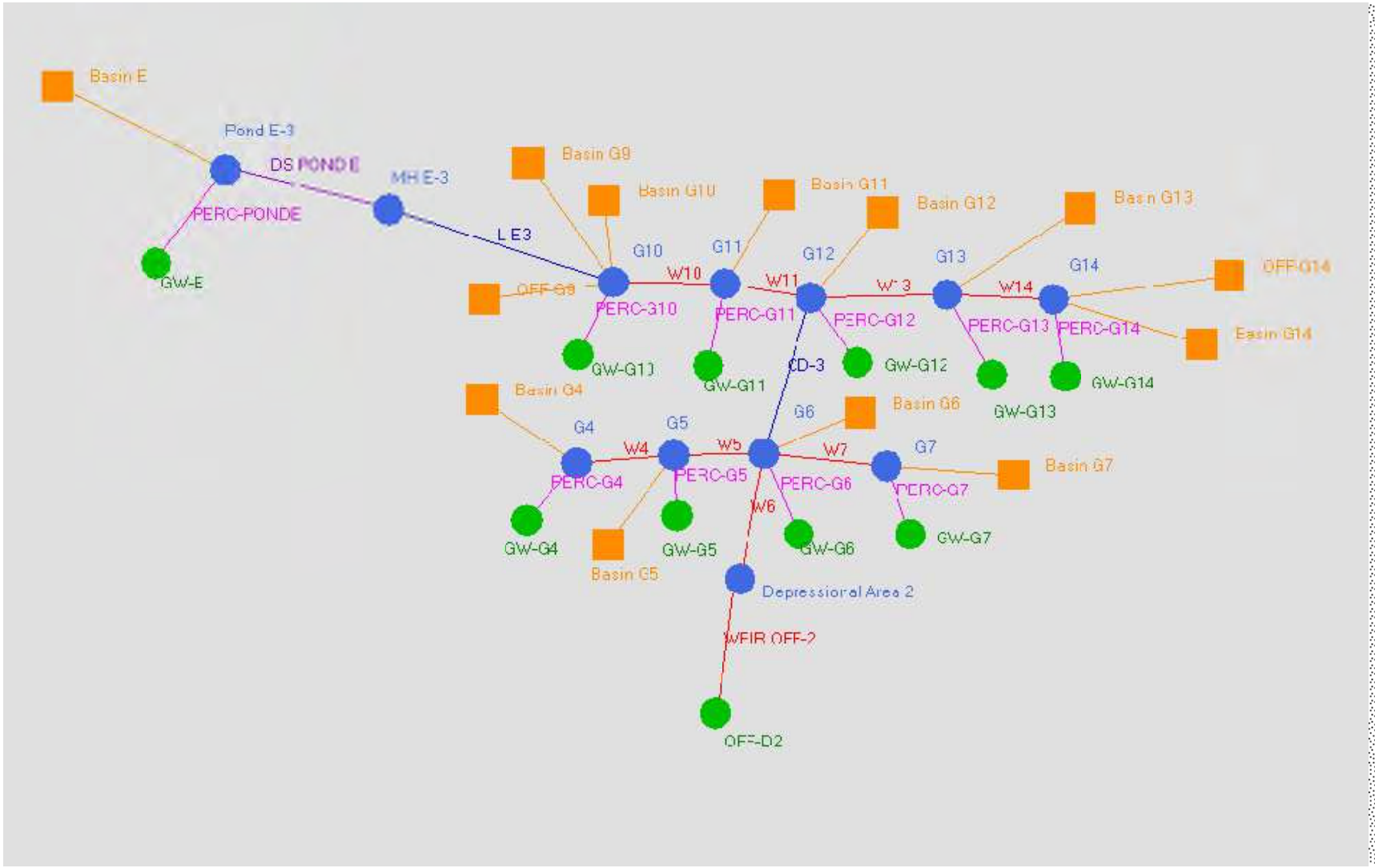
Land Use Description	Soil Group	CN	Area (ac)	Product
Impervious Areas	A/D	98	0.19	18.62
Pastureland	A	39	0.00	0.00
Grassed/Open Area (Good)	A	49	0.48	23.52
Water Bodies	A/D	100	0.00	0.00
		TOTAL	0.67	42.14
			COMPOSITE CN	**62.9**

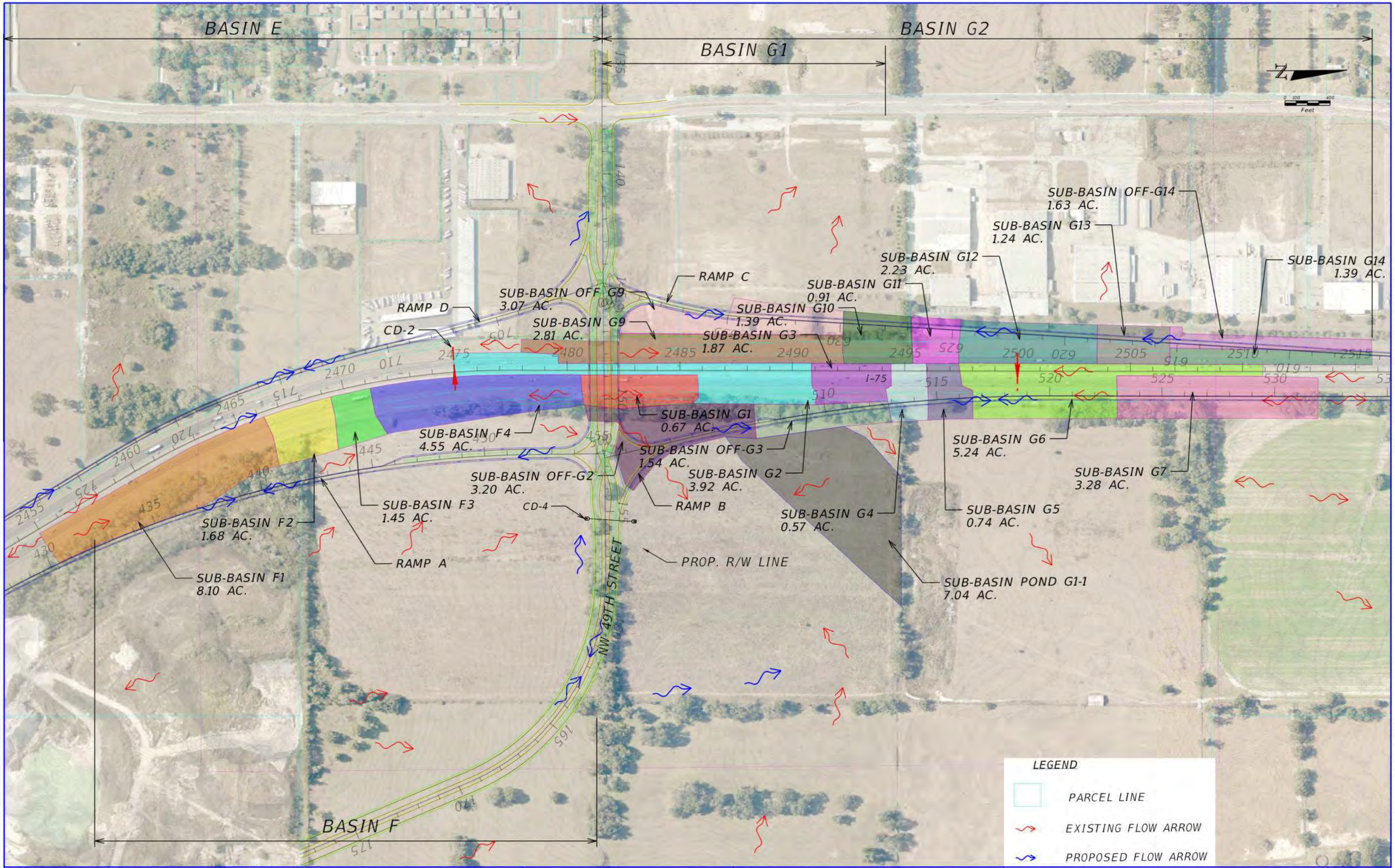
POST-DEVELOPMENT
ICPR MODEL

Post-Development ICPR Layout



Post-Development ICPR Layout





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REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

METRIC ENGINEERING, INC.
13940 S.W. 136 STREET
SUITE 200
MIAMI, FLORIDA 33186
TEL. (305) 235-5098
FAX. (305) 235-5271
CERTIFICATE OF AUTHORIZATION 2294

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
I-75	MARION	435209-1-22-01

$USERS $DATES $TIMES $FILES

POST-DEVELOPMENT
ICPR SUB-BASIN DRAINAGE MAP
(BASINS F, G1, & G2)

SHEET NO.
C-109

POST-DEVELOPMENT RECOMMENDED STORMWATER APPROACH ICPR MODEL

Post-Development
ICPR Input

Manual Basin: Basin 49

Scenario: Post-Development
Node: Pond 49-1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
14.8200	Basin 49	Basin 49	

Comment:

Manual Basin: Basin E

Scenario: Post-Development
Node: Pond E-3
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 77.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
28.7800	Basin E	Basin E	

Comment:

Manual Basin: Basin F-OFF

Scenario: Post-Development
Node: Pond F-1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 84.5000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
18.2000	Basin F-OFF	Basin F-OFF	

Comment:

Manual Basin: Basin F1

Scenario: Post-Development
Node: F1

Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
8.1000	Basin F1	Basin F1	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin F2

Scenario: Post-Development
Node: F2
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.6800	Basin F2	Basin F2	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin F3

Scenario: Post-Development
Node: F3
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.4500	Basin F3	Basin F3	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin F4

Scenario: Post-Development
Node: F4
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min

Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
4.5500	Basin F4	Basin F4	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin G1

Scenario: Post-Development
Node: G1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.6700	Basin G1	Basin G1	

Comment: Information from FDOT FPID 36210-1439 - This is a sub-basin in Basin G1-1

Manual Basin: Basin G10

Scenario: Post-Development
Node: G10
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.3900	Basin G10	Basin G10	

Comment: Area updated - This is a sub-basin in Basin G2

Manual Basin: Basin G11

Scenario: Post-Development
Node: G11
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484

Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.9100	Basin G11	Basin G11	

Comment: Area updated - This is a sub-basin in Basin G2

Manual Basin: Basin G12

Scenario: Post-Development
Node: G12
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
2.2300	Basin G12	Basin G12	

Comment: Area updated - This is a sub-basin in Basin G2

Manual Basin: Basin G13

Scenario: Post-Development
Node: G13
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.2400	Basin G13	Basin G13	

Comment: Information from FDOT FPID 36210-1439 - This is a sub-basin in Basin G2

Manual Basin: Basin G14

Scenario: Post-Development
Node: G14
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.3900	Basin G14	Basin G14	

Comment: Area updated - This is a sub-basin in Basin G2

Manual Basin: Basin G2

Scenario: Post-Development
Node: G1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
3.9200	Basin G2	Basin G2	

Comment: Information from FDOT FPID 36210-1439 - This is a sub-basin in Basin G1-1

Manual Basin: Basin G3

Scenario: Post-Development
Node: G3
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.8700	Basin G3	Basin G3	

Comment: Information from FDOT FPID 36210-1439 - This is a sub-basin in Basin G1-1

Manual Basin: Basin G4

Scenario: Post-Development
Node: G4
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.5700	Basin G4	Basin G4	

Comment: Area updated - This is a sub-basin in Basin G2

Manual Basin: Basin G5

Scenario: Post-Development
Node: G5
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.7400	Basin G5	Basin G5	

Comment: Information from FDOT FPID 36210-1439 - This is a sub-basin in Basin G2

Manual Basin: Basin G6

Scenario: Post-Development
Node: G6
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
5.2400	Basin G6	Basin G6	

Comment: Area updated - This is a sub-basin in Basin G2

Manual Basin: Basin G7

Scenario: Post-Development
Node: G7
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
3.2800	Basin G7/8	Basin G7/8	

Comment: Area updated - This is a sub-basin in Basin G2

Manual Basin: Basin G9

Scenario: Post-Development
Node: G10

Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
2.8100	Basin G9	Basin G9	

Comment: Area updated - This is a sub-basin in Basin G2

Manual Basin: Basin Pond G1-1

Scenario: Post-Development
Node: Pond G1-1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 39.2000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
7.0400	Basin Pond G1-1	Basin Pond G1-1	

Comment: Total Basin G1-1 is made up of Basin Pond G1-1, G1, G2, G2-OFF, G3-OFF and G3 (7.04+0.67+3.92+3.2+1.87+1.54=18.24 Ac)

Manual Basin: NE OFFSITE

Scenario: Post-Development
Node: Depressional Area 1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 34.5000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
77.4300	OFFSITE	OFFSITE	

Comment:

Manual Basin: OFF-G14

Scenario: Post-Development
Node: G14
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number

Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.6300	OFF G14	OFF G14	

Comment: Area updated - This is a sub-basin in Basin G2

Manual Basin: OFF-G2

Scenario: Post-Development
Node: G1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
3.2000	OFF G2	OFF G2	

Comment: Area updated - This is a sub-basin in Basin G2

Manual Basin: OFF-G3

Scenario: Post-Development
Node: G3
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.5400	OFF G3	OFF G3	

Comment: Area updated - This is a sub-basin in Basin G2

Manual Basin: OFF-G9

Scenario: Post-Development
Node: G10
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr

Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
3.0700	OFF G9	OFF G9	

Comment: Area updated - This is a sub-basin in Basin G2

Manual Basin: SE OFFSITE

Scenario: Post-Development
Node: SE-OFF
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 32.3000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
28.1500	OFFSITE	OFFSITE	

Comment:

Curve Number: CurveNumbers [Set]

Land Cover Zone	Soil Zone	Curve Number [dec]
Basin 49	Basin 49	60.7
Basin E	Basin E	54.7
Basin F-OFF	Basin F-OFF	45.1
Basin F1	Basin F1	56.0
Basin F2	Basin F2	58.0
Basin F3	Basin F3	59.1
Basin F4	Basin F4	58.7
Basin G1	Basin G1	62.9
Basin G10	Basin G10	59.6
Basin G11	Basin G11	63.5
Basin G12	Basin G12	69.5
Basin G13	Basin G13	65.2
Basin G14	Basin G14	63.1
Basin G2	Basin G2	73.6
Basin G3	Basin G3	76.0
Basin G4	Basin G4	70.3
Basin G5	Basin G5	66.2
Basin G6	Basin G6	76.3
Basin G7/8	Basin G7/8	63.9
Basin G9	Basin G9	57.7
Basin Pond G1-1	Basin Pond G1-1	39.0
OFF G14	OFF G14	62.9
OFF G2	OFF G2	59.0
OFF G3	OFF G3	59.2
OFF G9	OFF G9	53.8

Land Cover Zone	Soil Zone	Curve Number [dec]
OFFSITE	OFFSITE	39.0

Node: Depressional Area 1

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 66.00 ft
Warning Stage: 73.00 ft

Stage [ft]	Area [ac]	Area [ft2]
66.00	0.1200	5227
67.00	1.7600	76666
68.00	3.4700	151153
69.00	5.5900	243500
70.00	7.6700	334105
71.00	9.6700	421225
72.00	11.8100	514444
73.00	13.8600	603742

Comment:

Node: Depressional Area 2

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 67.00 ft
Warning Stage: 73.50 ft

Stage [ft]	Area [ac]	Area [ft2]
67.00	0.1000	4356
68.00	0.2800	12197
69.00	0.4200	18295
70.00	0.8100	35284
71.00	2.3300	101495
72.00	3.7100	161608
73.00	6.0200	262231
74.00	35.8000	1559448

Comment:

Node: F1

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 84.07 ft
Warning Stage: 86.47 ft

Stage [ft]	Area [ac]	Area [ft2]
84.07	0.0000	0
84.37	0.0220	958
84.67	0.0340	1481
84.97	0.0480	2091
85.27	0.0630	2744
85.57	0.0810	3528
85.87	0.0990	4312
86.17	0.1190	5184
86.47	0.1400	6098

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin F

Node: F2

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 82.07 ft
Warning Stage: 85.07 ft

Stage [ft]	Area [ac]	Area [ft2]
82.07	0.0000	0
82.37	0.0840	3659
82.67	0.0980	4269
82.97	0.1120	4879
83.27	0.1260	5489
83.57	0.1400	6098
83.87	0.1550	6752
84.17	0.1710	7449
84.47	0.1860	8102
85.07	0.2240	9757

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin F

Node: F3

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 80.07 ft
Warning Stage: 83.67 ft

Stage [ft]	Area [ac]	Area [ft2]
80.07	0.0000	0
80.47	0.0850	3703
80.87	0.1030	4487
81.27	0.1210	5271
81.67	0.1390	6055
82.07	0.1580	6882
82.47	0.1780	7754
82.87	0.1980	8625

Stage [ft]	Area [ac]	Area [ft2]
83.27	0.2210	9627
83.67	0.2460	10716

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin F

Node: F4

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 77.07 ft
Warning Stage: 80.97 ft

Stage [ft]	Area [ac]	Area [ft2]
77.07	0.0000	0
77.57	0.3020	13155
78.07	0.3660	15943
78.57	0.4320	18818
79.07	0.4990	21736
79.57	0.5670	24699
80.07	0.6360	27704
80.57	0.7060	30753
80.97	0.7760	33803

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin F

Node: G1

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 74.07 ft
Warning Stage: 77.87 ft

Stage [ft]	Area [ac]	Area [ft2]
74.07	0.0000	0
74.47	0.2840	12371
74.87	0.3600	15682
75.27	0.4370	19036
75.67	0.5140	22390
76.07	0.5920	25788
76.47	0.6840	29795
76.87	0.7770	33846
77.27	0.8730	38028
77.87	1.0210	44475

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin G1-1

Node: G10

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 71.57 ft
Warning Stage: 74.77 ft

Stage [ft]	Area [ac]	Area [ft2]
71.57	0.0000	0
71.67	0.0410	1786
72.37	0.0600	2614
72.77	0.0810	3528
73.17	0.1020	4443
73.57	0.1350	5881
73.97	0.1480	6447
74.37	0.1760	7667
74.77	0.2060	8973

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin G2

Node: G11

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 70.07 ft
Warning Stage: 73.27 ft

Stage [ft]	Area [ac]	Area [ft2]
70.07	0.0000	0
70.47	0.0500	2178
70.87	0.0630	2744
71.27	0.0780	3398
71.67	0.0940	4095
72.07	0.1110	4835
72.47	0.1300	5663
72.87	0.1500	6534
73.27	0.1730	7536

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin G2

Node: G12

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 68.07 ft
Warning Stage: 72.27 ft

Stage [ft]	Area [ac]	Area [ft2]
68.07	0.0000	0
68.67	0.2040	8886
69.27	0.2680	11674

Stage [ft]	Area [ac]	Area [ft2]
69.87	0.3340	14549
70.47	0.4040	17598
71.07	0.4760	20735
71.67	0.5500	23958
72.27	0.6320	27530

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin G2

Node: G13

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 70.07 ft
Warning Stage: 73.67 ft

Stage [ft]	Area [ac]	Area [ft2]
70.07	0.0000	0
70.47	0.0580	2526
70.87	0.0780	3398
71.27	0.1000	4356
71.67	0.1220	5314
72.07	0.1460	6360
72.47	0.1710	7449
72.87	0.1990	8668
73.67	0.2620	11413

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin G2

Node: G14

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 74.07 ft
Warning Stage: 75.67 ft

Stage [ft]	Area [ac]	Area [ft2]
74.07	0.0000	0
74.27	0.0320	1394
74.47	0.0430	1873
74.67	0.0560	2439
74.87	0.0700	3049
75.07	0.0850	3703
75.27	0.0990	4312
75.47	0.1140	4966
75.67	0.1280	5576

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin G2

Node: G3

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 72.57 ft
Warning Stage: 75.07 ft

Stage [ft]	Area [ac]	Area [ft2]
72.57	0.0000	0
72.87	0.0340	1481
73.17	0.0490	2134
73.47	0.0640	2788
73.77	0.0810	3528
74.07	0.0980	4269
74.37	0.1180	5140
74.67	0.1400	6098
75.07	0.1690	7362

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin G1-1

Node: G4

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 71.07 ft
Warning Stage: 74.07 ft

Stage [ft]	Area [ac]	Area [ft2]
71.07	0.0000	0
71.47	0.0540	2352
71.87	0.0670	2919
72.27	0.0820	3572
72.67	0.0990	4312
73.07	0.1180	5140
73.47	0.1390	6055
73.87	0.1610	7013
74.07	0.1710	7449

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin G2

Node: G5

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 68.07 ft
Warning Stage: 71.97 ft

Stage [ft]	Area [ac]	Area [ft2]
68.07	0.0000	0
68.57	0.0570	2483

Stage [ft]	Area [ac]	Area [ft2]
69.07	0.0740	3223
69.57	0.0930	4051
70.07	0.1140	4966
70.57	0.1370	5968
71.07	0.1610	7013
71.57	0.1880	8189
71.97	0.2100	9148

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin G2

Node: G6

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 66.57 ft
Warning Stage: 70.47 ft

Stage [ft]	Area [ac]	Area [ft2]
66.57	0.0000	0
67.07	0.1740	7579
67.57	0.2250	9801
68.07	0.2780	12110
68.57	0.3080	13416
69.07	0.3900	16988
69.57	0.4490	19558
70.07	0.5090	22172
70.47	0.5680	24742

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin G2

Node: G7

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 71.07 ft
Warning Stage: 75.67 ft

Stage [ft]	Area [ac]	Area [ft2]
71.07	0.0000	0
71.47	0.0840	3659
71.87	0.1010	4400
72.27	0.1180	5140
72.67	0.1360	5924
73.07	0.1560	6795
73.47	0.1770	7710
73.87	0.2010	8756
74.27	0.2260	9845
74.67	0.2520	10977

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin G2

Node: GW-49

Scenario: Post-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 72.60 ft
Warning Stage: 76.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	72.60
0	0	0	96.0000	72.60

Comment: Boring information from PBS-9, PBS-10, and PBS-11 shows the average SHWT estimated at 72.6'

Node: GW-E

Scenario: Post-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 75.35 ft
Warning Stage: 78.50 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	75.35
0	0	0	96.0000	75.35

Comment: Boring information from PBS-1, PBS-2, PBS- 23 and PBS-24 shows the average SHWT estimated at 75.35'

Node: GW-F1

Scenario: Post-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 79.07 ft
Warning Stage: 86.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	79.07
0	0	0	96.0000	79.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin F

Node: GW-F2

Scenario: Post-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 78.07 ft
Warning Stage: 84.57 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	78.07
0	0	0	96.0000	78.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin F

Node: GW-F3

Scenario: Post-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 74.07 ft
Warning Stage: 83.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	74.07
0	0	0	96.0000	74.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin F

Node: GW-F4

Scenario: Post-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 72.07 ft
Warning Stage: 80.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	72.07
0	0	0	96.0000	72.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin F

Node: GW-G1

Scenario: Post-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 71.07 ft
Warning Stage: 78.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	71.07
0	0	0	96.0000	71.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin G1-1

Node: GW-G1-1

Scenario: Post-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 62.60 ft
Warning Stage: 73.60 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	62.60
0	0	0	96.0000	62.60

Comment: Boring information from PBS-36 and PBS-38 shows the average SHWT estimated at 62.6'.

Node: GW-G10

Scenario: Post-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 67.07 ft
Warning Stage: 74.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	67.07
0	0	0	96.0000	67.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin G2

Node: GW-G11

Scenario: Post-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 66.07 ft
Warning Stage: 72.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	66.07
0	0	0	96.0000	66.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin G2

Node: GW-G12

Scenario: Post-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 62.07 ft
Warning Stage: 70.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	62.07
0	0	0	96.0000	62.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin G2

Node: GW-G13

Scenario: Post-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 62.07 ft
Warning Stage: 73.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	62.07
0	0	0	96.0000	62.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin G2

Node: GW-G14

Scenario: Post-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 68.07 ft
Warning Stage: 75.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	68.07
0	0	0	96.0000	68.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin G2

Node: GW-G2

Scenario: Post-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 69.07 ft
Warning Stage: 75.57 ft

Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	69.07
0	0	0	96.0000	69.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin G1-1

Node: GW-G3

Scenario: Post-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 66.07 ft
Warning Stage: 74.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	66.07
0	0	0	96.0000	66.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin G1-1

Node: GW-G4

Scenario: Post-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 66.07 ft
Warning Stage: 73.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	66.07
0	0	0	96.0000	66.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin G2

Node: GW-G5

Scenario: Post-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 63.07 ft
Warning Stage: 71.57 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	63.07
0	0	0	96.0000	63.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin G2

Node: GW-G6

Scenario: Post-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 61.07 ft
Warning Stage: 70.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	61.07
0	0	0	96.0000	61.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin G2

Node: GW-G7

Scenario: Post-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 63.07 ft
Warning Stage: 73.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	63.07
0	0	0	96.0000	63.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin G2

Node: GW-PF1

Scenario: Post-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 76.20 ft
Warning Stage: 84.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	76.20
0	0	0	96.0000	76.20

Comment: Boring information from PBS-13 and PBS-14 shows the average SHWT estimated at 76.20'.

Node: MH E-3

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 75.00 ft
Warning Stage: 76.50 ft

Stage [ft]	Area [ac]	Area [ft2]
75.00	0.0010	44
76.50	0.0010	44

Comment:

Node: OFF-D1

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 66.00 ft
Warning Stage: 73.00 ft

Stage [ft]	Area [ac]	Area [ft2]
66.00	1.0100	43996
67.00	1.4500	63162
70.00	2.6800	116741
71.00	2.9000	126324
72.00	3.6100	157252
73.00	3.8500	167706

Comment: Represents offsite pop-off location for Depressional Area 1

Node: OFF-D2

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 69.00 ft
Warning Stage: 73.50 ft

Stage [ft]	Area [ac]	Area [ft2]
69.00	0.0500	2178
70.00	2.0700	90169
71.00	7.7400	337154
72.00	13.5300	589367
73.00	20.5600	895594

Comment: Represents offsite pop-off location for Depressional Area 2

Node: Pond 49-1

Scenario: Post-Development
Type: Stage/Area

Base Flow: 0.00 cfs
Initial Stage: 77.00 ft
Warning Stage: 83.00 ft

Stage [ft]	Area [ac]	Area [ft2]
77.00	1.1300	49223
78.00	1.2500	54450
80.79	1.5700	68389
81.53	1.6800	73181
84.00	1.9600	85378
85.00	2.6300	114563

Comment:

Node: Pond E-3

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 80.50 ft
Warning Stage: 85.00 ft

Stage [ft]	Area [ac]	Area [ft2]
80.50	2.8000	121968
81.81	2.9900	130244
82.20	3.0400	132422
83.42	3.2000	139392
87.00	3.7500	163350
88.00	4.5500	198198

Comment: Warning stage set to low edge of pavement

Node: Pond F-1

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 81.00 ft
Warning Stage: 87.00 ft

Stage [ft]	Area [ac]	Area [ft2]
81.00	1.5000	65340
81.95	1.6000	69696
82.32	1.6500	71874
83.58	1.7800	77537
88.00	2.3000	100188
89.00	2.9400	128066

Comment:

Node: Pond G1-1

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 74.60 ft
Warning Stage: 80.00 ft

Stage [ft]	Area [ac]	Area [ft2]
74.60	2.9300	127631
74.94	2.9700	129373
75.11	3.0000	130680
75.44	3.1000	135036
81.00	3.8600	168142
82.00	4.6000	200376

Comment:

Node: SE-OFF

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 79.00 ft
Warning Stage: 82.40 ft

Stage [ft]	Area [ac]	Area [ft2]
79.00	0.1000	4356
82.00	0.1000	4356

Comment: Warning stage set at roadway sag

Pipe Link: CD-3

Scenario: Post-Development
From Node: G12
To Node: G6
Link Count: 1
Flow Direction: Both
Damping: 0.0000 ft
Length: 170.00 ft
FHWA Code: 1
Entr Loss Coef: 0.50
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Bend Location: 0.00 ft
Energy Switch: Energy

Upstream		Downstream	
Invert:	70.07 ft	Invert:	69.51 ft
Manning's N:	0.0120	Manning's N:	0.0120
Geometry: Circular		Geometry: Circular	
Max Depth:	2.00 ft	Max Depth:	2.00 ft
Bottom Clip			
Default:	0.00 ft	Default:	0.00 ft
Op Table:		Op Table:	
Ref Node:		Ref Node:	
Manning's N:	0.0000	Manning's N:	0.0000
Top Clip			
Default:	0.00 ft	Default:	0.00 ft
Op Table:		Op Table:	
Ref Node:		Ref Node:	
Manning's N:	0.0000	Manning's N:	0.0000

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Pipe Link: CD-4

Upstream Downstream

Scenario:	Post-Development	Invert:	79.00 ft	Invert:	73.00 ft
From Node:	SE-OFF	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	Depressional Area 1	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	3.00 ft	Max Depth:	3.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	182.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 ft	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Drop Structure Link: DS POND 49		Upstream Pipe		Downstream Pipe	
Scenario:	Post-Development	Invert:	70.00 ft	Invert:	66.00 ft
From Node:	Pond 49-1	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	Depressional Area 1	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	10	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	155.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	1.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 ft				
Energy Switch:	Energy				

Pipe Comment: DS INVERT SET TO BOTTOM OF DEPRESSION

Weir Component			
Weir:	1	Bottom Clip	
Weir Count:	1	Default:	0.00 ft
Weir Flow Direction:	Both	Op Table:	
Damping:	0.0000 ft	Ref Node:	
Weir Type:	Horizontal	Top Clip	
Geometry Type:	Rectangular	Default:	0.00 ft
Invert:	78.00 ft	Op Table:	
Control Elevation:	78.00 ft	Ref Node:	
Max Depth:	2.00 ft	Discharge Coefficients	
Max Width:	3.08 ft	Weir Default:	3.200
Fillet:	0.00 ft	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment: Invert based on treatment volume required

Drop Structure Comment:

Drop Structure Link: DS POND E		Upstream Pipe		Downstream Pipe	
Scenario:	Post-Development	Invert:	76.00 ft	Invert:	75.50 ft
From Node:	Pond E-3	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	MH E-3	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	10	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	400.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	1.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 ft				
Energy Switch:	Energy				

Pipe Comment: DS INVERT SET PER DITCH FL IN I-75 R/W

Weir Component		Bottom Clip	
Weir:	1	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Horizontal	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	81.81 ft	Ref Node:	
Control Elevation:	81.81 ft	Discharge Coefficients	
Max Depth:	2.00 ft	Weir Default:	3.200
Max Width:	3.08 ft	Weir Table:	
Fillet:	0.00 ft	Orifice Default:	0.600
		Orifice Table:	

Weir Comment: Invert based on treatment volume required

Drop Structure Comment:

Drop Structure Link: DS POND F		Upstream Pipe		Downstream Pipe	
Scenario:	Post-Development	Invert:	78.00 ft	Invert:	77.00 ft
From Node:	Pond F-1	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	Pond 49-1	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	10	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	400.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	1.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 ft				

Energy Switch: Energy

Pipe Comment: D/S INVERT SET TO BOTTOM OF POND 49-1

Weir Component		Bottom Clip	
Weir:	1	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	**Top Clip**	
Weir Type:	Horizontal	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	81.95 ft	Ref Node:	
Control Elevation:	81.95 ft	**Discharge Coefficients**	
Max Depth:	2.00 ft	Weir Default:	3.200
Max Width:	3.08 ft	Weir Table:	
Fillet:	0.00 ft	Orifice Default:	0.600
		Orifice Table:	

Weir Comment: Invert based on treatment volume required

Drop Structure Comment:

Drop Structure Link: DS POND G1		Upstream Pipe		Downstream Pipe	
Scenario:	Post-Development	Invert:	70.00 ft	Invert:	66.00 ft
From Node:	Pond G1-1	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	Depressional Area 1	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Flow Direction:	Both	**Bottom Clip**			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	10	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	140.00 ft	**Top Clip**			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	1.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 ft				
Energy Switch:	Energy				

Pipe Comment: D/S INVERT SET TO BOTTOM OF DEPRESSION 1

Weir Component		Bottom Clip	
Weir:	1	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	**Top Clip**	
Weir Type:	Horizontal	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	75.80 ft	Ref Node:	
Control Elevation:	75.80 ft	**Discharge Coefficients**	
Max Depth:	2.00 ft	Weir Default:	3.200
Max Width:	3.08 ft	Weir Table:	
Fillet:	0.00 ft	Orifice Default:	0.600

Orifice Table:

Weir Comment: Invert set to control discharge

Drop Structure Comment:

Pipe Link: L-E3		Upstream		Downstream	
Scenario:	Post-Development	Invert:	75.50 ft	Invert:	73.00 ft
From Node:	MH E-3	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	G10	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	900.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 ft	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Percolation Link: PERC-F1			
Scenario:	Post-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	F1	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-F1	Perimeter 1:	404.00 ft
Link Count:	1	Perimeter 2:	744.11 ft
Flow Direction:	Both	Perimeter 3:	2369.04 ft
Aquifer Base Elevation:	72.07 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	79.07 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10
Horizontal Conductivity:	4.500 fpd	# of Cells P2 to P3:	45
Vertical Conductivity:	3.000 fpd		
Fillable Porosity:	0.200		
Layer Thickness:	7.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin F

Percolation Link: PERC-F2			
Scenario:	Post-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	F2	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-F2	Perimeter 1:	577.50 ft
Link Count:	1	Perimeter 2:	1046.16 ft
Flow Direction:	Both	Perimeter 3:	2007.42 ft
Aquifer Base Elevation:	71.07 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	78.07 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10

Horizontal Conductivity:	4.500 fpd		
Vertical Conductivity:	3.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	6.50 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin F

Percolation Link: PERC-F3

Scenario:	Post-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	F3	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-F3	Perimeter 1:	511.30 ft
Link Count:	1	Perimeter 2:	772.42 ft
Flow Direction:	Both	Perimeter 3:	1603.85 ft
Aquifer Base Elevation:	68.07 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	74.07 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10
Horizontal Conductivity:	31.500 fpd	# of Cells P2 to P3:	45
Vertical Conductivity:	21.000 fpd		
Fillable Porosity:	0.200		
Layer Thickness:	9.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin F

Percolation Link: PERC-F4

Scenario:	Post-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	F4	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-F4	Perimeter 1:	1552.00 ft
Link Count:	1	Perimeter 2:	1835.49 ft
Flow Direction:	Both	Perimeter 3:	2171.02 ft
Aquifer Base Elevation:	64.07 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	72.07 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10
Horizontal Conductivity:	31.500 fpd	# of Cells P2 to P3:	45
Vertical Conductivity:	21.000 fpd		
Fillable Porosity:	0.200		
Layer Thickness:	8.75 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin F

Percolation Link: PERC-G1

Scenario:	Post-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G1	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-G1	Perimeter 1:	402.66 ft
Link Count:	1	Perimeter 2:	718.56 ft
Flow Direction:	Both	Perimeter 3:	1046.88 ft
Aquifer Base Elevation:	65.07 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	71.07 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10

Horizontal Conductivity:	29.250 fpd		
Vertical Conductivity:	19.500 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	7.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin G1-1

Percolation Link: PERC-G10

Scenario:	Post-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G10	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-G10	Perimeter 1:	530.00 ft
Link Count:	1	Perimeter 2:	887.78 ft
Flow Direction:	Both	Perimeter 3:	2693.05 ft
Aquifer Base Elevation:	60.07 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	67.07 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10
Horizontal Conductivity:	27.000 fpd	# of Cells P2 to P3:	45
Vertical Conductivity:	18.000 fpd		
Fillable Porosity:	0.200		
Layer Thickness:	7.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin G2

Percolation Link: PERC-G11

Scenario:	Post-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G11	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-G11	Perimeter 1:	342.66 ft
Link Count:	1	Perimeter 2:	667.49 ft
Flow Direction:	Both	Perimeter 3:	1804.84 ft
Aquifer Base Elevation:	60.07 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	66.07 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10
Horizontal Conductivity:	27.000 fpd	# of Cells P2 to P3:	45
Vertical Conductivity:	18.000 fpd		
Fillable Porosity:	0.200		
Layer Thickness:	6.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin G2

Percolation Link: PERC-G12

Scenario:	Post-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G12	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-G12	Perimeter 1:	1115.14 ft
Link Count:	1	Perimeter 2:	1448.86 ft
Flow Direction:	Both	Perimeter 3:	2502.20 ft
Aquifer Base Elevation:	55.07 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	62.07 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10

Horizontal Conductivity:	27.000 fpd		
Vertical Conductivity:	18.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	8.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin G2

Percolation Link: PERC-G13

Scenario:	Post-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G13	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-G13	Perimeter 1:	555.00 ft
Link Count:	1	Perimeter 2:	864.01 ft
Flow Direction:	Both	Perimeter 3:	1904.77 ft
Aquifer Base Elevation:	55.07 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	62.07 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10
Horizontal Conductivity:	27.000 fpd	# of Cells P2 to P3:	45
Vertical Conductivity:	18.000 fpd		
Fillable Porosity:	0.200		
Layer Thickness:	11.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin G2

Percolation Link: PERC-G14

Scenario:	Post-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G14	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-G14	Perimeter 1:	628.00 ft
Link Count:	1	Perimeter 2:	971.81 ft
Flow Direction:	Both	Perimeter 3:	2791.16 ft
Aquifer Base Elevation:	61.07 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	68.07 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10
Horizontal Conductivity:	27.000 fpd	# of Cells P2 to P3:	45
Vertical Conductivity:	18.000 fpd		
Fillable Porosity:	0.200		
Layer Thickness:	7.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin G2

Percolation Link: PERC-G2

Scenario:	Post-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G1	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-G2	Perimeter 1:	1519.00 ft
Link Count:	1	Perimeter 2:	1853.22 ft
Flow Direction:	Both	Perimeter 3:	2123.75 ft
Aquifer Base Elevation:	63.07 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	69.07 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10

Horizontal Conductivity:	29.250 fpd		
Vertical Conductivity:	19.500 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	6.50 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin G1-1

Percolation Link: PERC-G3

Scenario:	Post-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G3	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-G3	Perimeter 1:	538.50 ft
Link Count:	1	Perimeter 2:	864.99 ft
Flow Direction:	Both	Perimeter 3:	1071.47 ft
Aquifer Base Elevation:	58.07 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	66.07 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10
Horizontal Conductivity:	29.250 fpd	# of Cells P2 to P3:	45
Vertical Conductivity:	19.500 fpd		
Fillable Porosity:	0.200		
Layer Thickness:	8.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin G1-1

Percolation Link: PERC-G4

Scenario:	Post-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G4	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-G4	Perimeter 1:	351.34 ft
Link Count:	1	Perimeter 2:	634.78 ft
Flow Direction:	Both	Perimeter 3:	814.79 ft
Aquifer Base Elevation:	57.07 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	66.07 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10
Horizontal Conductivity:	29.250 fpd	# of Cells P2 to P3:	45
Vertical Conductivity:	19.500 fpd		
Fillable Porosity:	0.200		
Layer Thickness:	7.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin G2

Percolation Link: PERC-G5

Scenario:	Post-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G5	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-G5	Perimeter 1:	368.00 ft
Link Count:	1	Perimeter 2:	703.05 ft
Flow Direction:	Both	Perimeter 3:	888.64 ft
Aquifer Base Elevation:	55.07 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	63.07 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10

Horizontal Conductivity:	27.000 fpd		
Vertical Conductivity:	18.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	8.50 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin G2

Percolation Link: PERC-G6

Scenario:	Post-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G6	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-G6	Perimeter 1:	1116.66 ft
Link Count:	1	Perimeter 2:	1470.67 ft
Flow Direction:	Both	Perimeter 3:	2257.58 ft
Aquifer Base Elevation:	55.07 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	61.07 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10
Horizontal Conductivity:	27.000 fpd	# of Cells P2 to P3:	45
Vertical Conductivity:	18.000 fpd		
Fillable Porosity:	0.200		
Layer Thickness:	9.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin G2

Percolation Link: PERC-G7

Scenario:	Post-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G7	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-G7	Perimeter 1:	381.00 ft
Link Count:	1	Perimeter 2:	758.48 ft
Flow Direction:	Both	Perimeter 3:	2600.17 ft
Aquifer Base Elevation:	57.07 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	63.07 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10
Horizontal Conductivity:	27.000 fpd	# of Cells P2 to P3:	45
Vertical Conductivity:	18.000 fpd		
Fillable Porosity:	0.200		
Layer Thickness:	10.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin G2

Percolation Link: PERC-POND49

Scenario:	Post-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	Pond 49-1	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-49	Perimeter 1:	1510.00 ft
Link Count:	1	Perimeter 2:	1824.00 ft
Flow Direction:	Both	Perimeter 3:	4282.80 ft
Aquifer Base Elevation:	72.60 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	72.60 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10

Horizontal Conductivity:	2.000 fpd		
Vertical Conductivity:	1.330 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	4.40 ft		

Comment: Pond 49-1 is located in the parcel NE of the proposed interchange, adjacent to the existing depressional area. Boring information from PBS-9, PBS-10, and PBS-11 shows the average SHWT and confining layer estimated at 72.6'. FOS of 2 on horizontal and vertical conductivities

Percolation Link: PERC-PONDE

Scenario:	Post-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	Pond E-3	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-E	Perimeter 1:	1807.00 ft
Link Count:	1	Perimeter 2:	2121.00 ft
Flow Direction:	Both	Perimeter 3:	4822.80 ft
Aquifer Base Elevation:	75.35 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	75.35 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10
Horizontal Conductivity:	13.800 fpd	# of Cells P2 to P3:	45
Vertical Conductivity:	8.000 fpd		
Fillable Porosity:	0.200		
Layer Thickness:	5.15 ft		

Comment: Pond E-3 is located in the NW quadrant of the proposed interchange. Boring information from PBS-1, PBS-2, PBS- 23 and PBS-24 shows the average SHWT and confing layer estimated at 75.35'. FOS of 2 on horizontal and vertical conductivities

Percolation Link: PERC-PONDF

Scenario:	Post-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	Pond F-1	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-PF1	Perimeter 1:	1605.00 ft
Link Count:	1	Perimeter 2:	1919.00 ft
Flow Direction:	Both	Perimeter 3:	4453.79 ft
Aquifer Base Elevation:	76.20 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	76.20 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10
Horizontal Conductivity:	2.250 fpd	# of Cells P2 to P3:	45
Vertical Conductivity:	1.500 fpd		
Fillable Porosity:	0.200		
Layer Thickness:	4.80 ft		

Comment: Pond F-1 is located SE of the proposed interchange. Boring information from PBS-13 and PBS-14 shows the average SHWT and confining layer estimated at 76.2'. FOS of 2 on horizontal and vertical conductivities

Percolation Link: PERC-PONDG1

Scenario:	Post-Development	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	Pond G1-1	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-G1-1	Perimeter 1:	1937.60 ft
Link Count:	1	Perimeter 2:	2251.75 ft
Flow Direction:	Both	Perimeter 3:	4686.13 ft
Aquifer Base Elevation:	62.60 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	62.60 ft	Distance P2 to P3:	450.00 ft

Annual Recharge Rate:	0 ipy		
Horizontal Conductivity:	7.750 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	5.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	12.00 ft		

Comment: Pond G1-1 is located in the NE quadrant of the proposed interchange. Boring information from PBS-36 and PBS-38 shows the average SHWT and confining layer both estimated at 62.6'. FOS of 2 on horizontal and vertical conductivities

Weir Link: W1

Scenario:	Post-Development	**Bottom Clip**	
From Node:	F4	Default:	0.00 ft
To Node:	G1	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	79.87 ft	**Discharge Coefficients**	
Control Elevation:	79.87 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W10

Scenario:	Post-Development	**Bottom Clip**	
From Node:	G10	Default:	0.00 ft
To Node:	G11	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	74.07 ft	**Discharge Coefficients**	
Control Elevation:	74.07 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W11

Scenario:	Post-Development	**Bottom Clip**	
From Node:	G11	Default:	0.00 ft
To Node:	G12	Op Table:	

Link Count:	1		
Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Broad Crested Vertical	Default:	0.00 ft
Geometry Type:	Trapezoidal	Op Table:	
Invert:	72.07 ft	Ref Node:	
Control Elevation:	72.07 ft	Discharge Coefficients	
Max Depth:	999.00 ft	Weir Default:	3.200
Extrapolation Method:	Normal Projection	Weir Table:	
Bottom Width:	10.00 ft	Orifice Default:	0.600
Left Slope:	10.000 (h:v)	Orifice Table:	
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W13

Scenario:	Post-Development	Bottom Clip	
From Node:	G13	Default:	0.00 ft
To Node:	G12	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	72.97 ft	Discharge Coefficients	
Control Elevation:	72.97 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W14

Scenario:	Post-Development	Bottom Clip	
From Node:	G14	Default:	0.00 ft
To Node:	G13	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	75.07 ft	Discharge Coefficients	
Control Elevation:	75.07 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W2

Scenario:	Post-Development	**Bottom Clip**	
From Node:	G1	Default:	0.00 ft
To Node:	G3	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	75.57 ft	**Discharge Coefficients**	
Control Elevation:	75.57 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W3

Scenario:	Post-Development	**Bottom Clip**	
From Node:	G3	Default:	0.00 ft
To Node:	Pond G1-1	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	75.00 ft	**Discharge Coefficients**	
Control Elevation:	75.00 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	6.000 (h:v)		
Right Slope:	6.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W4

Scenario:	Post-Development	**Bottom Clip**	
From Node:	G4	Default:	0.00 ft
To Node:	G5	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	73.07 ft	**Discharge Coefficients**	
Control Elevation:	73.07 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	

Left Slope:	10.000 (h:v)
Right Slope:	10.000 (h:v)

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W5

Scenario:	Post-Development
From Node:	G5
To Node:	G6
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Trapezoidal
Invert:	70.77 ft
Control Elevation:	70.77 ft
Max Depth:	999.00 ft
Extrapolation Method:	Normal Projection
Bottom Width:	10.00 ft
Left Slope:	10.000 (h:v)
Right Slope:	10.000 (h:v)

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W6

Scenario:	Post-Development
From Node:	G6
To Node:	Depressional Area 2
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Trapezoidal
Invert:	69.27 ft
Control Elevation:	69.27 ft
Max Depth:	999.00 ft
Extrapolation Method:	Normal Projection
Bottom Width:	30.00 ft
Left Slope:	10.000 (h:v)
Right Slope:	10.000 (h:v)

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W7

Scenario:	Post-Development
From Node:	G7
To Node:	G6
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	

Geometry Type:	Trapezoidal		
Invert:	73.07 ft	Ref Node:	
Control Elevation:	73.07 ft	Discharge Coefficients	
Max Depth:	999.00 ft	Weir Default:	3.200
Extrapolation Method:	Normal Projection	Weir Table:	
Bottom Width:	10.00 ft	Orifice Default:	0.600
Left Slope:	10.000 (h:v)	Orifice Table:	
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: WEIR OFF-1

Scenario:	Post-Development	Bottom Clip	
From Node:	Depressional Area 1	Default:	0.00 ft
To Node:	OFF-D1	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	73.00 ft	Discharge Coefficients	
Control Elevation:	73.00 ft	Weir Default:	2.800
Cross Section:	X-OFF-1-W	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment: represents elevation at which the depression overtops to the adjacent offsite depressional area to the north

Weir Link: WEIR OFF-2

Scenario:	Post-Development	Bottom Clip	
From Node:	Depressional Area 2	Default:	0.00 ft
To Node:	OFF-D2	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	73.50 ft	Discharge Coefficients	
Control Elevation:	73.50 ft	Weir Default:	2.800
Cross Section:	X-OFF-2-W	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment: represents elevation at which the depression overtops to the adjacent offsite depressional area to the east

Weir Link: WF1

Scenario:	Post-Development	Bottom Clip	
From Node:	F1	Default:	0.00 ft
To Node:	F2	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	

Damping:	0.0000 ft		
Weir Type:	Broad Crested Vertical	Default:	0.00 ft
Geometry Type:	Trapezoidal	Op Table:	
Invert:	86.07 ft	Ref Node:	
Control Elevation:	86.07 ft	Discharge Coefficients	
Max Depth:	999.00 ft	Weir Default:	3.200
Extrapolation Method:	Normal Projection	Weir Table:	
Bottom Width:	10.00 ft	Orifice Default:	0.600
Left Slope:	10.000 (h:v)	Orifice Table:	
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: WF2

Scenario:	Post-Development	Bottom Clip	
From Node:	F2	Default:	0.00 ft
To Node:	F3	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	84.57 ft	Discharge Coefficients	
Control Elevation:	84.57 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: WF3

Scenario:	Post-Development	Bottom Clip	
From Node:	F3	Default:	0.00 ft
To Node:	F4	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	82.87 ft	Discharge Coefficients	
Control Elevation:	82.87 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Simulation: 100yr-10day

Scenario: Post-Development
Run Date/Time: 10/22/2020 9:12:01 AM
Program Version: ICPR4 4.04.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	240.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: CurveNumbers
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Basins

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Manual Basin Rain Opt: Global
Rainfall Name: ~FDOT-240
Rainfall Amount: 11.80 in
Storm Duration: 240.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 100yr-24hr

Scenario: Post-Development
Run Date/Time: 10/22/2020 9:13:19 AM
Program Version: ICPR4 4.04.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: CurveNumbers
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Basins

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft

IA Recovery Time: 24.0000 hr
Manual Basin Rain Opt: Global
Rainfall Name: ~FLMOD
Rainfall Amount: 11.40 in

Edge Length Option: Automatic

Storm Duration: 24.0000 hr

Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 10yr-24hr

Scenario: Post-Development
Run Date/Time: 10/22/2020 9:14:01 AM
Program Version: ICPR4 4.04.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: CurveNumbers
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Basins

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6

IA Recovery Time: 24.0000 hr

Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Manual Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	7.68 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 25yr-24hr-SJRWMD

Scenario: Post-Development
Run Date/Time: 10/22/2020 9:14:38 AM
Program Version: ICPR4 4.04.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: CurveNumbers
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Basins

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Manual Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	8.25 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 25yr-24hr-SWFWMD

Scenario: Post-Development
Run Date/Time: 10/22/2020 9:15:50 AM
Program Version: ICPR4 4.04.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Lookup Tables

Boundary Stage Set:

		Extern Hydrograph Set:	
Unit Hydrograph Folder:		Curve Number Set:	CurveNumbers
		Green-Ampt Set:	
		Vertical Layers Set:	
		Impervious Set:	Basins

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Manual Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	8.40 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 25yr-96hr

Scenario:	Post-Development
Run Date/Time:	10/22/2020 9:16:59 AM
Program Version:	ICPR4 4.04.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	240.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:	
Unit Hydrograph Folder:	

Lookup Tables

Boundary Stage Set:	
Extern Hydrograph Set:	
Curve Number Set:	CurveNumbers
Green-Ampt Set:	
Vertical Layers Set:	
Impervious Set:	Basins

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Manual Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SJRWMD-96
		Rainfall Amount:	11.50 in
Edge Length Option:	Automatic	Storm Duration:	96.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Post-Development
ICPR Output

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Depressional Area 1	100yr-10day	73.00	72.07	0.0007	27.71	0.00	521245
Depressional Area 1	100yr-24hr	73.00	71.92	0.0010	185.64	0.00	507462
Depressional Area 1	10yr-24hr	73.00	69.44	0.0010	51.05	0.00	283434
Depressional Area 1	25yr-24hr-SJRWMD	73.00	69.83	0.0010	69.59	0.00	318572
Depressional Area 1	25yr-24hr-SWFWMD	73.00	69.94	0.0010	74.80	0.00	328537
Depressional Area 1	25yr-96hr	73.00	71.92	0.0009	174.59	0.00	507110
Depressional Area 2	100yr-10day	73.50	70.38	0.0010	3.65	0.23	60580
Depressional Area 2	100yr-24hr	73.50	71.79	0.0010	50.28	1.39	149259
Depressional Area 2	10yr-24hr	73.50	68.52	0.0010	9.96	0.00	15392
Depressional Area 2	25yr-24hr-SJRWMD	73.50	69.29	0.0010	14.57	0.08	23219
Depressional Area 2	25yr-24hr-SWFWMD	73.50	69.39	0.0010	16.02	0.15	24944
Depressional Area 2	25yr-96hr	73.50	70.99	0.0010	40.67	0.66	101047
Pond 49-1	100yr-10day	83.00	78.35	0.0003	7.60	6.69	56181
Pond 49-1	100yr-24hr	83.00	79.30	0.0007	82.15	25.02	60936
Pond 49-1	10yr-24hr	83.00	78.38	0.0003	42.34	8.47	56346
Pond 49-1	25yr-24hr-SJRWMD	83.00	78.49	0.0003	48.19	12.08	56906
Pond 49-1	25yr-24hr-SWFWMD	83.00	78.52	0.0003	49.75	13.14	57058
Pond 49-1	25yr-96hr	83.00	79.02	0.0004	64.51	24.36	59540
Pond E-3	100yr-10day	85.00	82.12	0.0005	8.53	6.10	131975
Pond E-3	100yr-24hr	85.00	82.15	0.0008	59.28	17.15	132136
Pond E-3	10yr-24hr	85.00	81.38	0.0006	27.05	11.55	127509
Pond E-3	25yr-24hr-SJRWMD	85.00	81.67	0.0006	31.62	11.64	129328
Pond E-3	25yr-24hr-SWFWMD	85.00	81.74	0.0006	32.86	11.67	129811
Pond E-3	25yr-96hr	85.00	82.06	0.0010	49.61	11.98	131626
Pond F-1	100yr-10day	87.00	82.17	0.0005	4.34	3.59	70996
Pond F-1	100yr-24hr	87.00	82.39	0.0009	24.17	10.62	72173
Pond F-1	10yr-24hr	87.00	81.78	0.0006	8.69	1.20	68913
Pond F-1	25yr-24hr-SJRWMD	87.00	81.99	0.0008	10.73	1.48	69932
Pond F-1	25yr-24hr-SWFWMD	87.00	82.01	0.0007	11.29	1.73	70066
Pond F-1	25yr-96hr	87.00	82.29	0.0009	20.89	7.57	71672
Pond G1-1	100yr-10day	80.00	74.60	0.0000	3.84	4.51	127632
Pond G1-1	100yr-24hr	80.00	75.69	0.0010	56.65	7.90	136549
Pond G1-1	10yr-24hr	80.00	74.66	0.0003	13.55	7.41	127964
Pond G1-1	25yr-24hr-SJRWMD	80.00	74.74	0.0003	18.69	7.43	128371
Pond G1-1	25yr-24hr-SWFWMD	80.00	74.77	0.0003	20.13	7.44	128489
Pond G1-1	25yr-96hr	80.00	75.33	0.0006	48.44	7.73	133607

Scenario	Sim	Link Name	Maximum Flow Rate [cfs]	Time to Maximum Flow Rate [hrs]
Post-Development	100yr-10day	DS POND 49	6.63	184.0910
Post-Development	100yr-10day	DS POND E	5.61	184.8464
Post-Development	100yr-10day	DS POND F	3.37	184.7549
Post-Development	100yr-10day	DS POND G1	0.00	0.0000
Post-Development	100yr-24hr	DS POND 49	24.10	12.1369
Post-Development	100yr-24hr	DS POND E	6.41	16.1698
Post-Development	100yr-24hr	DS POND F	9.37	14.1194
Post-Development	100yr-24hr	DS POND G1	0.00	0.0000
Post-Development	10yr-24hr	DS POND 49	7.60	12.6152
Post-Development	10yr-24hr	DS POND E	0.00	0.0000
Post-Development	10yr-24hr	DS POND F	0.00	0.0000
Post-Development	10yr-24hr	DS POND G1	0.00	0.0000
Post-Development	25yr-24hr-SJRWMD	DS POND 49	11.21	12.5132
Post-Development	25yr-24hr-SJRWMD	DS POND E	0.00	0.0000
Post-Development	25yr-24hr-SJRWMD	DS POND F	0.26	19.1379
Post-Development	25yr-24hr-SJRWMD	DS POND G1	0.00	0.0000
Post-Development	25yr-24hr-SWFWMD	DS POND 49	12.26	12.4730
Post-Development	25yr-24hr-SWFWMD	DS POND E	0.00	0.0000
Post-Development	25yr-24hr-SWFWMD	DS POND F	0.51	18.0614
Post-Development	25yr-24hr-SWFWMD	DS POND G1	0.00	0.0000
Post-Development	25yr-96hr	DS POND 49	23.46	60.0349
Post-Development	25yr-96hr	DS POND E	4.00	64.5464
Post-Development	25yr-96hr	DS POND F	6.32	62.1037
Post-Development	25yr-96hr	DS POND G1	0.00	0.0000

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]
Post-Development	25yr-96hr	Depressional Area 1	231.0045	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	231.2545	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	231.5045	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	231.7545	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	232.0045	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	232.2545	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	232.5045	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	232.7545	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	233.0045	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	233.2545	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	233.5045	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	233.7545	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	234.0045	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	234.2545	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	234.5045	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	234.7545	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	235.0045	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	235.2545	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	235.5045	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	235.7545	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	236.0045	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	236.2545	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	236.5045	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	236.7545	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	237.0045	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	237.2545	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	237.5045	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	237.7545	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	238.0045	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	238.2545	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	238.5045	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	238.7545	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	239.0045	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	239.2545	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	239.5045	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	239.7545	71.92	33.22
Post-Development	25yr-96hr	Depressional Area 1	240.0045	71.92	33.22

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]
Post-Development	25yr-96hr	Depressional Area 2	231.0045	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	231.2545	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	231.5045	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	231.7545	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	232.0045	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	232.2545	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	232.5045	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	232.7545	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	233.0045	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	233.2545	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	233.5045	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	233.7545	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	234.0045	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	234.2545	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	234.5045	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	234.7545	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	235.0045	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	235.2545	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	235.5045	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	235.7545	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	236.0045	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	236.2545	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	236.5045	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	236.7545	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	237.0045	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	237.2545	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	237.5045	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	237.7545	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	238.0045	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	238.2545	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	238.5045	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	238.7545	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	239.0045	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	239.2545	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	239.5045	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	239.7545	69.27	2.72
Post-Development	25yr-96hr	Depressional Area 2	240.0045	69.27	2.72

Table A: Pre vs Post Volume Comparison

Node	Pre V (ac-ft)	Post V (ac-ft)
Depression 1	36.96	33.22
Depression 2	*9.93**	2.72

*OFF-LOW in permit for basin G

Table B: Summary of Min Projected Elevation

Pond	Pond Bottom	Profile Sag	Assumed Flowline	Length	Min Slope	Projected Elevation Using Min. Slope
E-3	79.5	85.05	81.05	1550	0.10%	81.05
F-1	81	88	84	1270	0.10%	82.27
G1-1	74.6	79.36	75	250	0.10%	74.85
49-1	77	82.4	78.4	340	0.10%	77.34

*Note - Minimum conveyance slope is based on assumed depth of 4' minimum from edge of pavement to

DRAWDOWN
ICPR MODEL

Node: GW-49

Scenario: Drawdown
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 72.60 ft
Warning Stage: 76.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	72.60
0	0	0	96.0000	72.60

Comment: Boring information from PBS-9, PBS-10, and PBS-11 shows the average SHWT estimated at 72.6'

Node: GW-E

Scenario: Drawdown
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 75.35 ft
Warning Stage: 78.50 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	75.35
0	0	0	96.0000	75.35

Comment: Boring information from PBS-1, PBS-2, PBS- 23 and PBS-24 shows the average SHWT estimated at 75.35'

Node: GW-G1-1

Scenario: Drawdown
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 62.60 ft
Warning Stage: 73.60 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	62.60
0	0	0	96.0000	62.60

Comment: Boring information from PBS-36 and PBS-38 shows the average SHWT estimated at 62.6'.

Node: GW-PF1

Scenario: Drawdown
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 76.20 ft
Warning Stage: 84.00 ft

Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	76.20
0	0	0	96.0000	76.20

Comment: Boring information from PBS-13 and PBS-14 shows the average SHWT estimated at 76.20'.

Node: Pond 49-1

Scenario: Drawdown
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 78.00 ft
Warning Stage: 83.00 ft

Stage [ft]	Area [ac]	Area [ft2]
77.00	1.1300	49223
78.00	1.2500	54450
80.79	1.5700	68389
81.53	1.6800	73181
84.00	1.9600	85378
85.00	2.6300	114563

Comment: Initial stage based on treatment volume required

Node: Pond E-3

Scenario: Drawdown
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 81.81 ft
Warning Stage: 85.00 ft

Stage [ft]	Area [ac]	Area [ft2]
80.50	2.8000	121968
81.81	2.9900	130244
82.20	3.0400	132422
83.42	3.2000	139392
87.00	3.7500	163350
88.00	4.5500	198198

Comment: Initial stage based on treatment volume required

Node: Pond F-1

Scenario: Drawdown
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 81.95 ft
Warning Stage: 87.00 ft

Stage [ft]	Area [ac]	Area [ft2]
81.00	1.5000	65340
81.95	1.6000	69696
82.32	1.6500	71874
83.58	1.7800	77537
88.00	2.3000	100188
89.00	2.9400	128066

Comment: Initial stage based on treatment volume required

Node: Pond G1-1

Scenario: Drawdown
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 75.80 ft
Warning Stage: 80.00 ft

Stage [ft]	Area [ac]	Area [ft2]
74.60	2.9300	127631
74.94	2.9700	129373
75.11	3.0000	130680
75.44	3.1000	135036
81.00	3.8600	168142
82.00	4.6000	200376

Comment: Initial stage based on weir elevation to control discharge

Node: GW-49

Scenario: Drawdown (Att)
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 72.60 ft
Warning Stage: 76.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	72.60
0	0	0	96.0000	72.60

Comment: Boring information from PBS-9, PBS-10, and PBS-11 shows the average SHWT estimated at 72.6'

Node: GW-E

Scenario: Drawdown (Att)
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 75.35 ft
Warning Stage: 78.50 ft

Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	75.35
0	0	0	96.0000	75.35

Comment: Boring information from PBS-1, PBS-2, PBS- 23 and PBS-24 shows the average SHWT estimated at 75.35'

Node: GW-G1-1

Scenario: Drawdown (Att)
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 62.60 ft
Warning Stage: 73.60 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	62.60
0	0	0	96.0000	62.60

Comment: Boring information from PBS-36 and PBS-38 shows the average SHWT estimated at 62.6'.

Node: GW-PF1

Scenario: Drawdown (Att)
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 76.20 ft
Warning Stage: 84.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	76.20
0	0	0	96.0000	76.20

Comment: Boring information from PBS-13 and PBS-14 shows the average SHWT estimated at 76.20'.

Node: Pond 49-1

Scenario: Drawdown (Att)
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 80.79 ft
Warning Stage: 83.00 ft

Stage [ft]	Area [ac]	Area [ft2]
77.00	1.1300	49223
78.00	1.2500	54450
80.79	1.5700	68389
81.53	1.6800	73181

Stage [ft]	Area [ac]	Area [ft2]
84.00	1.9600	85378
85.00	2.6300	114563

Comment: Initial stage based on attenuation volume required

Node: Pond E-3

Scenario: Drawdown (Att)
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 82.20 ft
Warning Stage: 85.00 ft

Stage [ft]	Area [ac]	Area [ft2]
80.50	2.8000	121968
81.81	2.9900	130244
82.20	3.0400	132422
83.42	3.2000	139392
87.00	3.7500	163350
88.00	4.5500	198198

Comment: Initial stage based on attenuation volume required.
Warning stage set at low edge of pavement

Node: Pond F-1

Scenario: Drawdown (Att)
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 82.32 ft
Warning Stage: 87.00 ft

Stage [ft]	Area [ac]	Area [ft2]
81.00	1.5000	65340
81.95	1.6000	69696
82.32	1.6500	71874
83.58	1.7800	77537
88.00	2.3000	100188
89.00	2.9400	128066

Comment: Initial stage based on attenuation volume required

Node: Pond G1-1

Scenario: Drawdown (Att)
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 75.80 ft
Warning Stage: 80.00 ft

Stage [ft]	Area [ac]	Area [ft2]
74.60	2.9300	127631
74.94	2.9700	129373
75.11	3.0000	130680
75.44	3.1000	135036
81.00	3.8600	168142
82.00	4.6000	200376

Comment: Initial stage based on weir elevation to control discharge

Drop Structure Link: DS POND 49		Upstream Pipe		Downstream Pipe	
Scenario:	Drawdown	Invert:	70.00 ft	Invert:	66.00 ft
From Node:	Pond 49-1	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	Depressional Area 1	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	10	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	155.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	1.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 ft				
Energy Switch:	Energy				

Pipe Comment: DS INVERT SET TO BOTTOM OF DEPRESSION

Weir Component			
Weir:	1	Bottom Clip	
Weir Count:	1	Default:	0.00 ft
Weir Flow Direction:	Both	Op Table:	
Damping:	0.0000 ft	Ref Node:	
Weir Type:	Horizontal	Top Clip	
Geometry Type:	Rectangular	Default:	0.00 ft
Invert:	78.00 ft	Op Table:	
Control Elevation:	78.00 ft	Ref Node:	
Max Depth:	2.00 ft	Discharge Coefficients	
Max Width:	3.08 ft	Weir Default:	3.200
Fillet:	0.00 ft	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment: Invert based on treatment volume required

Drop Structure Comment:

Drop Structure Link: DS POND E		Upstream Pipe		Downstream Pipe	
Scenario:	Drawdown	Invert:	76.00 ft	Invert:	75.50 ft
From Node:	Pond E-3	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	MH E-3	Geometry: Circular		Geometry: Circular	

Link Count:	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	10	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	400.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	1.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 ft				
Energy Switch:	Energy				

Pipe Comment: DS INVERT SET PER DITCH FL IN I-75 R/W

Weir Component			
Weir:	1	Bottom Clip	
Weir Count:	1	Default:	0.00 ft
Weir Flow Direction:	Both	Op Table:	
Damping:	0.0000 ft	Ref Node:	
Weir Type:	Horizontal	Top Clip	
Geometry Type:	Rectangular	Default:	0.00 ft
Invert:	81.81 ft	Op Table:	
Control Elevation:	81.81 ft	Ref Node:	
Max Depth:	2.00 ft	Discharge Coefficients	
Max Width:	3.08 ft	Weir Default:	3.200
Fillet:	0.00 ft	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment: Invert based on treatment volume required

Drop Structure Comment:

Drop Structure Link: DS POND F		Upstream Pipe		Downstream Pipe	
Scenario:	Drawdown	Invert:	78.00 ft	Invert:	77.00 ft
From Node:	Pond F-1	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	Pond 49-1	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	10	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	400.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	1.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 ft				
Energy Switch:	Energy				

Pipe Comment: D/S INVERT SET TO BOTTOM OF POND 49-1

Weir Component			
Weir:	1	Bottom Clip	

Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Horizontal
Geometry Type:	Rectangular
Invert:	81.95 ft
Control Elevation:	81.95 ft
Max Depth:	2.00 ft
Max Width:	3.08 ft
Fillet:	0.00 ft

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment: Invert based on treatment volume required

Drop Structure Comment:

Drop Structure Link: DS POND G1

Scenario:	Drawdown
From Node:	Pond G1-1
To Node:	Depressional Area 1
Link Count:	1
Flow Direction:	Both
Solution:	Combine
Increments:	10
Pipe Count:	1
Damping:	0.0000 ft
Length:	140.00 ft
FHWA Code:	1
Entr Loss Coef:	0.50
Exit Loss Coef:	1.00
Bend Loss Coef:	0.00
Bend Location:	0.00 ft
Energy Switch:	Energy

Upstream Pipe

Invert:	70.00 ft
Manning's N:	0.0120

Geometry: Circular

Max Depth:	1.50 ft

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	
Manning's N:	0.0000

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	
Manning's N:	0.0000

Downstream Pipe

Invert:	66.00 ft
Manning's N:	0.0120

Geometry: Circular

Max Depth:	1.50 ft

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	
Manning's N:	0.0000

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	
Manning's N:	0.0000

Pipe Comment: D/S INVERT SET TO BOTTOM OF DEPRESSION 1

Weir Component

Weir:	1
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Horizontal
Geometry Type:	Rectangular
Invert:	75.80 ft
Control Elevation:	75.80 ft
Max Depth:	2.00 ft
Max Width:	3.08 ft
Fillet:	0.00 ft

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Weir Comment: Invert set to control discharge

Drop Structure Comment:

Percolation Link: PERC-POND49

Scenario:	Drawdown	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	Pond 49-1	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-49	Perimeter 1:	1510.00 ft
Link Count:	1	Perimeter 2:	1824.00 ft
Flow Direction:	Both	Perimeter 3:	4282.80 ft
Aquifer Base Elevation:	72.60 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	72.60 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10
Horizontal Conductivity:	2.000 fpd	# of Cells P2 to P3:	45
Vertical Conductivity:	1.330 fpd		
Fillable Porosity:	0.200		
Layer Thickness:	4.40 ft		

Comment: Pond 49-1 is located in the parcel NE of the proposed interchange, adjacent to the existing depressional area. Boring information from PBS-9, PBS-10, and PBS-11 shows the average SHWT and confining layer estimated at 72.6'. FOS of 2 on horizontal and vertical conductivities

Percolation Link: PERC-PONDE

Scenario:	Drawdown	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	Pond E-3	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-E	Perimeter 1:	1807.00 ft
Link Count:	1	Perimeter 2:	2121.00 ft
Flow Direction:	Both	Perimeter 3:	4822.80 ft
Aquifer Base Elevation:	75.35 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	75.35 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10
Horizontal Conductivity:	13.800 fpd	# of Cells P2 to P3:	45
Vertical Conductivity:	8.000 fpd		
Fillable Porosity:	0.200		
Layer Thickness:	5.15 ft		

Comment: Pond E-3 is located in the NW quadrant of the proposed interchange. Boring information from PBS-1, PBS-2, PBS- 23 and PBS-24 shows the average SHWT and confing layer estimated at 75.35'. FOS of 2 on horizontal and vertical conductivities

Percolation Link: PERC-PONDF

Scenario:	Drawdown	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	Pond F-1	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-PF1	Perimeter 1:	1605.00 ft
Link Count:	1	Perimeter 2:	1919.00 ft
Flow Direction:	Both	Perimeter 3:	4453.79 ft
Aquifer Base Elevation:	76.20 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	76.20 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10
Horizontal Conductivity:	2.250 fpd	# of Cells P2 to P3:	45
Vertical Conductivity:	1.500 fpd		
Fillable Porosity:	0.200		
Layer Thickness:	4.80 ft		

Comment: Pond F-1 is located SE of the proposed interchange. Boring information from PBS-13 and PBS-14 shows the average SHWT and confining layer estimated at 76.2'. FOS of 2 on horizontal and vertical conductivities

Percolation Link: PERC-PONDG1			
Scenario:	Drawdown	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	Pond G1-1	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-G1-1	Perimeter 1:	1937.60 ft
Link Count:	1	Perimeter 2:	2251.75 ft
Flow Direction:	Both	Perimeter 3:	4686.13 ft
Aquifer Base Elevation:	62.60 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	62.60 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10
Horizontal Conductivity:	7.750 fpd	# of Cells P2 to P3:	45
Vertical Conductivity:	5.000 fpd		
Fillable Porosity:	0.200		
Layer Thickness:	12.00 ft		

Comment: Pond G1-1 is located in the NE quadrant of the proposed interchange. Boring information from PBS-36 and PBS-38 shows the average SHWT and confining layer both estimated at 62.6'. FOS of 2 on horizontal and vertical conductivities

Drop Structure Link: DS POND 49		Upstream Pipe		Downstream Pipe	
Scenario:	Drawdown (Att)	Invert:	70.00 ft	Invert:	66.00 ft
From Node:	Pond 49-1	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	Depressional Area 1	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	10	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	155.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	1.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 ft				
Energy Switch:	Energy				

Pipe Comment: DS INVERT SET TO BOTTOM OF DEPRESSION

Weir Component			
Weir:	1	Bottom Clip	
Weir Count:	1	Default:	0.00 ft
Weir Flow Direction:	Both	Op Table:	
Damping:	0.0000 ft	Ref Node:	
Weir Type:	Horizontal	Top Clip	
Geometry Type:	Rectangular	Default:	0.00 ft
Invert:	78.00 ft	Op Table:	
Control Elevation:	78.00 ft	Ref Node:	
Max Depth:	2.00 ft	Discharge Coefficients	
Max Width:	3.08 ft	Weir Default:	3.200
Fillet:	0.00 ft	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment: Invert based on treatment volume required

Drop Structure Comment:

Drop Structure Link: DS POND E		Upstream Pipe		Downstream Pipe	
Scenario:	Drawdown (Att)	Invert:	76.00 ft	Invert:	75.50 ft
From Node:	Pond E-3	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	MH E-3	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	10	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	400.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	1.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 ft				
Energy Switch:	Energy				

Pipe Comment: DS INVERT SET PER DITCH FL IN I-75 R/W

Weir Component		Bottom Clip	
Weir:	1	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Horizontal	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	81.81 ft	Ref Node:	
Control Elevation:	81.81 ft	Discharge Coefficients	
Max Depth:	2.00 ft	Weir Default:	3.200
Max Width:	3.08 ft	Weir Table:	
Fillet:	0.00 ft	Orifice Default:	0.600
		Orifice Table:	

Weir Comment: Invert based on treatment volume required

Drop Structure Comment:

Drop Structure Link: DS POND F		Upstream Pipe		Downstream Pipe	
Scenario:	Drawdown (Att)	Invert:	78.00 ft	Invert:	77.00 ft
From Node:	Pond F-1	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	Pond 49-1	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	10	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	400.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	1.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 ft				
Energy Switch:	Energy				

Pipe Comment: D/S INVERT SET TO BOTTOM OF POND 49-1

Weir Component		Bottom Clip	
Weir:	1	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	**Top Clip**	
Weir Type:	Horizontal	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	81.95 ft	Ref Node:	
Control Elevation:	81.95 ft	**Discharge Coefficients**	
Max Depth:	2.00 ft	Weir Default:	3.200
Max Width:	3.08 ft	Weir Table:	
Fillet:	0.00 ft	Orifice Default:	0.600
		Orifice Table:	

Weir Comment: Invert based on treatment volume required

Drop Structure Comment:

Drop Structure Link: DS POND G1		Upstream Pipe		Downstream Pipe	
Scenario:	Drawdown (Att)	Invert:	70.00 ft	Invert:	66.00 ft
From Node:	Pond G1-1	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	Depressional Area 1	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	10	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	140.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	1.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 ft				
Energy Switch:	Energy				

Pipe Comment: D/S INVERT SET TO BOTTOM OF DEPRESSION 1

Weir Component		Bottom Clip	
Weir:	1	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	**Top Clip**	
Weir Type:	Horizontal	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	75.80 ft	Ref Node:	
Control Elevation:	75.80 ft	**Discharge Coefficients**	
Max Depth:	2.00 ft	Weir Default:	3.200
Max Width:	3.08 ft	Weir Table:	
Fillet:	0.00 ft	Orifice Default:	0.600
		Orifice Table:	

Weir Comment: Invert set to control discharge

Drop Structure Comment:

Percolation Link: PERC-POND49

Scenario:	Drawdown (Att)	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	Pond 49-1	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-49	Perimeter 1:	1510.00 ft
Link Count:	1	Perimeter 2:	1824.00 ft
Flow Direction:	Both	Perimeter 3:	4282.80 ft
Aquifer Base Elevation:	72.60 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	72.60 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10
Horizontal Conductivity:	2.000 fpd	# of Cells P2 to P3:	45
Vertical Conductivity:	1.330 fpd		
Fillable Porosity:	0.200		
Layer Thickness:	4.40 ft		

Comment: Pond 49-1 is located in the parcel NE of the proposed interchange, adjacent to the existing depressional area. Boring information from PBS-9, PBS-10, and PBS-11 shows the average SHWT and confining layer estimated at 72.6'. FOS of 2 on horizontal and vertical conductivities

Percolation Link: PERC-PONDE

Scenario:	Drawdown (Att)	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	Pond E-3	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-E	Perimeter 1:	1807.00 ft
Link Count:	1	Perimeter 2:	2121.00 ft
Flow Direction:	Both	Perimeter 3:	4822.80 ft
Aquifer Base Elevation:	75.35 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	75.35 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10
Horizontal Conductivity:	13.800 fpd	# of Cells P2 to P3:	45
Vertical Conductivity:	8.000 fpd		
Fillable Porosity:	0.200		
Layer Thickness:	5.15 ft		

Comment: Pond E-3 is located in the NW quadrant of the proposed interchange. Boring information from PBS-1, PBS-2, PBS- 23 and PBS-24 shows the average SHWT and confing layer estimated at 75.35'. FOS of 2 on horizontal and vertical conductivities

Percolation Link: PERC-PONDF

Scenario:	Drawdown (Att)	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	Pond F-1	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-PF1	Perimeter 1:	1605.00 ft
Link Count:	1	Perimeter 2:	1919.00 ft
Flow Direction:	Both	Perimeter 3:	4453.79 ft
Aquifer Base Elevation:	76.20 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	76.20 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10
Horizontal Conductivity:	2.250 fpd	# of Cells P2 to P3:	45
Vertical Conductivity:	1.500 fpd		
Fillable Porosity:	0.200		

Layer Thickness: 4.80 ft

Comment: Pond F-1 is located SE of the proposed interchange. Boring information from PBS-13 and PBS-14 shows the average SHWT and confining layer estimated at 76.2'. FOS of 2 on horizontal and vertical conductivities

Percolation Link: PERC-PONDG1

Scenario:	Drawdown (Att)	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	Pond G1-1	Vertical Flow Termination:	Horizontal Flow Algorithm
To Node:	GW-G1-1	Perimeter 1:	1937.60 ft
Link Count:	1	Perimeter 2:	2251.75 ft
Flow Direction:	Both	Perimeter 3:	4686.13 ft
Aquifer Base Elevation:	62.60 ft	Distance P1 to P2:	50.00 ft
Water Table Elevation:	62.60 ft	Distance P2 to P3:	450.00 ft
Annual Recharge Rate:	0 ipy	# of Cells P1 to P2:	10
Horizontal Conductivity:	7.750 fpd	# of Cells P2 to P3:	45
Vertical Conductivity:	5.000 fpd		
Fillable Porosity:	0.200		
Layer Thickness:	12.00 ft		

Comment: Pond G1-1 is located in the NE quadrant of the proposed interchange. Boring information from PBS-36 and PBS-38 shows the average SHWT and confining layer both estimated at 62.6'. FOS of 2 on horizontal and vertical conductivities

Simulation: Drawdown

Scenario: Drawdown
Run Date/Time: 10/20/2020 2:58:10 PM
Program Version: ICPR4 4.04.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: CurveNumbers
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Basins

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Manual Basin Rain Opt: No Rainfall

Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: Drawdown 14 day

Scenario: Drawdown (Att)
Run Date/Time: 10/20/2020 2:58:25 PM
Program Version: ICPR4 4.04.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	360.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:	
Extern Hydrograph Set:	
Curve Number Set:	CurveNumbers
Green-Ampt Set:	
Vertical Layers Set:	
Impervious Set:	Basins

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Manual Basin Rain Opt:	No Rainfall
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft		
Edge Length Option:	Automatic		
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Warning Stage [ft]
Drawdown	Pond 49-1	22.5078	77.06	83.00
Drawdown	Pond 49-1	22.7578	77.06	83.00
Drawdown	Pond 49-1	23.0078	77.06	83.00
Drawdown	Pond 49-1	23.2578	77.06	83.00
Drawdown	Pond 49-1	23.5078	77.05	83.00
Drawdown	Pond 49-1	23.7578	77.05	83.00
Drawdown	Pond 49-1	24.0078	77.05	83.00
Drawdown	Pond 49-1	24.2578	77.05	83.00
Drawdown	Pond 49-1	24.5078	77.05	83.00
Drawdown	Pond 49-1	24.7578	77.05	83.00
Drawdown	Pond 49-1	25.0078	77.04	83.00
Drawdown	Pond 49-1	25.2578	77.04	83.00
Drawdown	Pond 49-1	25.5078	77.04	83.00
Drawdown	Pond 49-1	25.7578	77.04	83.00
Drawdown	Pond 49-1	26.0078	77.04	83.00
Drawdown	Pond 49-1	26.2578	77.04	83.00
Drawdown	Pond 49-1	26.5078	77.04	83.00
Drawdown	Pond 49-1	26.7578	77.03	83.00
Drawdown	Pond 49-1	27.0078	77.03	83.00
Drawdown	Pond 49-1	27.2578	77.03	83.00
Drawdown	Pond 49-1	27.5078	77.03	83.00
Drawdown	Pond 49-1	27.7578	77.03	83.00
Drawdown	Pond 49-1	28.0078	77.03	83.00
Drawdown	Pond 49-1	28.2578	77.03	83.00
Drawdown	Pond 49-1	28.5078	77.02	83.00
Drawdown	Pond 49-1	28.7578	77.02	83.00
Drawdown	Pond 49-1	29.0078	77.02	83.00
Drawdown	Pond 49-1	29.2578	77.02	83.00
Drawdown	Pond 49-1	29.5078	77.02	83.00
Drawdown	Pond 49-1	29.7578	77.02	83.00
Drawdown	Pond 49-1	30.0078	77.02	83.00
Drawdown	Pond 49-1	30.2578	77.01	83.00
Drawdown	Pond 49-1	30.5078	77.01	83.00
Drawdown	Pond 49-1	30.7578	77.01	83.00
Drawdown	Pond 49-1	31.0078	77.01	83.00
Drawdown	Pond 49-1	31.2578	77.01	83.00
Drawdown	Pond 49-1	31.5078	77.01	83.00
Drawdown	Pond 49-1	31.7578	77.01	83.00
Drawdown	Pond 49-1	32.0078	77.01	83.00
Drawdown	Pond 49-1	32.2578	77.01	83.00
Drawdown	Pond 49-1	32.5078	77.00	83.00
Drawdown	Pond 49-1	32.7578	77.00	83.00
Drawdown	Pond 49-1	33.0078	77.00	83.00
Drawdown	Pond 49-1	33.2578	77.00	83.00
Drawdown	Pond 49-1	33.5078	77.00	83.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Warning Stage [ft]
Drawdown 14 day	Pond 49-1	135.0023	77.01	83.00
Drawdown 14 day	Pond 49-1	135.2523	77.01	83.00
Drawdown 14 day	Pond 49-1	135.5023	77.01	83.00
Drawdown 14 day	Pond 49-1	135.7523	77.01	83.00
Drawdown 14 day	Pond 49-1	136.0023	77.01	83.00
Drawdown 14 day	Pond 49-1	136.2523	77.01	83.00
Drawdown 14 day	Pond 49-1	136.5023	77.00	83.00
Drawdown 14 day	Pond 49-1	136.7523	77.00	83.00
Drawdown 14 day	Pond 49-1	137.0023	77.00	83.00
Drawdown 14 day	Pond 49-1	137.2523	77.00	83.00
Drawdown 14 day	Pond 49-1	137.5023	77.00	83.00
Drawdown 14 day	Pond 49-1	137.7523	77.00	83.00
Drawdown 14 day	Pond 49-1	138.0023	77.00	83.00
Drawdown 14 day	Pond 49-1	138.2523	77.00	83.00
Drawdown 14 day	Pond 49-1	138.5023	77.00	83.00
Drawdown 14 day	Pond 49-1	138.7523	77.00	83.00
Drawdown 14 day	Pond 49-1	139.0023	77.00	83.00
Drawdown 14 day	Pond 49-1	139.2523	77.00	83.00
Drawdown 14 day	Pond 49-1	139.5023	77.00	83.00
Drawdown 14 day	Pond 49-1	139.7523	77.00	83.00
Drawdown 14 day	Pond 49-1	140.0023	77.00	83.00
Drawdown 14 day	Pond 49-1	140.2523	77.00	83.00
Drawdown 14 day	Pond 49-1	140.5023	77.00	83.00
Drawdown 14 day	Pond 49-1	140.7523	77.00	83.00
Drawdown 14 day	Pond 49-1	141.0023	77.00	83.00
Drawdown 14 day	Pond 49-1	141.2523	77.00	83.00
Drawdown 14 day	Pond 49-1	141.5023	77.00	83.00
Drawdown 14 day	Pond 49-1	141.7523	77.00	83.00
Drawdown 14 day	Pond 49-1	142.0023	77.00	83.00
Drawdown 14 day	Pond 49-1	142.2523	77.00	83.00
Drawdown 14 day	Pond 49-1	142.5023	77.00	83.00
Drawdown 14 day	Pond 49-1	142.7523	77.00	83.00
Drawdown 14 day	Pond 49-1	143.0023	77.00	83.00
Drawdown 14 day	Pond 49-1	143.2523	77.00	83.00
Drawdown 14 day	Pond 49-1	143.5023	77.00	83.00
Drawdown 14 day	Pond 49-1	143.7523	77.00	83.00
Drawdown 14 day	Pond 49-1	144.0023	77.00	83.00
Drawdown 14 day	Pond 49-1	144.2523	77.00	83.00
Drawdown 14 day	Pond 49-1	144.5023	77.00	83.00
Drawdown 14 day	Pond 49-1	144.7523	77.00	83.00
Drawdown 14 day	Pond 49-1	145.0023	77.00	83.00
Drawdown 14 day	Pond 49-1	145.2523	77.00	83.00
Drawdown 14 day	Pond 49-1	145.5023	77.00	83.00
Drawdown 14 day	Pond 49-1	145.7523	77.00	83.00
Drawdown 14 day	Pond 49-1	146.0023	77.00	83.00

Drawdown - Treatment

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Warning Stage [ft]
Drawdown	Pond E-3	23.5057	80.54	85.00
Drawdown	Pond E-3	23.7557	80.54	85.00
Drawdown	Pond E-3	24.0057	80.53	85.00
Drawdown	Pond E-3	24.2557	80.53	85.00
Drawdown	Pond E-3	24.5057	80.53	85.00
Drawdown	Pond E-3	24.7557	80.53	85.00
Drawdown	Pond E-3	25.0057	80.53	85.00
Drawdown	Pond E-3	25.2557	80.53	85.00
Drawdown	Pond E-3	25.5057	80.53	85.00
Drawdown	Pond E-3	25.7557	80.52	85.00
Drawdown	Pond E-3	26.0057	80.52	85.00
Drawdown	Pond E-3	26.2557	80.52	85.00
Drawdown	Pond E-3	26.5057	80.52	85.00
Drawdown	Pond E-3	26.7557	80.52	85.00
Drawdown	Pond E-3	27.0057	80.52	85.00
Drawdown	Pond E-3	27.2557	80.52	85.00
Drawdown	Pond E-3	27.5057	80.52	85.00
Drawdown	Pond E-3	27.7557	80.51	85.00
Drawdown	Pond E-3	28.0057	80.51	85.00
Drawdown	Pond E-3	28.2557	80.51	85.00
Drawdown	Pond E-3	28.5057	80.51	85.00
Drawdown	Pond E-3	28.7557	80.51	85.00
Drawdown	Pond E-3	29.0057	80.51	85.00
Drawdown	Pond E-3	29.2557	80.51	85.00
Drawdown	Pond E-3	29.5057	80.50	85.00
Drawdown	Pond E-3	29.7557	80.50	85.00
Drawdown	Pond E-3	30.0057	80.50	85.00
Drawdown	Pond E-3	30.2557	80.50	85.00
Drawdown	Pond E-3	30.5057	80.50	85.00
Drawdown	Pond E-3	30.7557	80.50	85.00
Drawdown	Pond E-3	31.0057	80.50	85.00
Drawdown	Pond E-3	31.2557	80.50	85.00
Drawdown	Pond E-3	31.5057	80.50	85.00
Drawdown	Pond E-3	31.7557	80.50	85.00
Drawdown	Pond E-3	32.0057	80.50	85.00
Drawdown	Pond E-3	32.2557	80.50	85.00
Drawdown	Pond E-3	32.5057	80.50	85.00
Drawdown	Pond E-3	32.7557	80.50	85.00
Drawdown	Pond E-3	33.0057	80.50	85.00
Drawdown	Pond E-3	33.2557	80.50	85.00
Drawdown	Pond E-3	33.5057	80.50	85.00
Drawdown	Pond E-3	33.7557	80.50	85.00
Drawdown	Pond E-3	34.0057	80.50	85.00
Drawdown	Pond E-3	34.2557	80.50	85.00
Drawdown	Pond E-3	34.5057	80.50	85.00
Drawdown	Pond E-3	34.7557	80.50	85.00
Drawdown	Pond E-3	35.0057	80.50	85.00

Drawdown - Attenuation

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Warning Stage [ft]
Drawdown 14 day	Pond E-3	105.7559	80.52	85.00
Drawdown 14 day	Pond E-3	106.0059	80.52	85.00
Drawdown 14 day	Pond E-3	106.2559	80.52	85.00
Drawdown 14 day	Pond E-3	106.5059	80.52	85.00
Drawdown 14 day	Pond E-3	106.7559	80.52	85.00
Drawdown 14 day	Pond E-3	107.0059	80.52	85.00
Drawdown 14 day	Pond E-3	107.2559	80.52	85.00
Drawdown 14 day	Pond E-3	107.5059	80.52	85.00
Drawdown 14 day	Pond E-3	107.7559	80.52	85.00
Drawdown 14 day	Pond E-3	108.0059	80.52	85.00
Drawdown 14 day	Pond E-3	108.2559	80.52	85.00
Drawdown 14 day	Pond E-3	108.5059	80.52	85.00
Drawdown 14 day	Pond E-3	108.7559	80.52	85.00
Drawdown 14 day	Pond E-3	109.0059	80.52	85.00
Drawdown 14 day	Pond E-3	109.2559	80.51	85.00
Drawdown 14 day	Pond E-3	109.5059	80.51	85.00
Drawdown 14 day	Pond E-3	109.7559	80.51	85.00
Drawdown 14 day	Pond E-3	110.0059	80.51	85.00
Drawdown 14 day	Pond E-3	110.2559	80.51	85.00
Drawdown 14 day	Pond E-3	110.5059	80.51	85.00
Drawdown 14 day	Pond E-3	110.7559	80.51	85.00
Drawdown 14 day	Pond E-3	111.0059	80.51	85.00
Drawdown 14 day	Pond E-3	111.2559	80.51	85.00
Drawdown 14 day	Pond E-3	111.5059	80.51	85.00
Drawdown 14 day	Pond E-3	111.7559	80.51	85.00
Drawdown 14 day	Pond E-3	112.0059	80.51	85.00
Drawdown 14 day	Pond E-3	112.2559	80.51	85.00
Drawdown 14 day	Pond E-3	112.5059	80.51	85.00
Drawdown 14 day	Pond E-3	112.7559	80.51	85.00
Drawdown 14 day	Pond E-3	113.0059	80.51	85.00
Drawdown 14 day	Pond E-3	113.2559	80.50	85.00
Drawdown 14 day	Pond E-3	113.5059	80.50	85.00
Drawdown 14 day	Pond E-3	113.7559	80.50	85.00
Drawdown 14 day	Pond E-3	114.0059	80.50	85.00
Drawdown 14 day	Pond E-3	114.2559	80.50	85.00
Drawdown 14 day	Pond E-3	114.5059	80.50	85.00
Drawdown 14 day	Pond E-3	114.7559	80.50	85.00
Drawdown 14 day	Pond E-3	115.0059	80.50	85.00
Drawdown 14 day	Pond E-3	115.2559	80.50	85.00
Drawdown 14 day	Pond E-3	115.5059	80.50	85.00
Drawdown 14 day	Pond E-3	115.7559	80.50	85.00
Drawdown 14 day	Pond E-3	116.0059	80.50	85.00
Drawdown 14 day	Pond E-3	116.2559	80.50	85.00
Drawdown 14 day	Pond E-3	116.5059	80.50	85.00
Drawdown 14 day	Pond E-3	116.7559	80.50	85.00
Drawdown 14 day	Pond E-3	117.0059	80.50	85.00
Drawdown 14 day	Pond E-3	117.2559	80.50	85.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Warning Stage [ft]
Drawdown	Pond F-1	11.2578	81.25	87.00
Drawdown	Pond F-1	11.5078	81.23	87.00
Drawdown	Pond F-1	11.7578	81.22	87.00
Drawdown	Pond F-1	12.0078	81.20	87.00
Drawdown	Pond F-1	12.2578	81.18	87.00
Drawdown	Pond F-1	12.5078	81.17	87.00
Drawdown	Pond F-1	12.7578	81.15	87.00
Drawdown	Pond F-1	13.0078	81.14	87.00
Drawdown	Pond F-1	13.2578	81.12	87.00
Drawdown	Pond F-1	13.5078	81.11	87.00
Drawdown	Pond F-1	13.7578	81.09	87.00
Drawdown	Pond F-1	14.0078	81.07	87.00
Drawdown	Pond F-1	14.2578	81.06	87.00
Drawdown	Pond F-1	14.5078	81.04	87.00
Drawdown	Pond F-1	14.7578	81.03	87.00
Drawdown	Pond F-1	15.0078	81.02	87.00
Drawdown	Pond F-1	15.2578	81.01	87.00
Drawdown	Pond F-1	15.5078	81.01	87.00
Drawdown	Pond F-1	15.7578	81.00	87.00
Drawdown	Pond F-1	16.0078	81.00	87.00
Drawdown	Pond F-1	16.2578	81.00	87.00
Drawdown	Pond F-1	16.5078	81.00	87.00
Drawdown	Pond F-1	16.7578	81.00	87.00
Drawdown	Pond F-1	17.0078	81.00	87.00
Drawdown	Pond F-1	17.2578	81.00	87.00
Drawdown	Pond F-1	17.5078	81.00	87.00
Drawdown	Pond F-1	17.7578	81.00	87.00
Drawdown	Pond F-1	18.0078	81.00	87.00
Drawdown	Pond F-1	18.2578	81.00	87.00
Drawdown	Pond F-1	18.5078	81.00	87.00
Drawdown	Pond F-1	18.7578	81.00	87.00
Drawdown	Pond F-1	19.0078	81.00	87.00
Drawdown	Pond F-1	19.2578	81.00	87.00
Drawdown	Pond F-1	19.5078	81.00	87.00
Drawdown	Pond F-1	19.7578	81.00	87.00
Drawdown	Pond F-1	20.0078	81.00	87.00
Drawdown	Pond F-1	20.2578	81.00	87.00
Drawdown	Pond F-1	20.5078	81.00	87.00
Drawdown	Pond F-1	20.7578	81.00	87.00
Drawdown	Pond F-1	21.0078	81.00	87.00
Drawdown	Pond F-1	21.2578	81.00	87.00
Drawdown	Pond F-1	21.5078	81.00	87.00
Drawdown	Pond F-1	21.7578	81.00	87.00
Drawdown	Pond F-1	22.0078	81.00	87.00
Drawdown	Pond F-1	22.2578	81.00	87.00

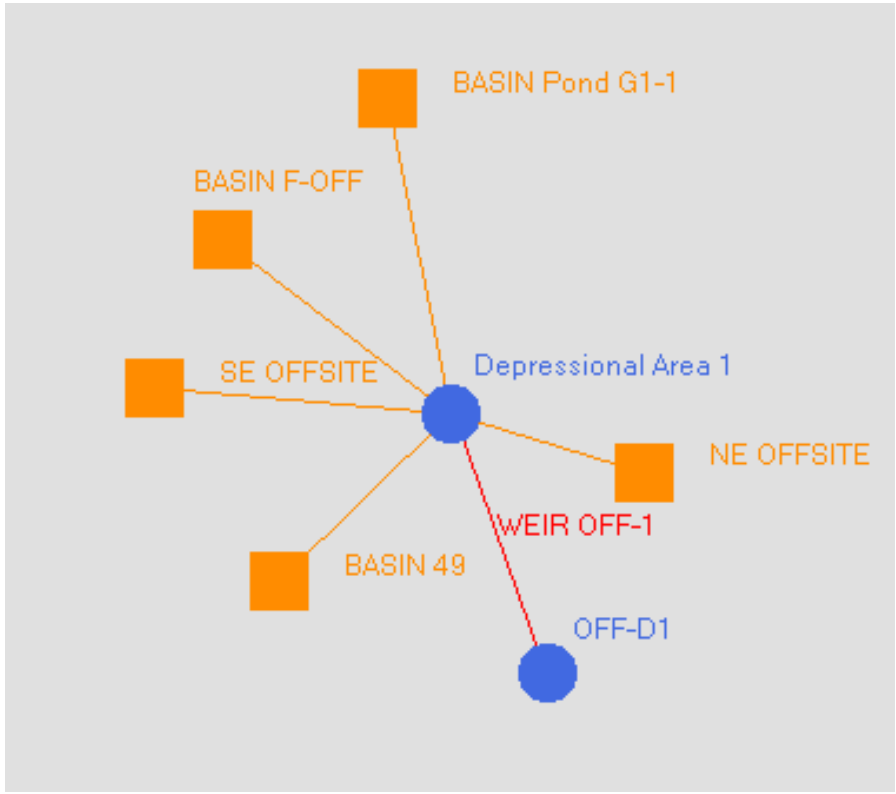
Sim	Node Name	Relative Time [hrs]	Stage [ft]	Warning Stage [ft]
Drawdown 14 day	Pond F-1	33.7523	81.02	87.00
Drawdown 14 day	Pond F-1	34.0023	81.02	87.00
Drawdown 14 day	Pond F-1	34.2523	81.02	87.00
Drawdown 14 day	Pond F-1	34.5023	81.01	87.00
Drawdown 14 day	Pond F-1	34.7523	81.01	87.00
Drawdown 14 day	Pond F-1	35.0023	81.01	87.00
Drawdown 14 day	Pond F-1	35.2523	81.01	87.00
Drawdown 14 day	Pond F-1	35.5023	81.01	87.00
Drawdown 14 day	Pond F-1	35.7523	81.01	87.00
Drawdown 14 day	Pond F-1	36.0023	81.01	87.00
Drawdown 14 day	Pond F-1	36.2523	81.01	87.00
Drawdown 14 day	Pond F-1	36.5023	81.01	87.00
Drawdown 14 day	Pond F-1	36.7523	81.01	87.00
Drawdown 14 day	Pond F-1	37.0023	81.01	87.00
Drawdown 14 day	Pond F-1	37.2523	81.00	87.00
Drawdown 14 day	Pond F-1	37.5023	81.00	87.00
Drawdown 14 day	Pond F-1	37.7523	81.00	87.00
Drawdown 14 day	Pond F-1	38.0023	81.00	87.00
Drawdown 14 day	Pond F-1	38.2523	81.00	87.00
Drawdown 14 day	Pond F-1	38.5023	81.00	87.00
Drawdown 14 day	Pond F-1	38.7523	81.00	87.00
Drawdown 14 day	Pond F-1	39.0023	81.00	87.00
Drawdown 14 day	Pond F-1	39.2523	81.00	87.00
Drawdown 14 day	Pond F-1	39.5023	81.00	87.00
Drawdown 14 day	Pond F-1	39.7523	81.00	87.00
Drawdown 14 day	Pond F-1	40.0023	81.00	87.00
Drawdown 14 day	Pond F-1	40.2523	81.00	87.00
Drawdown 14 day	Pond F-1	40.5023	81.00	87.00
Drawdown 14 day	Pond F-1	40.7523	81.00	87.00
Drawdown 14 day	Pond F-1	41.0023	81.00	87.00
Drawdown 14 day	Pond F-1	41.2523	81.00	87.00
Drawdown 14 day	Pond F-1	41.5023	81.00	87.00
Drawdown 14 day	Pond F-1	41.7523	81.00	87.00
Drawdown 14 day	Pond F-1	42.0023	81.00	87.00
Drawdown 14 day	Pond F-1	42.2523	81.00	87.00
Drawdown 14 day	Pond F-1	42.5023	81.00	87.00
Drawdown 14 day	Pond F-1	42.7523	81.00	87.00
Drawdown 14 day	Pond F-1	43.0023	81.00	87.00
Drawdown 14 day	Pond F-1	43.2523	81.00	87.00
Drawdown 14 day	Pond F-1	43.5023	81.00	87.00
Drawdown 14 day	Pond F-1	43.7523	81.00	87.00
Drawdown 14 day	Pond F-1	44.0023	81.00	87.00
Drawdown 14 day	Pond F-1	44.2523	81.00	87.00
Drawdown 14 day	Pond F-1	44.5023	81.00	87.00
Drawdown 14 day	Pond F-1	44.7523	81.00	87.00

Sim	Node Name	Relative Time [hrs]	Stage [ft]	Warning Stage [ft]
Drawdown	Pond G1-1	0.0000	75.80	80.00
Drawdown	Pond G1-1	0.2523	75.75	80.00
Drawdown	Pond G1-1	0.5024	75.70	80.00
Drawdown	Pond G1-1	0.7517	75.64	80.00
Drawdown	Pond G1-1	1.0017	75.59	80.00
Drawdown	Pond G1-1	1.2502	75.54	80.00
Drawdown	Pond G1-1	1.5021	75.49	80.00
Drawdown	Pond G1-1	1.7518	75.44	80.00
Drawdown	Pond G1-1	2.0007	75.38	80.00
Drawdown	Pond G1-1	2.2518	75.33	80.00
Drawdown	Pond G1-1	2.5014	75.28	80.00
Drawdown	Pond G1-1	2.7520	75.23	80.00
Drawdown	Pond G1-1	3.0003	75.17	80.00
Drawdown	Pond G1-1	3.2539	75.12	80.00
Drawdown	Pond G1-1	3.5026	75.07	80.00
Drawdown	Pond G1-1	3.7529	75.02	80.00
Drawdown	Pond G1-1	4.0016	74.97	80.00
Drawdown	Pond G1-1	4.2509	74.91	80.00
Drawdown	Pond G1-1	4.5020	74.86	80.00
Drawdown	Pond G1-1	4.7535	74.81	80.00
Drawdown	Pond G1-1	5.0017	74.76	80.00
Drawdown	Pond G1-1	5.2530	74.71	80.00
Drawdown	Pond G1-1	5.5037	74.65	80.00
Drawdown	Pond G1-1	5.7543	74.60	80.00
Drawdown	Pond G1-1	6.0038	74.60	80.00
Drawdown	Pond G1-1	6.2578	74.60	80.00
Drawdown	Pond G1-1	6.5078	74.60	80.00
Drawdown	Pond G1-1	6.7578	74.60	80.00
Drawdown	Pond G1-1	7.0078	74.60	80.00
Drawdown	Pond G1-1	7.2578	74.60	80.00
Drawdown	Pond G1-1	7.5078	74.60	80.00
Drawdown	Pond G1-1	7.7578	74.60	80.00
Drawdown	Pond G1-1	8.0078	74.60	80.00
Drawdown	Pond G1-1	8.2578	74.60	80.00
Drawdown	Pond G1-1	8.5078	74.60	80.00
Drawdown	Pond G1-1	8.7578	74.60	80.00
Drawdown	Pond G1-1	9.0078	74.60	80.00
Drawdown	Pond G1-1	9.2578	74.60	80.00
Drawdown	Pond G1-1	9.5078	74.60	80.00
Drawdown	Pond G1-1	9.7578	74.60	80.00
Drawdown	Pond G1-1	10.0078	74.60	80.00
Drawdown	Pond G1-1	10.2578	74.60	80.00
Drawdown	Pond G1-1	10.5078	74.60	80.00
Drawdown	Pond G1-1	10.7578	74.60	80.00
Drawdown	Pond G1-1	11.0078	74.60	80.00

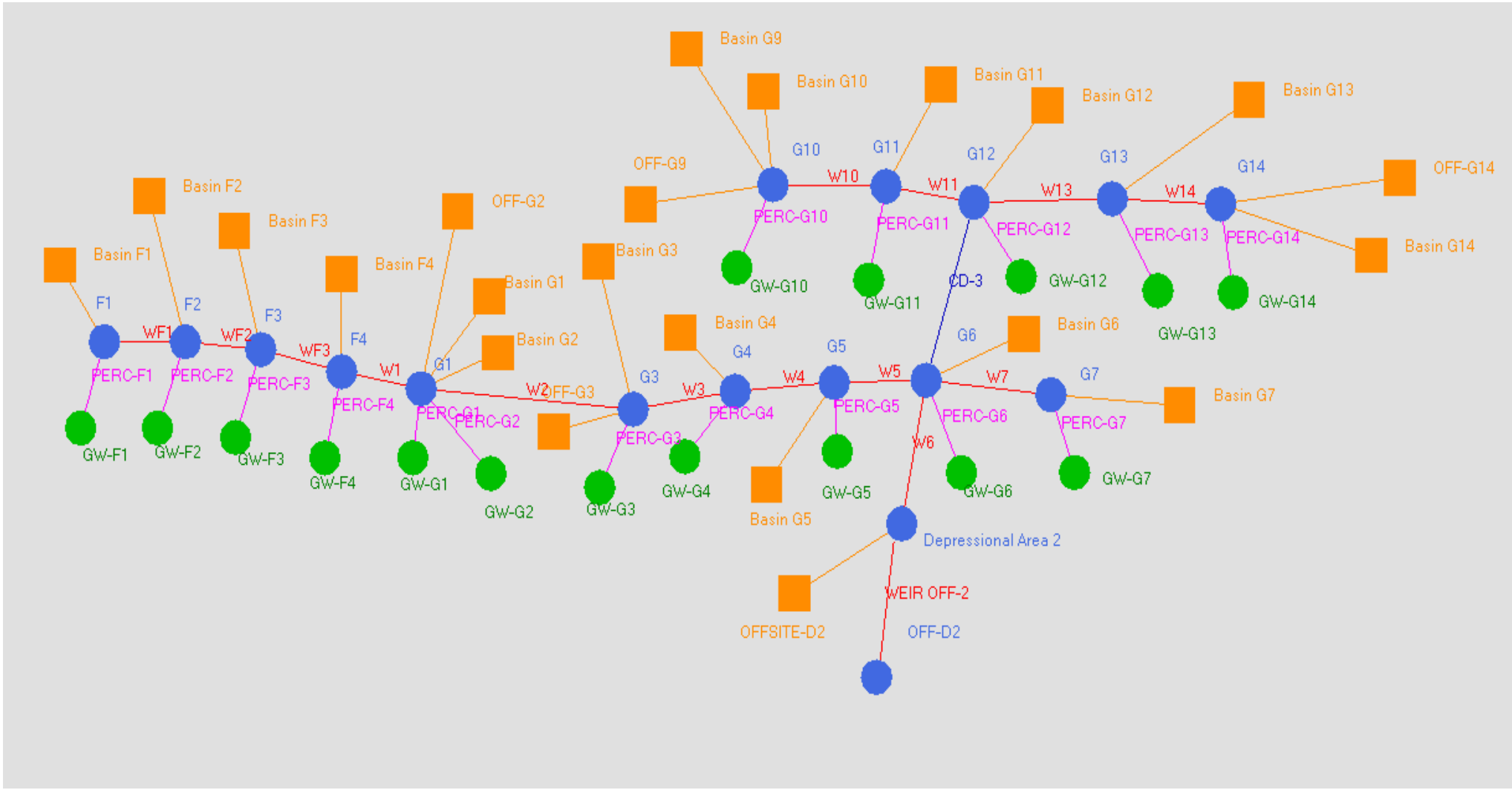
Sim	Node Name	Relative Time [hrs]	Stage [ft]	Warning Stage [ft]
Drawdown 14 day	Pond G1-1	0.0000	75.80	80.00
Drawdown 14 day	Pond G1-1	0.2500	75.75	80.00
Drawdown 14 day	Pond G1-1	0.5002	75.70	80.00
Drawdown 14 day	Pond G1-1	0.7500	75.64	80.00
Drawdown 14 day	Pond G1-1	1.0003	75.59	80.00
Drawdown 14 day	Pond G1-1	1.2502	75.54	80.00
Drawdown 14 day	Pond G1-1	1.5004	75.49	80.00
Drawdown 14 day	Pond G1-1	1.7506	75.44	80.00
Drawdown 14 day	Pond G1-1	2.0002	75.38	80.00
Drawdown 14 day	Pond G1-1	2.2507	75.33	80.00
Drawdown 14 day	Pond G1-1	2.5001	75.28	80.00
Drawdown 14 day	Pond G1-1	2.7501	75.23	80.00
Drawdown 14 day	Pond G1-1	3.0009	75.17	80.00
Drawdown 14 day	Pond G1-1	3.2514	75.12	80.00
Drawdown 14 day	Pond G1-1	3.5018	75.07	80.00
Drawdown 14 day	Pond G1-1	3.7511	75.02	80.00
Drawdown 14 day	Pond G1-1	4.0006	74.97	80.00
Drawdown 14 day	Pond G1-1	4.2518	74.91	80.00
Drawdown 14 day	Pond G1-1	4.5010	74.86	80.00
Drawdown 14 day	Pond G1-1	4.7507	74.81	80.00
Drawdown 14 day	Pond G1-1	5.0017	74.76	80.00
Drawdown 14 day	Pond G1-1	5.2503	74.71	80.00
Drawdown 14 day	Pond G1-1	5.5004	74.65	80.00
Drawdown 14 day	Pond G1-1	5.7512	74.60	80.00
Drawdown 14 day	Pond G1-1	6.0012	74.60	80.00
Drawdown 14 day	Pond G1-1	6.2501	74.60	80.00
Drawdown 14 day	Pond G1-1	6.5016	74.60	80.00
Drawdown 14 day	Pond G1-1	6.7516	74.60	80.00
Drawdown 14 day	Pond G1-1	7.0003	74.60	80.00
Drawdown 14 day	Pond G1-1	7.2514	74.60	80.00
Drawdown 14 day	Pond G1-1	7.5000	74.60	80.00
Drawdown 14 day	Pond G1-1	7.7558	74.60	80.00
Drawdown 14 day	Pond G1-1	8.0023	74.60	80.00
Drawdown 14 day	Pond G1-1	8.2523	74.60	80.00
Drawdown 14 day	Pond G1-1	8.5023	74.60	80.00
Drawdown 14 day	Pond G1-1	8.7523	74.60	80.00
Drawdown 14 day	Pond G1-1	9.0023	74.60	80.00
Drawdown 14 day	Pond G1-1	9.2523	74.60	80.00
Drawdown 14 day	Pond G1-1	9.5023	74.60	80.00
Drawdown 14 day	Pond G1-1	9.7523	74.60	80.00
Drawdown 14 day	Pond G1-1	10.0023	74.60	80.00
Drawdown 14 day	Pond G1-1	10.2523	74.60	80.00
Drawdown 14 day	Pond G1-1	10.5023	74.60	80.00
Drawdown 14 day	Pond G1-1	10.7523	74.60	80.00
Drawdown 14 day	Pond G1-1	11.0023	74.60	80.00

POST-DEVELOPMENT
FLOOD RIGHTS – NO PONDS
ICPR MODEL

Post-Development Flood Rights ICPR Layout



Post-Development Flood Rights ICPR Layout



Post-Development
Flood Rights – No Ponds
ICPR Input

Manual Basin: BASIN 49

Scenario: Floodrights
Node: Depressional Area 1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
14.8200	Basin 49	Basin 49	

Comment:

Manual Basin: BASIN F-OFF

Scenario: Floodrights
Node: Depressional Area 1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 84.5000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
18.2000	Basin F-OFF	Basin F-OFF	

Comment:

Manual Basin: BASIN Pond G1-1

Scenario: Floodrights
Node: Depressional Area 1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 39.2000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
7.0400	Basin Pond G1-1	Basin Pond G1-1	

Comment: Total Basin G1-1 is made up of Basin Pond G1-1, G1, G2, G2-OFF, G3-OFF and G3 (7.04+0.67+3.92+3.2+1.87+1.54=18.24 Ac)

Manual Basin: Basin F1

Scenario: Floodrights
Node: F1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
8.1000	Basin F1	Basin F1	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin F2

Scenario: Floodrights
Node: F2
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.6800	Basin F2	Basin F2	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin F3

Scenario: Floodrights
Node: F3
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.4500	Basin F3	Basin F3	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin F4

Scenario: Floodrights
Node: F4

Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
4.5500	Basin F4	Basin F4	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin G1

Scenario: Floodrights
Node: G1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.6700	Basin G1	Basin G1	

Comment: Information from FDOT FPID 36210-1439; This is a sub-basin in Basin G1-1

Manual Basin: Basin G10

Scenario: Floodrights
Node: G10
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.8700	Basin G10	Basin G10	

Comment: Information from FDOT FPID 36210-1439 - This is a sub-basin in Basin G2

Manual Basin: Basin G11

Scenario: Floodrights
Node: G11
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number

Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.5500	Basin G11	Basin G11	

Comment: Information from FDOT FPID 36210-1439 - This is a sub-basin in Basin G2

Manual Basin: Basin G12

Scenario: Floodrights
Node: G12
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.6700	Basin G12	Basin G12	

Comment: Information from FDOT FPID 36210-1439 - This is a sub-basin in Basin G2

Manual Basin: Basin G13

Scenario: Floodrights
Node: G13
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.8600	Basin G13	Basin G13	

Comment: Information from FDOT FPID 36210-1439 - This is a sub-basin in Basin G2

Manual Basin: Basin G14

Scenario: Floodrights
Node: G14
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs

Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.3900	Basin G14	Basin G14	

Comment: Information from FDOT FPID 36210-1439 - This is a sub-basin in Basin G2

Manual Basin: Basin G2

Scenario: Floodrights
Node: G1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
3.9200	Basin G2	Basin G2	

Comment: Information from FDOT FPID 36210-1439; This is a sub-basin in Basin G1-1

Manual Basin: Basin G3

Scenario: Floodrights
Node: G3
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.8700	Basin G3	Basin G3	

Comment: Information from FDOT FPID 36210-1439; This is a sub-basin in Basin G1-1

Manual Basin: Basin G4

Scenario: Floodrights
Node: G4
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484

Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.5500	Basin G4	Basin G4	

Comment: Information from FDOT FPID 36210-1439 - This is a sub-basin in Basin G2

Manual Basin: Basin G5

Scenario: Floodrights
Node: G5
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.5900	Basin G5	Basin G5	

Comment: Information from FDOT FPID 36210-1439 - This is a sub-basin in Basin G2

Manual Basin: Basin G6

Scenario: Floodrights
Node: G6
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
4.4800	Basin G6	Basin G6	

Comment: Information from FDOT FPID 36210-1439 - This is a sub-basin in Basin G2

Manual Basin: Basin G7

Scenario: Floodrights
Node: G7
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.9700	Basin G7/8	Basin G7/8	

Comment: Information from FDOT FPID 36210-1439 - This is a sub-basin in Basin G2

Manual Basin: Basin G9

Scenario: Floodrights
Node: G10
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
2.8100	Basin G9	Basin G9	

Comment: Information from FDOT FPID 36210-1439 - This is a sub-basin in Basin G2

Manual Basin: NE OFFSITE

Scenario: Floodrights
Node: Depressional Area 1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 34.5000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
77.4300	OFFSITE	OFFSITE	

Comment:

Manual Basin: OFF-G14

Scenario: Floodrights
Node: G14
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.6000	OFF G14	OFF G14	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: OFF-G2

Scenario: Floodrights
Node: G1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.2000	OFF G2	OFF G2	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: OFF-G3

Scenario: Floodrights
Node: G3
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.2000	OFF G3	OFF G3	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: OFF-G9

Scenario: Floodrights
Node: G10
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
2.3000	OFF G9	OFF G9	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: OFFSITE-D2

Scenario: Floodrights
Node: Depressional Area 2
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 25.7000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
16.6900	OFFSITE	OFFSITE	

Comment: Depression 2 basin

Manual Basin: SE OFFSITE

Scenario: Floodrights
Node: Depressional Area 1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 32.3000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
28.1500	OFFSITE	OFFSITE	

Comment:

Curve Number: CurveNumbers [Set]

Land Cover Zone	Soil Zone	Curve Number [dec]
Basin 49	Basin 49	60.7
Basin E	Basin E	54.7
Basin F-OFF	Basin F-OFF	45.1
Basin F1	Basin F1	56.0
Basin F2	Basin F2	58.0
Basin F3	Basin F3	59.1
Basin F4	Basin F4	58.7
Basin G1	Basin G1	62.9
Basin G10	Basin G10	59.6
Basin G11	Basin G11	63.5
Basin G12	Basin G12	69.5
Basin G13	Basin G13	65.2
Basin G14	Basin G14	63.1
Basin G2	Basin G2	73.6
Basin G3	Basin G3	76.0
Basin G4	Basin G4	70.3
Basin G5	Basin G5	66.2

Land Cover Zone	Soil Zone	Curve Number [dec]
Basin G6	Basin G6	76.3
Basin G7/8	Basin G7/8	63.9
Basin G9	Basin G9	57.7
Basin Pond G1-1	Basin Pond G1-1	39.0
OFF G14	OFF G14	62.9
OFF G2	OFF G2	59.0
OFF G3	OFF G3	59.2
OFF G9	OFF G9	53.8
OFFSITE	OFFSITE	39.0

Node: Depressional Area 1

Scenario: Floodrights
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 66.00 ft
Warning Stage: 73.00 ft

Stage [ft]	Area [ac]	Area [ft2]
66.00	0.1200	5227
67.00	1.7600	76666
68.00	3.4700	151153
69.00	5.5900	243500
70.00	7.6700	334105
71.00	9.6700	421225
72.00	11.8100	514444
73.00	13.8600	603742

Comment:

Node: Depressional Area 2

Scenario: Floodrights
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 67.00 ft
Warning Stage: 73.50 ft

Stage [ft]	Area [ac]	Area [ft2]
67.00	0.1000	4356
68.00	0.2800	12197
69.00	0.4200	18295
70.00	0.8100	35284
71.00	2.3300	101495
72.00	3.7100	161608
73.00	6.0200	262231
74.00	35.8000	1559448

Comment:

Node: F1

Scenario: Floodrights
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 84.07 ft
Warning Stage: 86.47 ft

Stage [ft]	Area [ac]	Area [ft2]
84.07	0.0000	0
84.37	0.0220	958
84.67	0.0340	1481
84.97	0.0480	2091
85.27	0.0630	2744
85.57	0.0810	3528
85.87	0.0990	4312
86.17	0.1190	5184
86.47	0.1400	6098

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin F

Node: F2

Scenario: Floodrights
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 82.07 ft
Warning Stage: 85.07 ft

Stage [ft]	Area [ac]	Area [ft2]
82.07	0.0000	0
82.37	0.0840	3659
82.67	0.0980	4269
82.97	0.1120	4879
83.27	0.1260	5489
83.57	0.1400	6098
83.87	0.1550	6752
84.17	0.1710	7449
84.47	0.1860	8102
85.07	0.2240	9757

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin F

Node: F3

Scenario: Floodrights
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 80.07 ft
Warning Stage: 83.67 ft

Stage [ft]	Area [ac]	Area [ft2]
80.07	0.0000	0

Stage [ft]	Area [ac]	Area [ft2]
80.47	0.0850	3703
80.87	0.1030	4487
81.27	0.1210	5271
81.67	0.1390	6055
82.07	0.1580	6882
82.47	0.1780	7754
82.87	0.1980	8625
83.27	0.2210	9627
83.67	0.2460	10716

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin F

Node: F4

Scenario: Floodrights
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 77.07 ft
Warning Stage: 80.97 ft

Stage [ft]	Area [ac]	Area [ft2]
77.07	0.0000	0
77.57	0.3020	13155
78.07	0.3660	15943
78.57	0.4320	18818
79.07	0.4990	21736
79.57	0.5670	24699
80.07	0.6360	27704
80.57	0.7060	30753
80.97	0.7760	33803

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin F

Node: G1

Scenario: Floodrights
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 74.07 ft
Warning Stage: 77.87 ft

Stage [ft]	Area [ac]	Area [ft2]
74.07	0.0000	0
74.47	0.2840	12371
74.87	0.3600	15682
75.27	0.4370	19036
75.67	0.5140	22390
76.07	0.5920	25788
76.47	0.6840	29795
76.87	0.7770	33846
77.27	0.8730	38028

Stage [ft]	Area [ac]	Area [ft2]
77.87	1.0210	44475

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G10

Scenario: Floodrights
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 71.57 ft
Warning Stage: 74.77 ft

Stage [ft]	Area [ac]	Area [ft2]
71.57	0.0000	0
71.67	0.0410	1786
72.37	0.0600	2614
72.77	0.0810	3528
73.17	0.1020	4443
73.57	0.1350	5881
73.97	0.1480	6447
74.37	0.1760	7667
74.77	0.2060	8973

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G11

Scenario: Floodrights
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 70.07 ft
Warning Stage: 73.27 ft

Stage [ft]	Area [ac]	Area [ft2]
70.07	0.0000	0
70.47	0.0500	2178
70.87	0.0630	2744
71.27	0.0780	3398
71.67	0.0940	4095
72.07	0.1110	4835
72.47	0.1300	5663
72.87	0.1500	6534
73.27	0.1730	7536

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G12

Scenario: Floodrights

Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 68.07 ft
Warning Stage: 72.27 ft

Stage [ft]	Area [ac]	Area [ft2]
68.07	0.0000	0
68.67	0.2040	8886
69.27	0.2680	11674
69.87	0.3340	14549
70.47	0.4040	17598
71.07	0.4760	20735
71.67	0.5500	23958
72.27	0.6320	27530

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G13

Scenario: Floodrights
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 70.07 ft
Warning Stage: 73.67 ft

Stage [ft]	Area [ac]	Area [ft2]
70.07	0.0000	0
70.47	0.0580	2526
70.87	0.0780	3398
71.27	0.1000	4356
71.67	0.1220	5314
72.07	0.1460	6360
72.47	0.1710	7449
72.87	0.1990	8668
73.67	0.2620	11413

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G14

Scenario: Floodrights
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 74.07 ft
Warning Stage: 75.67 ft

Stage [ft]	Area [ac]	Area [ft2]
74.07	0.0000	0
74.27	0.0320	1394
74.47	0.0430	1873
74.67	0.0560	2439
74.87	0.0700	3049

Stage [ft]	Area [ac]	Area [ft2]
75.07	0.0850	3703
75.27	0.0990	4312
75.47	0.1140	4966
75.67	0.1280	5576

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G3

Scenario: Floodrights
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 72.57 ft
Warning Stage: 75.07 ft

Stage [ft]	Area [ac]	Area [ft2]
72.57	0.0000	0
72.87	0.0340	1481
73.17	0.0490	2134
73.47	0.0640	2788
73.77	0.0810	3528
74.07	0.0980	4269
74.37	0.1180	5140
74.67	0.1400	6098
75.07	0.1690	7362

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G4

Scenario: Floodrights
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 71.07 ft
Warning Stage: 74.07 ft

Stage [ft]	Area [ac]	Area [ft2]
71.07	0.0000	0
71.47	0.0540	2352
71.87	0.0670	2919
72.27	0.0820	3572
72.67	0.0990	4312
73.07	0.1180	5140
73.47	0.1390	6055
73.87	0.1610	7013
74.07	0.1710	7449

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G5

Scenario: Floodrights
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 68.07 ft
Warning Stage: 71.97 ft

Stage [ft]	Area [ac]	Area [ft2]
68.07	0.0000	0
68.57	0.0570	2483
69.07	0.0740	3223
69.57	0.0930	4051
70.07	0.1140	4966
70.57	0.1370	5968
71.07	0.1610	7013
71.57	0.1880	8189
71.97	0.2100	9148

Comment:

Node: G6

Scenario: Floodrights
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 66.57 ft
Warning Stage: 70.47 ft

Stage [ft]	Area [ac]	Area [ft2]
66.57	0.0000	0
67.07	0.1740	7579
67.57	0.2250	9801
68.07	0.2780	12110
68.57	0.3080	13416
69.07	0.3900	16988
69.57	0.4490	19558
70.07	0.5090	22172
70.47	0.5680	24742

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G7

Scenario: Floodrights
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 71.07 ft
Warning Stage: 75.67 ft

Stage [ft]	Area [ac]	Area [ft2]
71.07	0.0000	0
71.47	0.0840	3659

Stage [ft]	Area [ac]	Area [ft2]
71.87	0.1010	4400
72.27	0.1180	5140
72.67	0.1360	5924
73.07	0.1560	6795
73.47	0.1770	7710
73.87	0.2010	8756
74.27	0.2260	9845
74.67	0.2520	10977

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-F1

Scenario: Floodrights
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 79.07 ft
Warning Stage: 86.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	79.07
0	0	0	96.0000	79.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin F

Node: GW-F2

Scenario: Floodrights
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 78.07 ft
Warning Stage: 84.57 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	78.07
0	0	0	96.0000	78.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin F

Node: GW-F3

Scenario: Floodrights
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 74.07 ft
Warning Stage: 83.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	74.07
0	0	0	96.0000	74.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin F

Node: GW-F4

Scenario: Floodrights
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 72.07 ft
Warning Stage: 80.77 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	72.07
0	0	0	96.0000	72.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin F

Node: GW-G1

Scenario: Floodrights
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 71.07 ft
Warning Stage: 78.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	71.07
0	0	0	96.0000	71.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G10

Scenario: Floodrights
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 67.07 ft
Warning Stage: 74.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	67.07
0	0	0	96.0000	67.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G11

Scenario: Floodrights
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 66.07 ft
Warning Stage: 72.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	66.07
0	0	0	96.0000	66.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G12

Scenario: Floodrights
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 62.07 ft
Warning Stage: 70.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	62.07
0	0	0	96.0000	62.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G13

Scenario: Floodrights
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 62.07 ft
Warning Stage: 73.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	62.07
0	0	0	96.0000	62.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G14

Scenario: Floodrights
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 68.07 ft
Warning Stage: 75.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	68.07
0	0	0	96.0000	68.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G2

Scenario: Floodrights
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 69.07 ft
Warning Stage: 75.57 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	69.07
0	0	0	96.0000	69.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G3

Scenario: Floodrights
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 66.07 ft
Warning Stage: 74.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	66.07
0	0	0	96.0000	66.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G4

Scenario: Floodrights
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 66.07 ft
Warning Stage: 73.07 ft

Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	66.07
0	0	0	96.0000	66.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G5

Scenario: Floodrights
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 63.07 ft
Warning Stage: 71.57 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	63.07
0	0	0	96.0000	63.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G6

Scenario: Floodrights
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 61.07 ft
Warning Stage: 70.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	61.07
0	0	0	96.0000	61.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G7

Scenario: Floodrights
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 63.07 ft
Warning Stage: 73.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	63.07
0	0	0	96.0000	63.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: OFF-D1

Scenario: Floodrights
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 66.00 ft
Warning Stage: 73.00 ft

Stage [ft]	Area [ac]	Area [ft2]
66.00	1.0100	43996
67.00	1.4500	63162
70.00	2.6800	116741
71.00	2.9000	126324
72.00	3.6100	157252
73.00	3.8500	167706

Comment: Represents offsite pop-off location for Depressional Area 1

Node: OFF-D2

Scenario: Floodrights
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 69.00 ft
Warning Stage: 73.50 ft

Stage [ft]	Area [ac]	Area [ft2]
69.00	0.0500	2178
70.00	2.0700	90169
71.00	7.7400	337154
72.00	13.5300	589367
73.00	20.5600	895594

Comment: Represents offsite pop-off location for Depressional Area 2

Pipe Link: CD-3

Scenario: Floodrights
From Node: G12
To Node: G6
Link Count: 1
Flow Direction: Both
Damping: 0.0000 ft
Length: 170.00 ft
FHWA Code: 1
Entr Loss Coef: 0.50
Exit Loss Coef: 0.00

Upstream		Downstream	
Invert:	70.07 ft	Invert:	69.51 ft
Manning's N:	0.0120	Manning's N:	0.0120
Geometry: Circular		Geometry: Circular	
Max Depth:	2.00 ft	Max Depth:	2.00 ft
Bottom Clip			
Default:	0.00 ft	Default:	0.00 ft
Op Table:		Op Table:	
Ref Node:		Ref Node:	
Manning's N:	0.0000	Manning's N:	0.0000
Top Clip			

Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 ft	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Percolation Link: PERC-F1

Scenario:	Floodrights	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	F1		
To Node:	GW-F1	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	404.00 ft
Flow Direction:	Both	Perimeter 2:	744.11 ft
Aquifer Base Elevation:	72.07 ft	Perimeter 3:	2369.04 ft
Water Table Elevation:	79.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	4.500 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	3.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	7.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-F2

Scenario:	Floodrights	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	F2		
To Node:	GW-F2	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	577.50 ft
Flow Direction:	Both	Perimeter 2:	1046.16 ft
Aquifer Base Elevation:	71.07 ft	Perimeter 3:	2007.42 ft
Water Table Elevation:	78.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	4.500 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	3.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	6.50 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-F3

Scenario:	Floodrights	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	F3		
To Node:	GW-F3	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	511.30 ft
Flow Direction:	Both	Perimeter 2:	772.42 ft
Aquifer Base Elevation:	68.07 ft	Perimeter 3:	1603.85 ft
Water Table Elevation:	74.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft

Horizontal Conductivity:	31.500 fpd		
Vertical Conductivity:	21.000 fpd	# of Cells P1 to P2:	10
Fillable Porosity:	0.200	# of Cells P2 to P3:	45
Layer Thickness:	9.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-F4

Scenario:	Floodrights	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	F4		
To Node:	GW-F4	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	1552.00 ft
Flow Direction:	Both	Perimeter 2:	1835.49 ft
Aquifer Base Elevation:	64.07 ft	Perimeter 3:	2171.02 ft
Water Table Elevation:	72.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	31.500 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	21.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	8.75 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-G1

Scenario:	Floodrights	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G1		
To Node:	GW-G1	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	402.66 ft
Flow Direction:	Both	Perimeter 2:	718.56 ft
Aquifer Base Elevation:	65.07 ft	Perimeter 3:	1046.88 ft
Water Table Elevation:	71.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	29.250 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	19.500 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	7.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-G10

Scenario:	Floodrights	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G10		
To Node:	GW-G10	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	530.00 ft
Flow Direction:	Both	Perimeter 2:	887.78 ft
Aquifer Base Elevation:	60.07 ft	Perimeter 3:	2693.05 ft
Water Table Elevation:	67.07 ft	Distance P1 to P2:	50.00 ft

Annual Recharge Rate:	0 ipy		
Horizontal Conductivity:	27.000 fpd	Distance P2 to P3:	450.00 ft
Vertical Conductivity:	18.000 fpd	# of Cells P1 to P2:	10
Fillable Porosity:	0.200	# of Cells P2 to P3:	45
Layer Thickness:	7.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-G11

Scenario:	Floodrights	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G11		
To Node:	GW-G11	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	342.66 ft
Flow Direction:	Both	Perimeter 2:	656.82 ft
Aquifer Base Elevation:	60.07 ft	Perimeter 3:	3484.25 ft
Water Table Elevation:	66.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	27.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	18.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	6.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-G12

Scenario:	Floodrights	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G12		
To Node:	GW-G12	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	1115.14 ft
Flow Direction:	Both	Perimeter 2:	1448.86 ft
Aquifer Base Elevation:	55.07 ft	Perimeter 3:	2502.20 ft
Water Table Elevation:	62.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	27.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	18.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	8.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-G13

Scenario:	Floodrights	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G13		
To Node:	GW-G13	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	555.00 ft
Flow Direction:	Both	Perimeter 2:	864.01 ft
Aquifer Base Elevation:	55.07 ft	Perimeter 3:	1904.77 ft

Water Table Elevation:	62.07 ft		
Annual Recharge Rate:	0 ipy	Distance P1 to P2:	50.00 ft
Horizontal Conductivity:	27.000 fpd	Distance P2 to P3:	450.00 ft
Vertical Conductivity:	18.000 fpd	# of Cells P1 to P2:	10
Fillable Porosity:	0.200	# of Cells P2 to P3:	45
Layer Thickness:	11.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-G14

Scenario:	Floodrights	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G14		
To Node:	GW-G14	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	628.00 ft
Flow Direction:	Both	Perimeter 2:	971.81 ft
Aquifer Base Elevation:	61.07 ft	Perimeter 3:	2791.16 ft
Water Table Elevation:	68.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	27.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	18.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	7.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-G2

Scenario:	Floodrights	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G1		
To Node:	GW-G2	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	1519.00 ft
Flow Direction:	Both	Perimeter 2:	1853.22 ft
Aquifer Base Elevation:	63.07 ft	Perimeter 3:	2123.75 ft
Water Table Elevation:	69.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	29.250 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	19.500 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	6.50 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-G3

Scenario:	Floodrights	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G3		
To Node:	GW-G3	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	538.50 ft
Flow Direction:	Both	Perimeter 2:	864.99 ft

Aquifer Base Elevation:	58.07 ft		
Water Table Elevation:	66.07 ft	Perimeter 3:	1071.47 ft
Annual Recharge Rate:	0 ipy	Distance P1 to P2:	50.00 ft
Horizontal Conductivity:	29.250 fpd	Distance P2 to P3:	450.00 ft
Vertical Conductivity:	19.500 fpd	# of Cells P1 to P2:	10
Fillable Porosity:	0.200	# of Cells P2 to P3:	45
Layer Thickness:	8.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-G4

Scenario:	Floodrights	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G4		
To Node:	GW-G4	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	351.34 ft
Flow Direction:	Both	Perimeter 2:	634.78 ft
Aquifer Base Elevation:	57.07 ft	Perimeter 3:	814.79 ft
Water Table Elevation:	66.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	29.250 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	19.500 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	7.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-G5

Scenario:	Floodrights	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G5		
To Node:	GW-G5	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	368.00 ft
Flow Direction:	Both	Perimeter 2:	703.05 ft
Aquifer Base Elevation:	55.07 ft	Perimeter 3:	888.64 ft
Water Table Elevation:	63.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	27.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	18.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	8.50 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-G6

Scenario:	Floodrights	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G6		
To Node:	GW-G6	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	1116.66 ft

Flow Direction:	Both		
Aquifer Base Elevation:	55.07 ft	Perimeter 2:	1470.67 ft
Water Table Elevation:	61.07 ft	Perimeter 3:	2257.58 ft
Annual Recharge Rate:	0 ipy	Distance P1 to P2:	50.00 ft
Horizontal Conductivity:	27.000 fpd	Distance P2 to P3:	450.00 ft
Vertical Conductivity:	18.000 fpd	# of Cells P1 to P2:	10
Fillable Porosity:	0.200	# of Cells P2 to P3:	45
Layer Thickness:	9.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Percolation Link: PERC-G7

Scenario:	Floodrights	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G7		
To Node:	GW-G7	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	381.00 ft
Flow Direction:	Both	Perimeter 2:	758.48 ft
Aquifer Base Elevation:	57.07 ft	Perimeter 3:	2600.17 ft
Water Table Elevation:	63.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	27.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	18.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	10.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity

Weir Link: W1

Scenario:	Floodrights	**Bottom Clip**	
From Node:	F4	Default:	0.00 ft
To Node:	G1	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	79.87 ft	**Discharge Coefficients**	
Control Elevation:	79.87 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W10

Scenario:	Floodrights	**Bottom Clip**	

From Node:	G10		
To Node:	G11	Default:	0.00 ft
Link Count:	1	Op Table:	
Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Broad Crested Vertical	Default:	0.00 ft
Geometry Type:	Trapezoidal	Op Table:	
Invert:	74.07 ft	Ref Node:	
Control Elevation:	74.07 ft	Discharge Coefficients	
Max Depth:	999.00 ft	Weir Default:	3.200
Extrapolation Method:	Normal Projection	Weir Table:	
Bottom Width:	10.00 ft	Orifice Default:	0.600
Left Slope:	10.000 (h:v)	Orifice Table:	
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W11

Scenario:	Floodrights	Bottom Clip	
From Node:	G11	Default:	0.00 ft
To Node:	G12	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	72.07 ft	Discharge Coefficients	
Control Elevation:	72.07 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W13

Scenario:	Floodrights	Bottom Clip	
From Node:	G13	Default:	0.00 ft
To Node:	G12	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	72.97 ft	Discharge Coefficients	
Control Elevation:	72.97 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W14

Scenario:	Floodrights	**Bottom Clip**	
From Node:	G14	Default:	0.00 ft
To Node:	G13	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	75.07 ft	**Discharge Coefficients**	
Control Elevation:	75.07 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W2

Scenario:	Floodrights	**Bottom Clip**	
From Node:	G1	Default:	0.00 ft
To Node:	G3	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	75.57 ft	**Discharge Coefficients**	
Control Elevation:	75.57 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W3

Scenario:	Floodrights	**Bottom Clip**	
From Node:	G3	Default:	0.00 ft
To Node:	G4	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	

Invert:	74.07 ft
Control Elevation:	740.70 ft
Max Depth:	999.00 ft
Extrapolation Method:	Normal Projection
Bottom Width:	10.00 ft
Left Slope:	10.000 (h:v)
Right Slope:	10.000 (h:v)

Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W4

Scenario:	Floodrights
From Node:	G4
To Node:	G5
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Trapezoidal
Invert:	73.07 ft
Control Elevation:	73.07 ft
Max Depth:	999.00 ft
Extrapolation Method:	Normal Projection
Bottom Width:	10.00 ft
Left Slope:	10.000 (h:v)
Right Slope:	10.000 (h:v)

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W5

Scenario:	Floodrights
From Node:	G5
To Node:	G6
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Trapezoidal
Invert:	70.77 ft
Control Elevation:	70.77 ft
Max Depth:	999.00 ft
Extrapolation Method:	Normal Projection
Bottom Width:	10.00 ft
Left Slope:	10.000 (h:v)
Right Slope:	10.000 (h:v)

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W6

Scenario:	Floodrights

Bottom Clip

From Node:	G6
To Node:	Depressional Area 2
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Trapezoidal
Invert:	69.27 ft
Control Elevation:	69.27 ft
Max Depth:	999.00 ft
Extrapolation Method:	Normal Projection
Bottom Width:	30.00 ft
Left Slope:	10.000 (h:v)
Right Slope:	10.000 (h:v)

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W7

Scenario:	Floodrights
From Node:	G7
To Node:	G6
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Trapezoidal
Invert:	73.07 ft
Control Elevation:	73.07 ft
Max Depth:	999.00 ft
Extrapolation Method:	Normal Projection
Bottom Width:	10.00 ft
Left Slope:	10.000 (h:v)
Right Slope:	10.000 (h:v)

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: WEIR D1-D2

Scenario:	Floodrights
From Node:	OFF-D1
To Node:	Depressional Area 2
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Irregular
Invert:	74.00 ft
Control Elevation:	74.00 ft
Cross Section:	X-D1-D2

Bottom Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip

Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients

Weir Default:	2.800
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment:

Weir Link: WEIR OFF-1

Scenario:	Floodrights	**Bottom Clip**	
From Node:	Depressional Area 1	Default:	0.00 ft
To Node:	OFF-D1	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	73.00 ft	**Discharge Coefficients**	
Control Elevation:	73.00 ft	Weir Default:	2.800
Cross Section:	X-OFF-1-W	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment: represents elevation at which the depression overtops to the adjacent offsite depressional area to the north

Weir Link: WEIR OFF-2

Scenario:	Floodrights	**Bottom Clip**	
From Node:	Depressional Area 2	Default:	0.00 ft
To Node:	OFF-D2	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	73.50 ft	**Discharge Coefficients**	
Control Elevation:	73.50 ft	Weir Default:	2.800
Cross Section:	X-OFF-2-W	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment: represents elevation at which the depression overtops to the adjacent offsite depressional area to the east

Weir Link: WF1

Scenario:	Floodrights	**Bottom Clip**	
From Node:	F1	Default:	0.00 ft
To Node:	F2	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	86.07 ft	**Discharge Coefficients**	
Control Elevation:	86.07 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: WF2

Scenario:	Floodrights	**Bottom Clip**	
From Node:	F2	Default:	0.00 ft
To Node:	F3	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	84.57 ft	**Discharge Coefficients**	
Control Elevation:	84.57 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: WF3

Scenario:	Floodrights	**Bottom Clip**	
From Node:	F3	Default:	0.00 ft
To Node:	F4	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	82.87 ft	**Discharge Coefficients**	
Control Elevation:	82.87 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Simulation: 100yr-10day

Scenario:	Floodrights
Run Date/Time:	10/20/2020 2:32:01 PM
Program Version:	ICPR4 4.04.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	240.0000

Hydrology [sec]	Surface Hydraulics [sec]

Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: CurveNumbers
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Basins

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Manual Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-240
		Rainfall Amount:	16.80 in
Edge Length Option:	Automatic	Storm Duration:	240.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 100yr-24hr

Scenario: Floodrights
Run Date/Time: 10/20/2020 2:33:12 PM
Program Version: ICPR4 4.04.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: CurveNumbers
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Basins

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Manual Basin Rain Opt: Global
Rainfall Name: ~FLMOD
Rainfall Amount: 11.40 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 25yr-24hr

Scenario: Floodrights
Run Date/Time: 10/20/2020 2:33:51 PM
Program Version: ICPR4 4.04.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: CurveNumbers
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Basins

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
IA Recovery Time: 24.0000 hr

dZ Tolerance:	0.0010 ft	Manual Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	8.40 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 25yr-96hr

Scenario: Floodrights
Run Date/Time: 10/20/2020 2:34:29 PM
Program Version: ICPR4 4.04.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	240.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: CurveNumbers

Green-Ampt Set:	
Vertical Layers Set:	
Impervious Set:	Basins

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Manual Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SJRWMD-96
		Rainfall Amount:	11.50 in
Edge Length Option:	Automatic	Storm Duration:	96.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

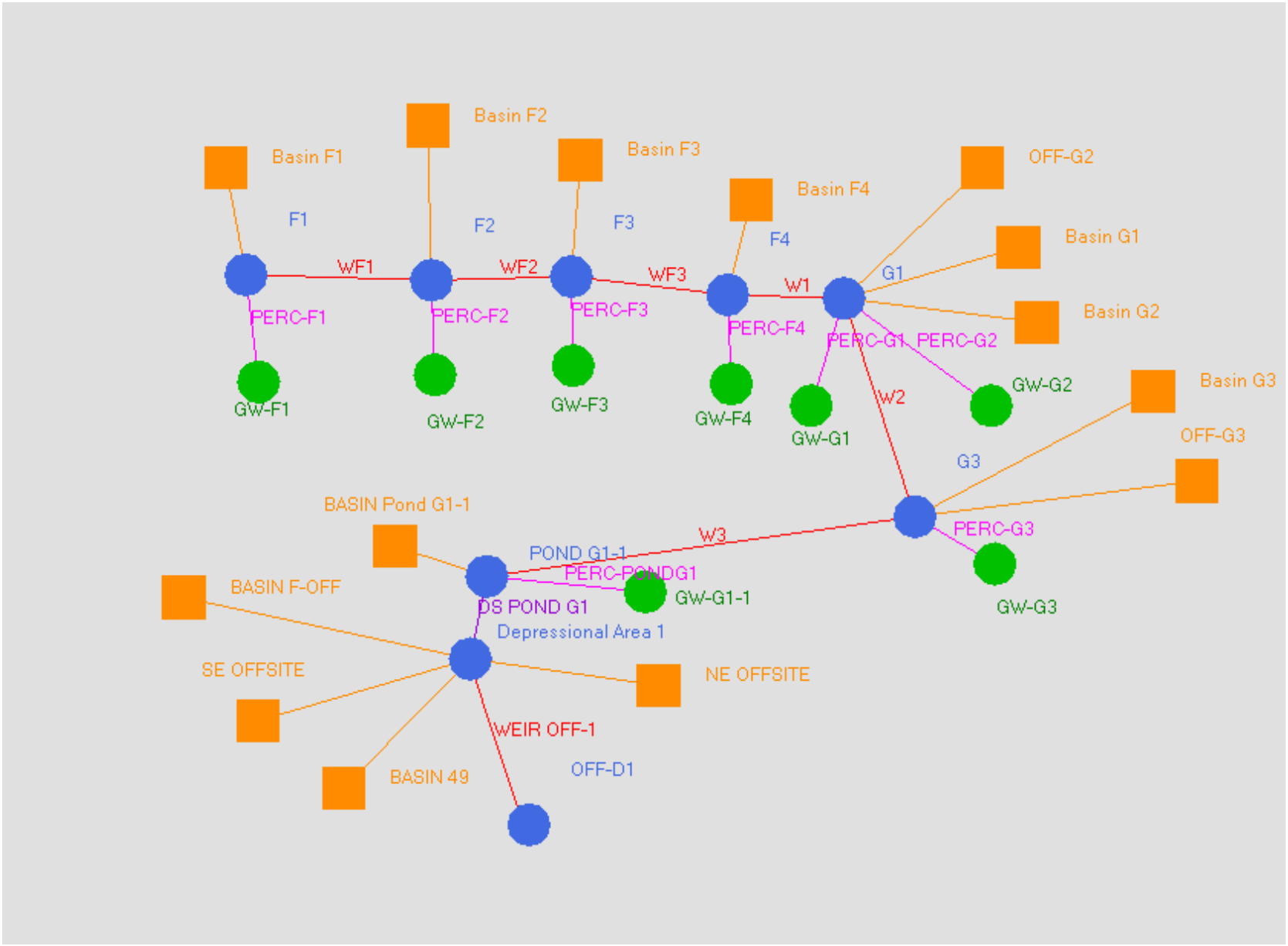
Post-Development
Flood Rights – No Ponds
ICPR Output

Node Max Conditions [Floodrights]

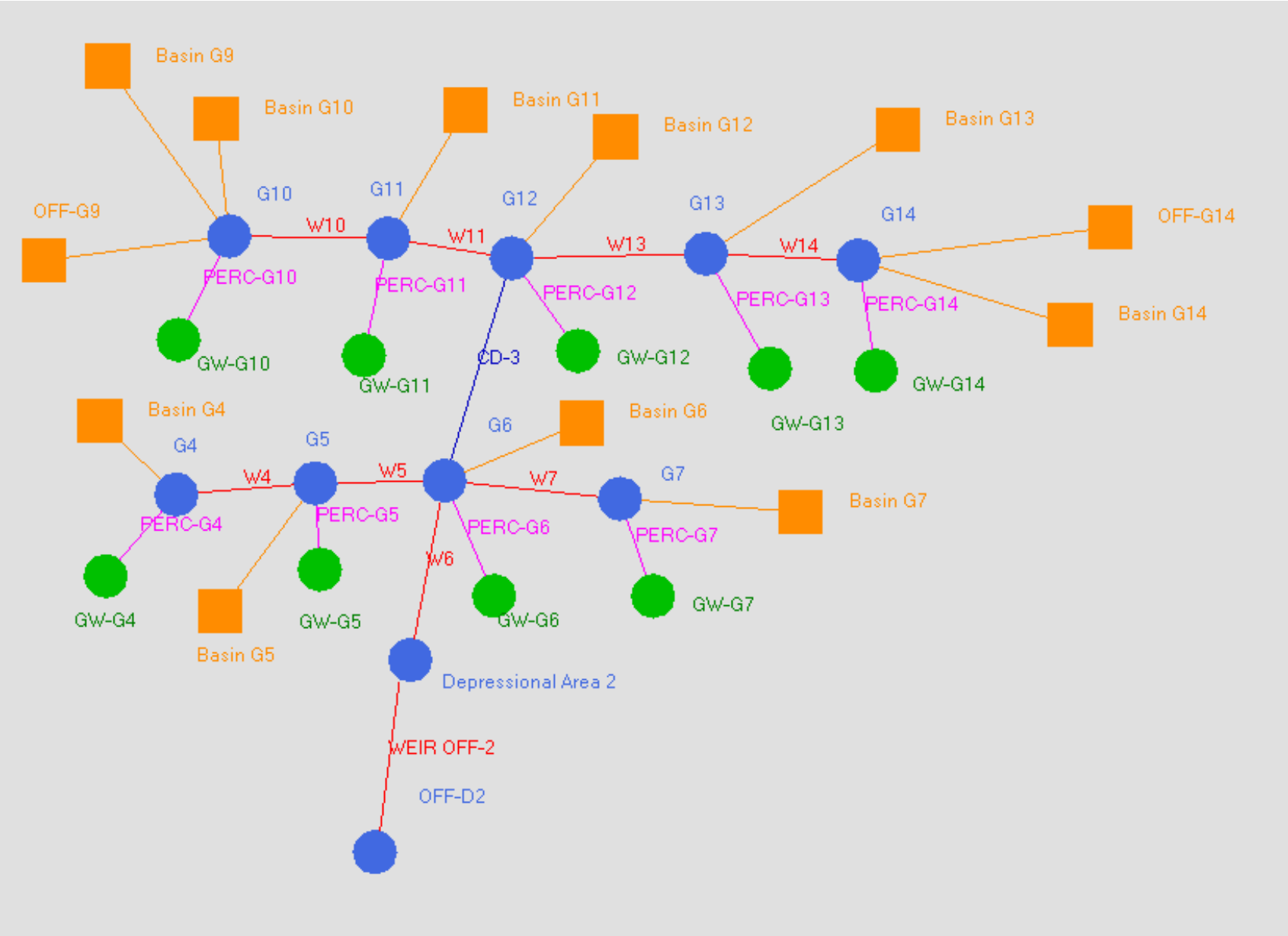
Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Depressional Area 1	100yr-10day	73.00	74.06	0.0009	56.80	38.30	603742
Depressional Area 1	100yr-24hr	73.00	72.50	0.0010	220.90	0.00	559261
Depressional Area 1	25yr-96hr	73.00	72.56	0.0010	200.04	0.00	564428
Depressional Area 2	100yr-10day	73.50	71.84	0.0006	7.73	3.27	151923
Depressional Area 2	100yr-24hr	73.50	71.31	0.0010	56.68	3.03	119859
Depressional Area 2	25yr-96hr	73.50	70.84	0.0009	47.24	2.49	90805

POST-DEVELOPMENT
FLOOD RIGHTS
ICPR MODEL

Post-Development Flood Rights F 49 ICPR Layout



Post-Development Flood Rights F 49 ICPR Layout



Post-Development
Flood Rights
ICPR Input

Manual Basin: BASIN 49

Scenario: Floodrights F 49
Node: Depressional Area 1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
14.8200	Basin 49	Basin 49	

Comment:

Manual Basin: BASIN F-OFF

Scenario: Floodrights F 49
Node: Depressional Area 1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 84.5000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
18.2000	Basin F-OFF	Basin F-OFF	

Comment:

Manual Basin: BASIN Pond G1-1

Scenario: Floodrights F 49
Node: POND G1-1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 39.2000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
7.0400	Basin Pond G1-1	Basin Pond G1-1	

Comment: Total Basin G1-1 is made up of Basin Pond G1-1, G1, G2, G2-OFF, G3-OFF and G3 (7.04+0.67+3.92+3.2+1.87+1.54=18.24 Ac)

Manual Basin: Basin F1

Scenario: Floodrights F 49
Node: F1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
8.1000	Basin F1	Basin F1	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin F2

Scenario: Floodrights F 49
Node: F2
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.6800	Basin F2	Basin F2	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin F3

Scenario: Floodrights F 49
Node: F3
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.4500	Basin F3	Basin F3	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin F4

Scenario: Floodrights F 49
Node: F4

Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
4.5500	Basin F4	Basin F4	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: Basin G1

Scenario: Floodrights F 49
Node: G1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.6700	Basin G1	Basin G1	

Comment: Information from FDOT FPID 36210-1439 - This is a sub-basin in Basin G1-1

Manual Basin: Basin G10

Scenario: Floodrights F 49
Node: G10
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.3900	Basin G10	Basin G10	

Comment: Area updated - This is a sub-basin in Basin G2

Manual Basin: Basin G11

Scenario: Floodrights F 49
Node: G11
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number

Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.9100	Basin G11	Basin G11	

Comment: Area updated - This is a sub-basin in Basin G2

Manual Basin: Basin G12

Scenario: Floodrights F 49
Node: G12
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
2.2300	Basin G12	Basin G12	

Comment: Area updated - This is a sub-basin in Basin G2

Manual Basin: Basin G13

Scenario: Floodrights F 49
Node: G13
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.2400	Basin G13	Basin G13	

Comment: Area updated - This is a sub-basin in Basin G2

Manual Basin: Basin G14

Scenario: Floodrights F 49
Node: G14
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs

Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.3900	Basin G14	Basin G14	

Comment: Area updated - This is a sub-basin in Basin G2

Manual Basin: Basin G2

Scenario: Floodrights F 49
Node: G1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
3.9200	Basin G2	Basin G2	

Comment: Information from FDOT FPID 36210-1439 - This is a sub-basin in Basin G1-1

Manual Basin: Basin G3

Scenario: Floodrights F 49
Node: G3
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.8700	Basin G3	Basin G3	

Comment: Information from FDOT FPID 36210-1439 - This is a sub-basin in Basin G1-1

Manual Basin: Basin G4

Scenario: Floodrights F 49
Node: G4
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484

Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.5700	Basin G4	Basin G4	

Comment: Information from FDOT FPID 36210-1439 - This is a sub-basin in Basin G2

Manual Basin: Basin G5

Scenario: Floodrights F 49
Node: G5
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.7400	Basin G5	Basin G5	

Comment: Area updated - This is a sub-basin in Basin G2

Manual Basin: Basin G6

Scenario: Floodrights F 49
Node: G6
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
5.2400	Basin G6	Basin G6	

Comment: Area updated - This is a sub-basin in Basin G2

Manual Basin: Basin G7

Scenario: Floodrights F 49
Node: G7
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
3.2800	Basin G7/8	Basin G7/8	

Comment: Area updated - This is a sub-basin in Basin G2

Manual Basin: Basin G9

Scenario: Floodrights F 49
Node: G10
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
2.8100	Basin G9	Basin G9	

Comment: Area updated - This is a sub-basin in Basin G2

Manual Basin: NE OFFSITE

Scenario: Floodrights F 49
Node: Depressional Area 1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 34.5000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
77.4300	OFFSITE	OFFSITE	

Comment:

Manual Basin: OFF-G14

Scenario: Floodrights F 49
Node: G14
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.6300	OFF G14	OFF G14	

Comment: Area updated - This is a sub-basin in Basin G2

Manual Basin: OFF-G2

Scenario: Floodrights F 49
Node: G1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.2000	OFF G2	OFF G2	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: OFF-G3

Scenario: Floodrights F 49
Node: G3
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.2000	OFF G3	OFF G3	

Comment: Information from FDOT FPID 36210-1439

Manual Basin: OFF-G9

Scenario: Floodrights F 49
Node: G10
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
3.0700	OFF G9	OFF G9	

Comment: Area updated - This is a sub-basin in Basin G2

Manual Basin: SE OFFSITE

Scenario: Floodrights F 49
Node: Depressional Area 1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 32.3000 min
Max Allowable Q: 999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
28.1500	OFFSITE	OFFSITE	

Comment:

Curve Number: CurveNumbers [Set]

Land Cover Zone	Soil Zone	Curve Number [dec]
Basin 49	Basin 49	60.7
Basin E	Basin E	54.7
Basin F-OFF	Basin F-OFF	45.1
Basin F1	Basin F1	56.0
Basin F2	Basin F2	58.0
Basin F3	Basin F3	59.1
Basin F4	Basin F4	58.7
Basin G1	Basin G1	62.9
Basin G10	Basin G10	59.6
Basin G11	Basin G11	63.5
Basin G12	Basin G12	69.5
Basin G13	Basin G13	65.2
Basin G14	Basin G14	63.1
Basin G2	Basin G2	73.6
Basin G3	Basin G3	76.0
Basin G4	Basin G4	70.3
Basin G5	Basin G5	66.2
Basin G6	Basin G6	76.3
Basin G7/8	Basin G7/8	63.9
Basin G9	Basin G9	57.7
Basin Pond G1-1	Basin Pond G1-1	39.0
OFF G14	OFF G14	62.9
OFF G2	OFF G2	59.0
OFF G3	OFF G3	59.2
OFF G9	OFF G9	53.8
OFFSITE	OFFSITE	39.0

Node: Depressional Area 1

Scenario: Floodrights F 49
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 66.00 ft

Warning Stage: 73.00 ft

Stage [ft]	Area [ac]	Area [ft2]
66.00	0.1200	5227
67.00	1.7600	76666
68.00	3.4700	151153
69.00	5.5900	243500
70.00	7.6700	334105
71.00	9.6700	421225
72.00	11.8100	514444
73.00	13.8600	603742

Comment:

Node: Depressional Area 2

Scenario: Floodrights F 49
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 67.00 ft
Warning Stage: 73.50 ft

Stage [ft]	Area [ac]	Area [ft2]
67.00	0.1000	4356
68.00	0.2800	12197
69.00	0.4200	18295
70.00	0.8100	35284
71.00	2.3300	101495
72.00	3.7100	161608
73.00	6.0200	262231
74.00	35.8000	1559448

Comment:

Node: F1

Scenario: Floodrights F 49
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 84.07 ft
Warning Stage: 86.47 ft

Stage [ft]	Area [ac]	Area [ft2]
84.07	0.0000	0
84.37	0.0220	958
84.67	0.0340	1481
84.97	0.0480	2091
85.27	0.0630	2744
85.57	0.0810	3528
85.87	0.0990	4312
86.17	0.1190	5184
86.47	0.1400	6098

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin F

Node: F2

Scenario: Floodrights F 49
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 82.07 ft
Warning Stage: 85.07 ft

Stage [ft]	Area [ac]	Area [ft2]
82.07	0.0000	0
82.37	0.0840	3659
82.67	0.0980	4269
82.97	0.1120	4879
83.27	0.1260	5489
83.57	0.1400	6098
83.87	0.1550	6752
84.17	0.1710	7449
84.47	0.1860	8102
85.07	0.2240	9757

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin F

Node: F3

Scenario: Floodrights F 49
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 80.07 ft
Warning Stage: 83.67 ft

Stage [ft]	Area [ac]	Area [ft2]
80.07	0.0000	0
80.47	0.0850	3703
80.87	0.1030	4487
81.27	0.1210	5271
81.67	0.1390	6055
82.07	0.1580	6882
82.47	0.1780	7754
82.87	0.1980	8625
83.27	0.2210	9627
83.67	0.2460	10716

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin F

Node: F4

Scenario: Floodrights F 49

Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 77.07 ft
Warning Stage: 80.97 ft

Stage [ft]	Area [ac]	Area [ft2]
77.07	0.0000	0
77.57	0.3020	13155
78.07	0.3660	15943
78.57	0.4320	18818
79.07	0.4990	21736
79.57	0.5670	24699
80.07	0.6360	27704
80.57	0.7060	30753
80.97	0.7760	33803

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin F

Node: G1

Scenario: Floodrights F 49
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 74.07 ft
Warning Stage: 77.87 ft

Stage [ft]	Area [ac]	Area [ft2]
74.07	0.0000	0
74.47	0.2840	12371
74.87	0.3600	15682
75.27	0.4370	19036
75.67	0.5140	22390
76.07	0.5920	25788
76.47	0.6840	29795
76.87	0.7770	33846
77.27	0.8730	38028
77.87	1.0210	44475

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G10

Scenario: Floodrights F 49
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 71.57 ft
Warning Stage: 74.77 ft

Stage [ft]	Area [ac]	Area [ft2]
71.57	0.0000	0
71.67	0.0410	1786
72.37	0.0600	2614

Stage [ft]	Area [ac]	Area [ft2]
72.77	0.0810	3528
73.17	0.1020	4443
73.57	0.1350	5881
73.97	0.1480	6447
74.37	0.1760	7667
74.77	0.2060	8973

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G11

Scenario: Floodrights F 49
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 70.07 ft
Warning Stage: 73.27 ft

Stage [ft]	Area [ac]	Area [ft2]
70.07	0.0000	0
70.47	0.0500	2178
70.87	0.0630	2744
71.27	0.0780	3398
71.67	0.0940	4095
72.07	0.1110	4835
72.47	0.1300	5663
72.87	0.1500	6534
73.27	0.1730	7536

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G12

Scenario: Floodrights F 49
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 68.07 ft
Warning Stage: 72.27 ft

Stage [ft]	Area [ac]	Area [ft2]
68.07	0.0000	0
68.67	0.2040	8886
69.27	0.2680	11674
69.87	0.3340	14549
70.47	0.4040	17598
71.07	0.4760	20735
71.67	0.5500	23958
72.27	0.6320	27530

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G13

Scenario: Floodrights F 49
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 70.07 ft
Warning Stage: 73.67 ft

Stage [ft]	Area [ac]	Area [ft2]
70.07	0.0000	0
70.47	0.0580	2526
70.87	0.0780	3398
71.27	0.1000	4356
71.67	0.1220	5314
72.07	0.1460	6360
72.47	0.1710	7449
72.87	0.1990	8668
73.67	0.2620	11413

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G14

Scenario: Floodrights F 49
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 74.07 ft
Warning Stage: 75.67 ft

Stage [ft]	Area [ac]	Area [ft2]
74.07	0.0000	0
74.27	0.0320	1394
74.47	0.0430	1873
74.67	0.0560	2439
74.87	0.0700	3049
75.07	0.0850	3703
75.27	0.0990	4312
75.47	0.1140	4966
75.67	0.1280	5576

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G3

Scenario: Floodrights F 49
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 72.57 ft
Warning Stage: 75.07 ft

Stage [ft]	Area [ac]	Area [ft2]
72.57	0.0000	0
72.87	0.0340	1481

Stage [ft]	Area [ac]	Area [ft2]
73.17	0.0490	2134
73.47	0.0640	2788
73.77	0.0810	3528
74.07	0.0980	4269
74.37	0.1180	5140
74.67	0.1400	6098
75.07	0.1690	7362

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G4

Scenario: Floodrights F 49
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 71.07 ft
Warning Stage: 74.07 ft

Stage [ft]	Area [ac]	Area [ft2]
71.07	0.0000	0
71.47	0.0540	2352
71.87	0.0670	2919
72.27	0.0820	3572
72.67	0.0990	4312
73.07	0.1180	5140
73.47	0.1390	6055
73.87	0.1610	7013
74.07	0.1710	7449

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G5

Scenario: Floodrights F 49
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 68.07 ft
Warning Stage: 71.97 ft

Stage [ft]	Area [ac]	Area [ft2]
68.07	0.0000	0
68.57	0.0570	2483
69.07	0.0740	3223
69.57	0.0930	4051
70.07	0.1140	4966
70.57	0.1370	5968
71.07	0.1610	7013
71.57	0.1880	8189
71.97	0.2100	9148

Comment:

Node: G6

Scenario: Floodrights F 49
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 66.57 ft
Warning Stage: 70.47 ft

Stage [ft]	Area [ac]	Area [ft2]
66.57	0.0000	0
67.07	0.1740	7579
67.57	0.2250	9801
68.07	0.2780	12110
68.57	0.3080	13416
69.07	0.3900	16988
69.57	0.4490	19558
70.07	0.5090	22172
70.47	0.5680	24742

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: G7

Scenario: Floodrights F 49
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 71.07 ft
Warning Stage: 75.67 ft

Stage [ft]	Area [ac]	Area [ft2]
71.07	0.0000	0
71.47	0.0840	3659
71.87	0.1010	4400
72.27	0.1180	5140
72.67	0.1360	5924
73.07	0.1560	6795
73.47	0.1770	7710
73.87	0.2010	8756
74.27	0.2260	9845
74.67	0.2520	10977

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-F1

Scenario: Floodrights F 49
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 79.07 ft
Warning Stage: 86.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	79.07
0	0	0	96.0000	79.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin F

Node: GW-F2

Scenario: Floodrights F 49
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 78.07 ft
Warning Stage: 84.57 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	78.07
0	0	0	96.0000	78.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin F

Node: GW-F3

Scenario: Floodrights F 49
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 74.07 ft
Warning Stage: 83.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	74.07
0	0	0	96.0000	74.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin F

Node: GW-F4

Scenario: Floodrights F 49
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 72.07 ft
Warning Stage: 80.77 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	72.07
0	0	0	96.0000	72.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93') - This is a sub-basin in Basin F

Node: GW-G1

Scenario: Floodrights F 49
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 71.07 ft
Warning Stage: 78.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	71.07
0	0	0	96.0000	71.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G1-1

Scenario: Floodrights F 49
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 62.60 ft
Warning Stage: 73.60 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	62.60
0	0	0	96.0000	62.60

Comment: Boring information from PBS-36 and PBS-38 shows the average SHWT estimated at 62.6'.

Node: GW-G10

Scenario: Floodrights F 49
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 67.07 ft
Warning Stage: 74.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	67.07
0	0	0	96.0000	67.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G11

Scenario: Floodrights F 49
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 66.07 ft

Warning Stage: 72.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	66.07
0	0	0	96.0000	66.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G12

Scenario: Floodrights F 49
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 62.07 ft
Warning Stage: 70.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	62.07
0	0	0	96.0000	62.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G13

Scenario: Floodrights F 49
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 62.07 ft
Warning Stage: 73.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	62.07
0	0	0	96.0000	62.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G14

Scenario: Floodrights F 49
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 68.07 ft
Warning Stage: 75.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	68.07

Year	Month	Day	Hour	Stage [ft]
0	0	0	96.0000	68.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G2

Scenario: Floodrights F 49
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 69.07 ft
Warning Stage: 75.57 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	69.07
0	0	0	96.0000	69.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G3

Scenario: Floodrights F 49
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 66.07 ft
Warning Stage: 74.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	66.07
0	0	0	96.0000	66.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G4

Scenario: Floodrights F 49
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 66.07 ft
Warning Stage: 73.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	66.07
0	0	0	96.0000	66.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G5

Scenario: Floodrights F 49
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 63.07 ft
Warning Stage: 71.57 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	63.07
0	0	0	96.0000	63.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G6

Scenario: Floodrights F 49
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 61.07 ft
Warning Stage: 70.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	61.07
0	0	0	96.0000	61.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: GW-G7

Scenario: Floodrights F 49
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 63.07 ft
Warning Stage: 73.07 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	63.07
0	0	0	96.0000	63.07

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Node: OFF-D1

Scenario: Floodrights F 49
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 66.00 ft

Warning Stage: 73.00 ft

Stage [ft]	Area [ac]	Area [ft2]
66.00	1.0100	43996
67.00	1.4500	63162
70.00	2.6800	116741
71.00	2.9000	126324
72.00	3.6100	157252
73.00	3.8500	167706

Comment: Represents offsite pop-off location for Depressional Area 1

Node: OFF-D2

Scenario: Floodrights F 49
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 69.00 ft
Warning Stage: 73.50 ft

Stage [ft]	Area [ac]	Area [ft2]
69.00	0.0500	2178
70.00	2.0700	90169
71.00	7.7400	337154
72.00	13.5300	589367
73.00	20.5600	895594

Comment: Represents offsite pop-off location for Depressional Area 2

Node: POND G1-1

Scenario: Floodrights F 49
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 74.60 ft
Warning Stage: 80.00 ft

Stage [ft]	Area [ac]	Area [ft2]
74.60	2.9300	127631
74.94	2.9700	129373
75.11	3.0000	130680
75.44	3.1000	135036
81.00	3.8600	168142
82.00	4.6000	200376

Comment:

Pipe Link: CD-3 | Upstream | Downstream

Scenario: Floodrights F 49 | Invert: 70.07 ft | Invert: 69.51 ft

From Node:	G12	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	G6	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	170.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 ft	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Drop Structure Link: DS POND G1		Upstream Pipe		Downstream Pipe	
Scenario:	Floodrights F 49	Invert:	70.00 ft	Invert:	66.00 ft
From Node:	POND G1-1	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	Depressional Area	Geometry: Circular		Geometry: Circular	
	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Link Count:	1	Bottom Clip			
Flow Direction:	Both	Default:	0.00 ft	Default:	0.00 ft
Solution:	Combine	Op Table:		Op Table:	
Increments:	10	Ref Node:		Ref Node:	
Pipe Count:	1	Manning's N:	0.0000	Manning's N:	0.0000
Damping:	0.0000 ft	Top Clip			
Length:	140.00 ft	Default:	0.00 ft	Default:	0.00 ft
FHWA Code:	1	Op Table:		Op Table:	
Entr Loss Coef:	0.50	Ref Node:		Ref Node:	
Exit Loss Coef:	1.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Loss Coef:	0.00				
Bend Location:	0.00 ft				
Energy Switch:	Energy				

Pipe Comment:

Weir Component		Bottom Clip	
Weir:	1	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Horizontal	Default:	0.00 ft
Geometry Type:	Rectangular	Op Table:	
Invert:	75.80 ft	Ref Node:	
Control Elevation:	75.80 ft	Discharge Coefficients	
Max Depth:	2.00 ft	Weir Default:	3.200
Max Width:	3.08 ft	Weir Table:	
Fillet:	0.00 ft	Orifice Default:	0.600
		Orifice Table:	

Weir Comment: Invert set to control discharge

Drop Structure Comment:

Percolation Link: PERC-F1

Scenario:	Floodrights F 49	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	F1		
To Node:	GW-F1	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	404.00 ft
Flow Direction:	Both	Perimeter 2:	744.11 ft
Aquifer Base Elevation:	72.07 ft	Perimeter 3:	2369.04 ft
Water Table Elevation:	79.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	4.500 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	3.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	7.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin F

Percolation Link: PERC-F2

Scenario:	Floodrights F 49	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	F2		
To Node:	GW-F2	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	577.50 ft
Flow Direction:	Both	Perimeter 2:	1046.16 ft
Aquifer Base Elevation:	71.07 ft	Perimeter 3:	2007.42 ft
Water Table Elevation:	78.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	4.500 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	3.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	6.50 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin F

Percolation Link: PERC-F3

Scenario:	Floodrights F 49	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	F3		
To Node:	GW-F3	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	511.30 ft
Flow Direction:	Both	Perimeter 2:	772.42 ft
Aquifer Base Elevation:	68.07 ft	Perimeter 3:	1603.85 ft
Water Table Elevation:	74.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	31.500 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	21.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	9.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin F

Percolation Link: PERC-F4

Scenario:	Floodrights F 49	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	F4		
To Node:	GW-F4	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	1552.00 ft
Flow Direction:	Both	Perimeter 2:	1866.20 ft
Aquifer Base Elevation:	64.07 ft	Perimeter 3:	4693.60 ft
Water Table Elevation:	72.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	31.500 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	21.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	8.75 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin F

Percolation Link: PERC-G1

Scenario:	Floodrights F 49	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G1		
To Node:	GW-G1	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	402.66 ft
Flow Direction:	Both	Perimeter 2:	718.56 ft
Aquifer Base Elevation:	65.07 ft	Perimeter 3:	1046.88 ft
Water Table Elevation:	71.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	29.250 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	19.500 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	7.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin G1-1

Percolation Link: PERC-G10

Scenario:	Floodrights F 49	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G10		
To Node:	GW-G10	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	530.00 ft
Flow Direction:	Both	Perimeter 2:	887.78 ft
Aquifer Base Elevation:	60.07 ft	Perimeter 3:	2693.05 ft
Water Table Elevation:	67.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	27.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	18.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	7.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin G2

Percolation Link: PERC-G11

Scenario:	Floodrights F 49	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G11		
To Node:	GW-G11	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	342.66 ft
Flow Direction:	Both	Perimeter 2:	656.82 ft
Aquifer Base Elevation:	60.07 ft	Perimeter 3:	3484.25 ft
Water Table Elevation:	66.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	27.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	18.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	6.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin G2

Percolation Link: PERC-G12

Scenario:	Floodrights F 49	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G12		
To Node:	GW-G12	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	1115.14 ft
Flow Direction:	Both	Perimeter 2:	1448.86 ft
Aquifer Base Elevation:	55.07 ft	Perimeter 3:	2502.20 ft
Water Table Elevation:	62.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	27.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	18.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	8.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin G2

Percolation Link: PERC-G13

Scenario:	Floodrights F 49	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G13		
To Node:	GW-G13	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	555.00 ft
Flow Direction:	Both	Perimeter 2:	864.01 ft
Aquifer Base Elevation:	55.07 ft	Perimeter 3:	1904.77 ft
Water Table Elevation:	62.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	27.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	18.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	11.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin G2

Percolation Link: PERC-G14

Scenario:	Floodrights F 49	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G14		
To Node:	GW-G14	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	628.00 ft
Flow Direction:	Both	Perimeter 2:	971.81 ft
Aquifer Base Elevation:	61.07 ft	Perimeter 3:	2791.16 ft
Water Table Elevation:	68.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	27.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	18.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	7.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin G2

Percolation Link: PERC-G2

Scenario:	Floodrights F 49	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G1		
To Node:	GW-G2	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	1519.00 ft
Flow Direction:	Both	Perimeter 2:	1853.22 ft
Aquifer Base Elevation:	63.07 ft	Perimeter 3:	2123.75 ft
Water Table Elevation:	69.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	29.250 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	19.500 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	6.50 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin G1-1

Percolation Link: PERC-G3

Scenario:	Floodrights F 49	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G3		
To Node:	GW-G3	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	538.50 ft
Flow Direction:	Both	Perimeter 2:	864.99 ft
Aquifer Base Elevation:	58.07 ft	Perimeter 3:	1071.47 ft
Water Table Elevation:	66.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	29.250 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	19.500 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	8.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin G1-1

Percolation Link: PERC-G4

Scenario:	Floodrights F 49	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G4		
To Node:	GW-G4	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	351.34 ft
Flow Direction:	Both	Perimeter 2:	634.78 ft
Aquifer Base Elevation:	57.07 ft	Perimeter 3:	814.79 ft
Water Table Elevation:	66.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	29.250 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	19.500 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	7.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin G2

Percolation Link: PERC-G5

Scenario:	Floodrights F 49	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G5		
To Node:	GW-G5	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	368.00 ft
Flow Direction:	Both	Perimeter 2:	703.05 ft
Aquifer Base Elevation:	55.07 ft	Perimeter 3:	888.64 ft
Water Table Elevation:	63.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	27.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	18.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	8.50 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin G2

Percolation Link: PERC-G6

Scenario:	Floodrights F 49	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G6		
To Node:	GW-G6	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	1116.66 ft
Flow Direction:	Both	Perimeter 2:	1470.67 ft
Aquifer Base Elevation:	55.07 ft	Perimeter 3:	2257.58 ft
Water Table Elevation:	61.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	27.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	18.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	9.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin G2

Percolation Link: PERC-G7

Scenario:	Floodrights F 49	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	G7		
To Node:	GW-G7	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	381.00 ft
Flow Direction:	Both	Perimeter 2:	758.48 ft
Aquifer Base Elevation:	57.07 ft	Perimeter 3:	2600.17 ft
Water Table Elevation:	63.07 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	27.000 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	18.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	10.00 ft		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93'); conversion factor of 2/3 used to convert horizontal to vertical conductivity - This is a sub-basin in Basin G2

Percolation Link: PERC-PONDG1

Scenario:	Floodrights F 49	Surface Area Option:	Vary Based on Stage/Area Table
From Node:	POND G1-1		
To Node:	GW-G1-1	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	1937.60 ft
Flow Direction:	Both	Perimeter 2:	2251.75 ft
Aquifer Base Elevation:	62.60 ft	Perimeter 3:	4686.13 ft
Water Table Elevation:	62.60 ft	Distance P1 to P2:	50.00 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	450.00 ft
Horizontal Conductivity:	7.750 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	5.000 fpd	# of Cells P2 to P3:	45
Fillable Porosity:	0.200		
Layer Thickness:	12.00 ft		

Comment: Pond G1-1 is located in the NE quadrant of the proposed interchange. Boring information from PBS-36 and PBS-38 shows the average SHWT and confining layer both estimated at 62.6'. FOS of 2 on horizontal and vertical conductivities

Weir Link: W1

Scenario:	Floodrights F 49	**Bottom Clip**	
From Node:	F4	Default:	0.00 ft
To Node:	G1	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	79.87 ft	**Discharge Coefficients**	
Control Elevation:	79.87 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W10

Scenario:	Floodrights F 49	**Bottom Clip**	
From Node:	G10	Default:	0.00 ft
To Node:	G11	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	74.07 ft	**Discharge Coefficients**	
Control Elevation:	74.07 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W11

Scenario:	Floodrights F 49	**Bottom Clip**	
From Node:	G11	Default:	0.00 ft
To Node:	G12	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	72.07 ft	**Discharge Coefficients**	
Control Elevation:	72.07 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W13

Scenario:	Floodrights F 49	**Bottom Clip**	
From Node:	G13	Default:	0.00 ft
To Node:	G12	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	72.97 ft	**Discharge Coefficients**	
Control Elevation:	72.97 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	

Left Slope:	10.000 (h:v)
Right Slope:	10.000 (h:v)

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W14

Scenario:	Floodrights F 49
From Node:	G14
To Node:	G13
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Trapezoidal
Invert:	75.07 ft
Control Elevation:	75.07 ft
Max Depth:	999.00 ft
Extrapolation Method:	Normal Projection
Bottom Width:	10.00 ft
Left Slope:	10.000 (h:v)
Right Slope:	10.000 (h:v)

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W2

Scenario:	Floodrights F 49
From Node:	G1
To Node:	G3
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Broad Crested Vertical
Geometry Type:	Trapezoidal
Invert:	75.57 ft
Control Elevation:	75.57 ft
Max Depth:	999.00 ft
Extrapolation Method:	Normal Projection
Bottom Width:	10.00 ft
Left Slope:	10.000 (h:v)
Right Slope:	10.000 (h:v)

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Discharge Coefficients	
Weir Default:	3.200
Weir Table:	
Orifice Default:	0.600
Orifice Table:	

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W3

Scenario:	Floodrights F 49
From Node:	G3
To Node:	POND G1-1
Link Count:	1
Flow Direction:	Both
Damping:	0.0000 ft

Bottom Clip	
Default:	0.00 ft
Op Table:	
Ref Node:	

Top Clip	
Default:	0.00 ft

Weir Type:	Broad Crested Vertical		
Geometry Type:	Trapezoidal	Op Table:	
Invert:	75.00 ft	Ref Node:	
Control Elevation:	75.00 ft	Discharge Coefficients	
Max Depth:	999.00 ft	Weir Default:	3.200
Extrapolation Method:	Normal Projection	Weir Table:	
Bottom Width:	10.00 ft	Orifice Default:	0.600
Left Slope:	6.000 (h:v)	Orifice Table:	
Right Slope:	6.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W4

Scenario:	Floodrights F 49	Bottom Clip	
From Node:	G4	Default:	0.00 ft
To Node:	G5	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	73.07 ft	Discharge Coefficients	
Control Elevation:	73.07 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W5

Scenario:	Floodrights F 49	Bottom Clip	
From Node:	G5	Default:	0.00 ft
To Node:	G6	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	70.77 ft	Discharge Coefficients	
Control Elevation:	70.77 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W6

Scenario:	Floodrights F 49	**Bottom Clip**	
From Node:	G6	Default:	0.00 ft
To Node:	Depressional Area 2	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	69.27 ft	**Discharge Coefficients**	
Control Elevation:	69.27 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	30.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: W7

Scenario:	Floodrights F 49	**Bottom Clip**	
From Node:	G7	Default:	0.00 ft
To Node:	G6	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	73.07 ft	**Discharge Coefficients**	
Control Elevation:	73.07 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: WEIR D1-D2

Scenario:	Floodrights F 49	**Bottom Clip**	
From Node:	OFF-D1	Default:	0.00 ft
To Node:	Depressional Area 2	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	74.00 ft	**Discharge Coefficients**	
Control Elevation:	74.00 ft	Weir Default:	2.800
Cross Section:	X-D1-D2	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment:

Weir Link: WEIR OFF-1

Scenario:	Floodrights F 49	**Bottom Clip**	
From Node:	Depressional Area 1	Default:	0.00 ft
To Node:	OFF-D1	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	73.00 ft	**Discharge Coefficients**	
Control Elevation:	73.00 ft	Weir Default:	2.800
Cross Section:	X-OFF-1-W	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment: represents elevation at which the depression overtops to the adjacent offsite depressional area to the north

Weir Link: WEIR OFF-2

Scenario:	Floodrights F 49	**Bottom Clip**	
From Node:	Depressional Area 2	Default:	0.00 ft
To Node:	OFF-D2	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Irregular	Ref Node:	
Invert:	73.50 ft	**Discharge Coefficients**	
Control Elevation:	73.50 ft	Weir Default:	2.800
Cross Section:	X-OFF-2-W	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Comment: represents elevation at which the depression overtops to the adjacent offsite depressional area to the east

Weir Link: WF1

Scenario:	Floodrights F 49	**Bottom Clip**	
From Node:	F1	Default:	0.00 ft
To Node:	F2	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	86.07 ft	**Discharge Coefficients**	
Control Elevation:	86.07 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600

Bottom Width:	10.00 ft		
Left Slope:	10.000 (h:v)	Orifice Table:	
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: WF2

Scenario:	Floodrights F 49	**Bottom Clip**	
From Node:	F2	Default:	0.00 ft
To Node:	F3	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	84.57 ft	**Discharge Coefficients**	
Control Elevation:	84.57 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Weir Link: WF3

Scenario:	Floodrights F 49	**Bottom Clip**	
From Node:	F3	Default:	0.00 ft
To Node:	F4	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	**Top Clip**	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:	
Geometry Type:	Trapezoidal	Ref Node:	
Invert:	82.87 ft	**Discharge Coefficients**	
Control Elevation:	82.87 ft	Weir Default:	3.200
Max Depth:	999.00 ft	Weir Table:	
Extrapolation Method:	Normal Projection	Orifice Default:	0.600
Bottom Width:	10.00 ft	Orifice Table:	
Left Slope:	10.000 (h:v)		
Right Slope:	10.000 (h:v)		

Comment: Information from FDOT FPID 36210-1439; Converted to NAVD (-0.93')

Simulation: 100yr-10day

Scenario:	Floodrights F 49
Run Date/Time:	10/20/2020 2:35:56 PM
Program Version:	ICPR4 4.04.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	240.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: CurveNumbers
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Basins

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Manual Basin Rain Opt: Global
Rainfall Name: ~FDOT-240
Rainfall Amount: 11.80 in
Storm Duration: 240.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 100yr-24hr

Scenario: Floodrights F 49
Run Date/Time: 10/20/2020 2:37:20 PM
Program Version: ICPR4 4.04.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: CurveNumbers
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Basins

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr
Manual Basin Rain Opt: Global
Rainfall Name: ~FLMOD
Rainfall Amount: 11.40 in
Storm Duration: 24.0000 hr

Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (1D):	100 ft2
Energy Switch (1D):	Energy

Comment:

Simulation: 10yr-24hr

Scenario: Floodrights F 49
Run Date/Time: 10/20/2020 2:38:01 PM
Program Version: ICPR4 4.04.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: CurveNumbers
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Basins

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Manual Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	7.68 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 25yr-24hr

Scenario: Floodrights F 49
Run Date/Time: 10/20/2020 2:38:39 PM
Program Version: ICPR4 4.04.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Lookup Tables

Rainfall Folder:		Boundary Stage Set:	
		Extern Hydrograph Set:	
Unit Hydrograph Folder:		Curve Number Set:	CurveNumbers
		Green-Ampt Set:	
		Vertical Layers Set:	
		Impervious Set:	Basins

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Manual Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	8.40 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Simulation: 25yr-96hr

Scenario:	Floodrights F 49
Run Date/Time:	10/20/2020 2:39:19 PM
Program Version:	ICPR4 4.04.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	240.0000

	Hydrology [sec]	Surface Hydraulics [sec]
Min Calculation Time:	60.0000	0.1000
Max Calculation Time:		30.0000

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	15.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources		Lookup Tables	
Rainfall Folder:		Boundary Stage Set:	
		Extern Hydrograph Set:	
Unit Hydrograph Folder:		Curve Number Set:	CurveNumbers
		Green-Ampt Set:	
		Vertical Layers Set:	
		Impervious Set:	Basins

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Manual Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SJRWMD-96
		Rainfall Amount:	11.50 in
Edge Length Option:	Automatic	Storm Duration:	96.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

Post-Development
Flood Rights
ICPR Output

Node Max Conditions [Floodrights F 49]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Depressional Area 1	100yr-10day	73.00	72.59	0.0007	30.36	0.00	566944
Depressional Area 1	100yr-24hr	73.00	72.37	0.0010	211.26	0.00	547438
Depressional Area 1	25yr-96hr	73.00	72.43	0.0010	192.69	0.00	552478
Depressional Area 2	100yr-10day	73.50	68.13	0.0010	2.27	0.00	13011
Depressional Area 2	100yr-24hr	73.50	70.96	0.0010	50.36	1.25	98971
Depressional Area 2	25yr-96hr	73.50	70.59	0.0010	40.75	0.58	74176

Scenario	Sim	Node Name	Relative Time [hrs]	Stage [ft]	Total Inflow Volume [ac_ft]
Floodrights F 49	25yr-96hr	Depressional Area 1	240.0028	72.43	39.34

APPENDIX D

Excerpts from Existing I-75 Plans

4-083-0163AG 1993 19699-

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

FINAL PLANS

STATE HIGHWAY

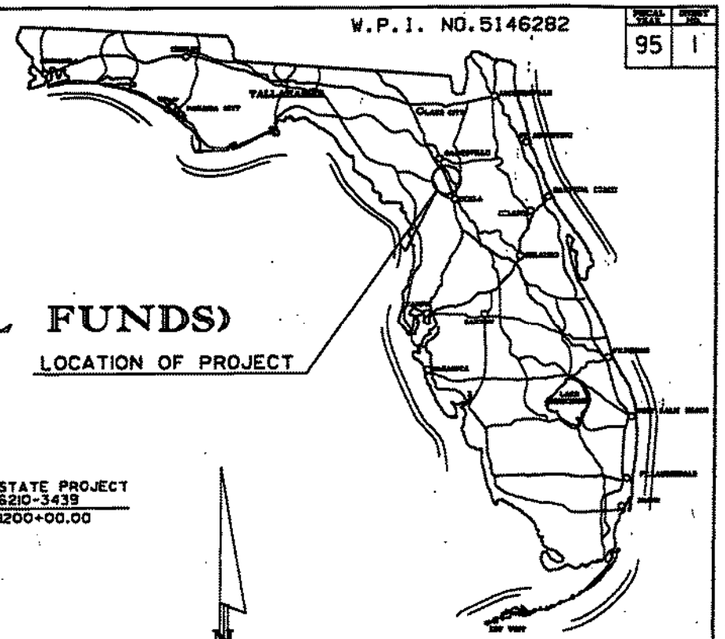
STATE PROJECT NO. 36210-3439 (FEDERAL FUNDS)

MARION COUNTY

I-75 FROM SR 500 TO CR 326

W.P.I. NO. 5146282

FISCAL YEAR	SHEET NO.
95	1



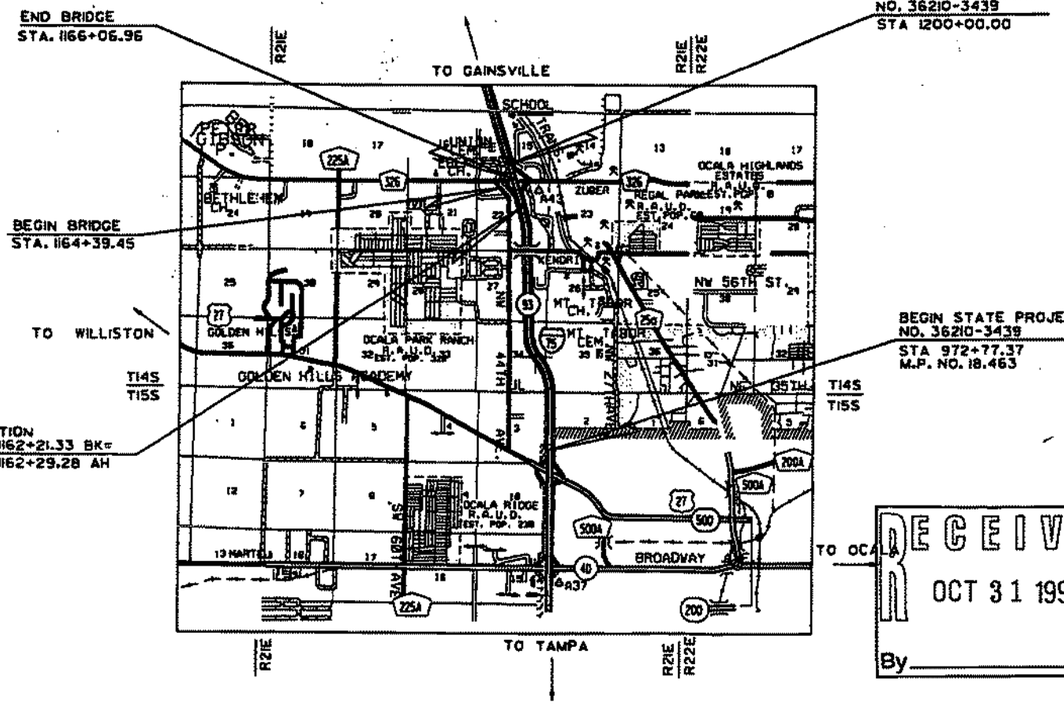
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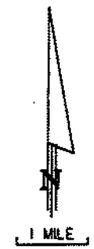
ROADWAY PLANS
SUMMARY OF PAY ITEMS (4 SHEETS)
SIGNING AND PAVEMENT MARKING PLANS
STRUCTURE PLANS

A DETAILED INDEX APPEARS ON THE KEY SHEET OF EACH COMPONENT SET OF PLANS

INDEX OF ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2-4	DRAINAGE MAPS
5	SUPPLEMENTARY DRAINAGE MAP
6-8	TYPICAL SECTIONS & MILLING DETAILS
9-10	SUPERELEVATION TRANSITION
11	MOTORIST AID CALL BOX DETAILS
12	RUMBLE STRIP DETAIL
13	MISCELLANEOUS CONSTRUCTION DETAILS
14-15	SUMMARY OF QUANTITIES
16	SUMMARY OF DITCH BLOCKS
17	TYPICAL DRAINAGE STRUCTURES
18-22	SUMMARY OF DRAINAGE STRUCTURES
23-45	PLAN AND PROFILE
46-53	DRAINAGE STRUCTURES
54	ROADWAY SOIL SURVEY
55-77	ROADWAY CROSS SECTIONS
78-120	POND CROSS SECTIONS
121-138	TRAFFIC CONTROL SHEETS
139	UTILITY ADJUSTMENT SHEETS
140-143	APPROACH SLAB
144	CONTROLLED RELEASE RETURN DETAIL





CONTRACTOR: WHITE CONSTRUCTION CO.
CONSULTANT: PARSONS BRINCKERHOFF CONST. SVCS., INC.
DISTRICT SECRETARY: N. HOUSTON
RESIDENT ENGINEER: B. POST
PROJECT ENGINEER: R. POLLOCK
DATE WORK STARTED: 02/23/94
DATE WORK CONT. ACCEPTED: 1/16/96
DATE WORK ACCEPTED: 1/21/96

ROADWAY PLANS
ENGINEER OF RECORD
Norman H. Johnson, P.E.
BEISWENGER, HOCH & ASSOCIATES, INC.
P.O. Box 160336
Altamonte Springs, Florida
32716-0336

PLANS PREPARED BY
BEISWENGER, HOCH & ASSOCIATES, INC.
CONSULTING ENGINEERS
ALTAMONTE SPRINGS, FLORIDA

CONTRACT PLAN SET

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

GOVERNING SPECIFICATIONS: STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS DATED 1991 AND SUPPLEMENTS THERETO IF NOTED IN THE SPECIAL PROVISIONS FOR THIS PROJECT.

RECEIVED
OCT 31 1996
By

ROADWAY PLANS
APPROVED BY: NORMAN H. JOHNSON

DATE:

P. E. NO.: 42681

TOTAL FIELD BOOKS: 35

BOOK NUMBER	DESCRIPTION
C241	CONSTRUCTION BOOK - ROADWAY SYSTEM
C242	CONSTRUCTION BOOK - BRIDGE SYSTEM
7240	FILING - CLOSE BOOKS
7240	BORING, EXCAVATION - GRADE DIRECTION
7240	BORING, EXCAVATION DRILLING / STABILIZATION / OPTIONAL BASE / TRUCK MEASUREMENTS
7240	CONCRETE BRICK BLOCK PIPES / CONCRETE DITCH SLAB PAVEMENT
7240	DRAINAGE STRUCTURE - DITCH PAVEMENT / STRUCTURES / LACES & BOXES / PIPE UNDERDRAIN
7240	TUNNELING
7240	PAVEMENT ESSENTIAL / SELF TESTING / SAMPLE STUDY OF SUBGRADE
7240	BASE & SURFACE TEST
7240	STRIPING LANE LINES (TEMPORARY / THERMOPLASTIC / PLASTER/LASTING)
7240	GUARDRAIL
7240	MAINTENANCE OF TRAFFIC LANE CLOSURE ON WEEKDAYS / LAW ENFORCEMENT SERVICES
7240	PERMANENT GRADING OF SHOULDERS
7240	DISTRIBUTION MATERIALS / ASPHALT ROLLING / ASPHALT
7240	CONCRETE FINISHING MACHINE / CONCRETE SLAB PAVEMENT
7240	CR 326 BRIDGE SUPERSTRUCTURE - 4 CONTINUOUS SPANS / CONCRETE / REINFORCING STEEL / APPROACH SLAB SPANNING / GROOVING / TRAFFIC RAILING / NOISE BARRIER WALL
7240	UTILIZATION / MONITORING SYSTEM
7240	PROJECT SURVEY - LEVELS, 3-SECTIONS, POND 3-SECTIONS
7240	PROJECT SURVEY - BASELINE LEVELS, 3-SECTIONS
7240	PROJECT SURVEY - POND 3-SECTIONS CHECK

REVISIONS

Roadway sheets 1,6,8,14,25,121 (revised 8-25-1993)
Signing and Pavement Marking sheets S-2 (revised 8-25-1993)
Roadway Cost, Signing Cost (Revised 8-26-93)
Bridge Sheets B-8, B-11, B-14, B-15, B-16, B-17, B-20, B-23, Bridge Cost (Revised 10-18-93)
Mast Quads (Sig Corrections) Locations Dec 1994

LENGTH OF PROJECT		
	LIN. FT.	MILES
ROADWAY	22,547.17	4.270
BRIDGES	167.51	0.032
NET LENGTH OF PROJECT	22,714.68	4.302
EXCEPTIONS	0.00	0.000
GROSS LENGTH OF PROJECT	22,714.68	4.302

REVISIONS		
DATE	BY	DESCRIPTION
8-25-93	K.M.S.	Changed the summary of pay item sheets from 10 sheets to 14 sheets As Built
1-96		

THIS CERTIFICATION LIMITED TO VERIFICATION OF THE ACCURACY OF AS-BUILT POINTS SHOWN ON THIS SHEET.

PARSONS BRINCKERHOFF CONSTRUCTION SERVICES, INC.
By: Date: 01/21/96

F. D. O. T. PROJECT MANAGER: GEORGE J. PAPPAS, P.E.

08/26/93
N:\PSN\keystr4.dgn
H:\SCAN\SHEETQ.PRF

I-4
36210-3439

STATE PROJ. NO.	SHEET NO.
36210-1439	3

Area currently not receiving treatment or attenuation in roadside swales

Area currently not receiving treatment or attenuation in roadside swales

T. 15 S. R. 21 E. T. 14 S.

REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

AERIAL PHOTOGRAPHIC DATA							
FLOWN BY	F.D.O.T.		NAME	DATE		NAME	DATE
PHOTO DATE	4-25-89	DESIGNED BY	M.M.K.	11-90	DRAWN BY	L.A.F.	11-90
PHOTO ID NO.	P.D. 3810-11-17	CHECKED BY	K.J.E.	11-90	CHECKED BY	M.M.K.	11-90
		SUPERVISED BY : Norman H. Johnson, P.E.					

FLORIDA DEPARTMENT OF TRANSPORTATION

APPROVED BY :

DATE :

DRAINAGE MAP

RECEIVED
MAR 05 1993
PERMIT DATA SERVICES
Tallahassee

19679

PROJECT NO.	SHEET NO.
362/0-3439	27

CURVE C1
PI Sta 1009+94.47
Δ = 30° 59' 08" LT
D = 1° 45' 00"
L = 1770.60'
T = 907.53'
R = 3,274.04'
PC Sta 1000+86.95
PT Sta 1018+57.55
e = 0.065 Ft/Ft

40 Ft

Const. 34' x 7" Conc. Ditch Pavement (4" Thick, Class I) With 24" Toewall (30.3 S.Y.) Index No. 281

Remove Existing Fence and Construct Type A Fence

LA R/W Line

4:1 (Typ)

Pond D1

S.E. Trans.

0.065 Ft/Ft

0.002 Ft/Ft

S-125

18" RCP

Sign

Begin Guardrail Taper Sta. 1018+40

Sta. 1018+57.55

-95.57'

-15.57'

End Single Face GR End Arch Type 10 Sta. 1020+75

Sta. 1023+17 Begin Underdrain Connect to S-130

24" RCP

S-129

Exist Shldr Pvt

Sta. 1025+00 Connect Underdrain (Bk & Ah) to S-132

Single Faced GR

S-126

C1

Exist Rdwy

Milling and Resurfacing

S-128

Remove Exist Inlet

12' Widening

10' Shldr Pvt

1015

1020

1025

20' 12'

Const Shoulder Gutter

Sign

℄ Survey I-75

N 30° 28' 08" W

S-130

S-132

S-124

12' Widening

8' Shldr Pavt

S-127

B-13

S-131

10' Typ.

-88.57'

-58.57'

10.02 Ft/Ft

Sta. 1020+25 Connect To Exist Ground

6:1

Pond D2

Pond D3

End Shoulder Gutter

End Single Faced Guardrail

Begin Double Faced Guardrail Sta 1020+50 S.E. Trans.

Weir El. 81.50 (existing ground el.)

B-14

Const. 33' x 10' Conc. Ditch Pavement (4" Thick, Class I) With 24" Toewall (42.2 S.Y.) Index No. 281

Const. 25' x 20' Conc. Ditch Pavement (4" Thick, Class I) with Two Toewalls on Two Ends (69.4 S.Y.) Index No. 281

Set 5/8" FDOT Yellow Cap, R/W

Rural Fence

Spike @ Survey

90° T.C. STA 1018+57.55

270° T.C.

150'

0.6'

0.4'

BM No. 102
FDOT Survey Marker Brass Disk In 4"X4" Concrete Post 6" Below Ground
Sta 1020+04.1, 146.8' Lt.
Elev. 86.039

Exist. PGL (East)

6" UD Pipe FL. 88.50

6" UD Pipe FL. 89.50

Const. 6" Underdrain Pipe See Sheet 13 for Details

93.02

94.42

S-126

Exist. 18" RCP

S-127

S-128

S-130

Exist. 24" RCP

S-132

Const. 18" Pipe

-8.3+1

87.44

85.19

86.94

87.46

87.44

87.13

86.94

88.14

86.94

-40.00 Rt 50.00 Rt

EL. 84.00 EL. 84.00

87.00

86.00

-50.00 Rt 50.00 Rt

EL. 88.30 EL. 88.30

-0.00%

Special Ditch Lt

Special Ditch Rt

Connect to Exist. Ground

D.P.I. Rt. -25.00 EL. 81.50

D.P.I. Rt. -80.00 EL. 79.00

D.P.I. Rt. -84.20 EL. 79.00

D.P.I. Rt. -76.80 EL. 85.50

6:1

SCALE: 1" = 40' Horiz.
1" = 8' Vert.

105 100 95 90 85 80 75 70

1015 1020 1025

4 5 6 7 8 1 2 3 4 6

07/15/93

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N:\75\n\dd416.dgn

REVISIONS											
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
1-96		As Built									

	NAME	DATE		NAME	DATE
DESIGNED BY	HMS	3/92	DRAWN BY	KAH	3/92
CHECKED BY	NHJ	3/92	CHECKED BY	HMS	3/92

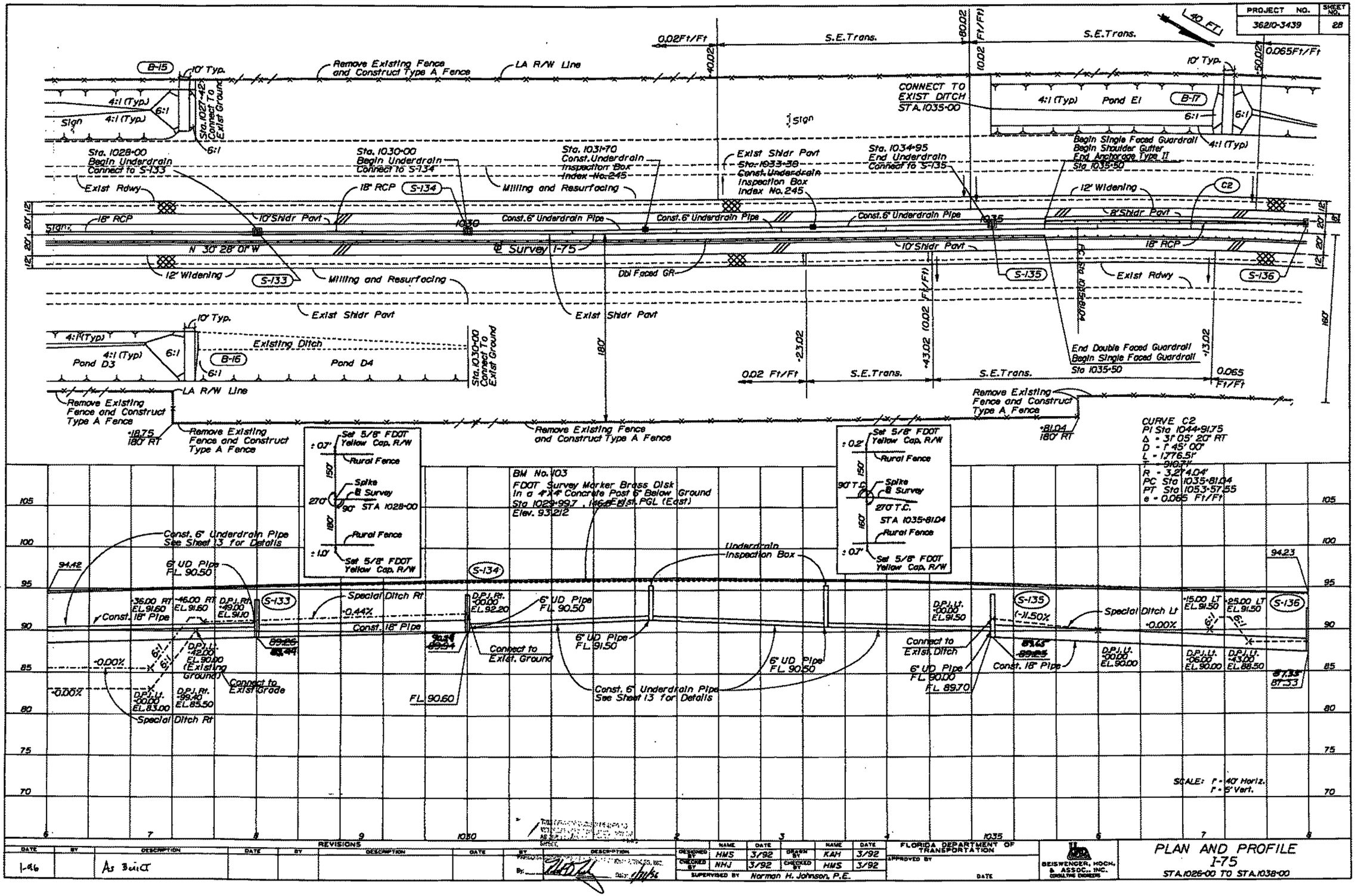
SUPERVISED BY Norman H. Johnson, P.E.

FLORIDA DEPARTMENT OF TRANSPORTATION
APPROVED BY
DATE

BEISWENGER, HOCH, & ASSOC., INC.
CONSULTING ENGINEERS

PLAN AND PROFILE
I-75
STA. 1014+00 TO STA. 1026+00

PROJECT NO.	SHEET NO.
362/0-3439	28



REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
1-96		As Built						

	NAME	DATE		NAME	DATE
DESIGNED BY	HMS	3/92	DRAWN BY	KAH	3/92
CHECKED BY	NHJ	3/92	CHECKED BY	HMS	3/92

SUPERVISED BY Norman H. Johnson, P.E.

FLORIDA DEPARTMENT OF TRANSPORTATION

APPROVED BY

DATE

BEISWENGER, HOCH, & ASSOC., INC. CONSULTING ENGINEERS

PLAN AND PROFILE I-75

STA. 1026+00 TO STA. 1038+00

07/15/93

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PROJECT NO.	SHEET NO.
3620-3439	29

WF1

WF2

WF3

Weir WF1

Weir WF2

Weir WF3

CURVE C2
PI Sta 1044+91.75
Δ = 3° 05' 20" RT
D = 1° 45' 00"
L = 1776.51'
T = 910.71'
R = 3,274.04'
PC Sta 1035+81.04
PT Sta 1053+57.55
e=0.065 Ft/Ft

REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
1-96		As Built						

	NAME	DATE		NAME	DATE
DESIGNED BY	HMS	3/92	DRAWN BY	KAH	3/92
CHECKED BY	NHJ	3/92	CHECKED BY	HMS	3/92

SUPERVISED BY Norman H. Johnson, P.E.

FLORIDA DEPARTMENT OF TRANSPORTATION

APPROVED BY

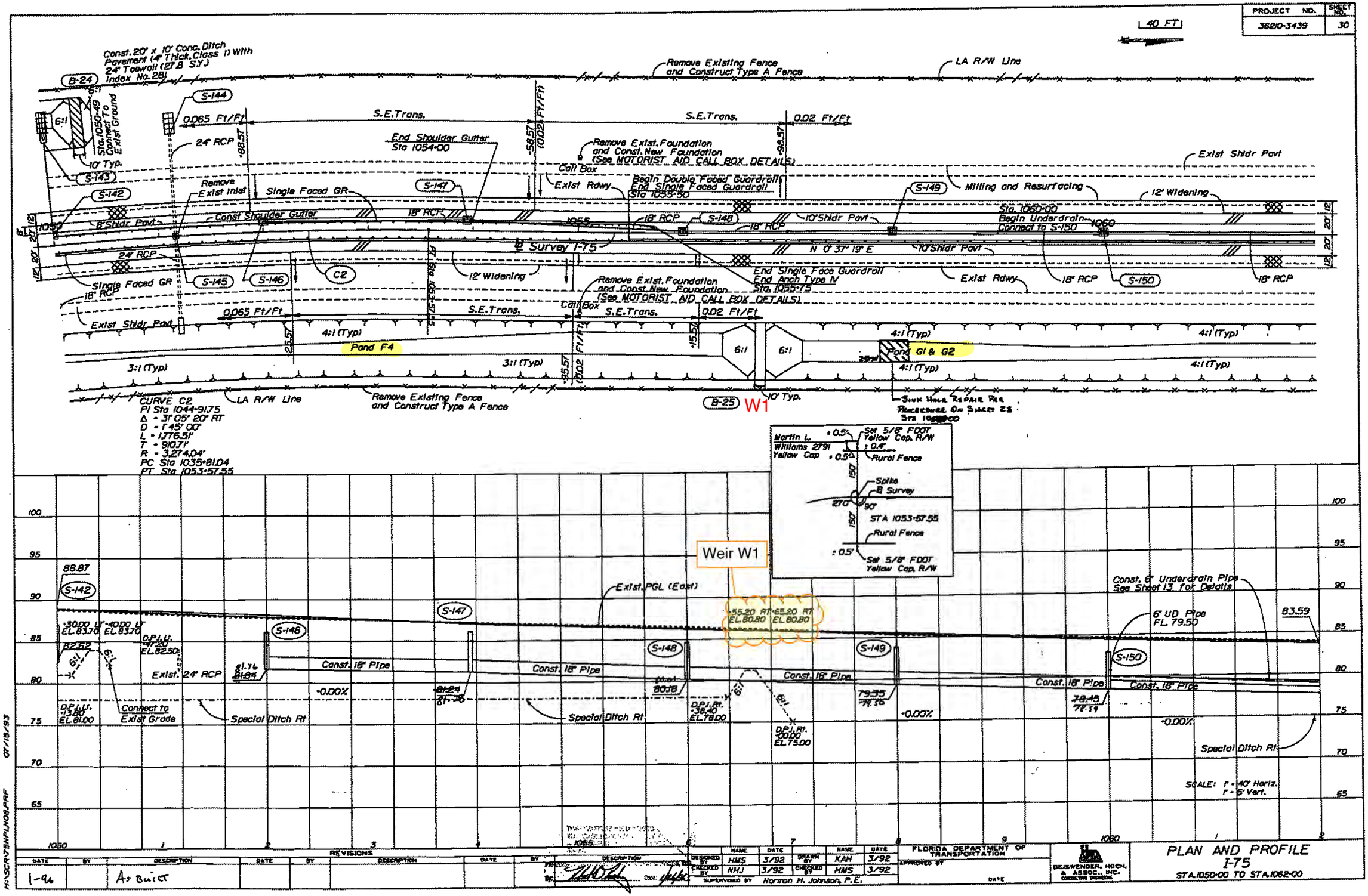
DATE

BE/SWENGER, HOCH, & ASSOC., INC. CONSULTING ENGINEERS

PLAN AND PROFILE
I-75
STA.1038+00 TO STA.1050+00

SCALE: 1" = 40' Horiz.
1" = 5' Vert.

PROJECT NO.	SHEET NO.
36210-3439	30



REVISIONS												
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE
1-96		As Built										

	NAME	DATE		NAME	DATE
DESIGNED BY	HMS	3/92	DRAWN BY	KAH	3/92
CHECKED BY	NHJ	3/92	CHECKED BY	HMS	3/92
SUPERVISED BY	Norman H. Johnson, P.E.				

FLORIDA DEPARTMENT OF TRANSPORTATION
APPROVED BY
DATE

BEISWENGER, HOCH, & ASSOC., INC. CONSULTING ENGINEERS

PLAN AND PROFILE
I-75
STA. 1050+00 TO STA. 1062+00

07/15/93
N:\TSNHT\PLN08.DGN
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PROJECT NO.	SHEET NO.
362/0-3439	31

40 FT

W10 W11

Remove Existing Fence and Construct Type A Fence

18" RCP

Sta. 1062+16.80
6" Underdrain Pipe (Bk & Ah)
Connect to S-151

S-151 Const. 6" Underdrain Pipe

S-153 Exist Rdwy

S-154 Milling and Resurfacing

S-155 Remove Exist Inlet

S-157 18" RCP 12' Widening

S-158

10' Shldr Pavt

1065 18" RCP N 0° 37' 19" E

℄ Survey I-75

1070

Remove Exist Inlet 12' Widening

Sta. 1064+45
End Underdrain
Connect to S-153

Dbl Faced GR 18" RCP

Exist Rdwy Milling and Resurfacing

18" RCP Exist Shldr Pavt

S-152

Pond G2 4:1 (Typ) 6:1 10' Typ.

Pond G3 S-156 Pond G4 Pond G5

B-27 B-29 B-31

W2 W3 W4

LA R/W Line

Const. 24' x 7" Conc. Ditch Pavement (4" Thick, Class I) With 24" Toewall (22.6 S.Y.) Index No. 281

Remove Existing Fence and Construct Type A Fence

Const. 14' x 7" Conc. Ditch Pavement (4" Thick, Class I) With 24" Toewall (14.8 S.Y.) Index No. 281

Sta 1063+97 Conc. Ditch Flume

LA R/W Line

Sta. 1068+44 Connect To Exist Ground

B-28 B-30 B-32

Pond G10 Pond G11

Exist Shldr Pavt Sign

Set 5/8" FDOT Yellow Cap, R/W

Rural Fence

Spike & Survey

STA 1064+00

Rural Fence

Set 5/8" FDOT Yellow Cap, R/W

Weir W2 Weir W3 Weir W10 Weir W4 Weir W11

Exist. PGL (East)

Exist. 18" RCP

6" UD Pipe FL 78.50

6" UD Pipe FL 77.50

Special Ditch Rt

Const. 6" Underdrain Pipe See Sheet 13 for Details

Const. 18" Pipe

Connect to Exist. Grade

Special Ditch Rt

Special Ditch Lt

Special Ditch Rt

Const. 18" Pipe

Special Ditch Lt

Special Ditch Rt

Const. 18" Pipe

SCALE: 1" = 40' Horiz.
1" = 5' Vert.

REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	
1-96		As Built						

THIS CERTIFICATION IS LIMITED TO ... OF THE ACCURACY OF ... CONDITIONS EXISTING ON THIS ...

	NAME	DATE
DESIGNED BY	HMS	3/92
CHECKED BY	NHJ	3/92
DRAWN BY	KAH	3/92
CHECKED BY	HMS	3/92

SUPERVISED BY Norman H. Johnson, P.E.

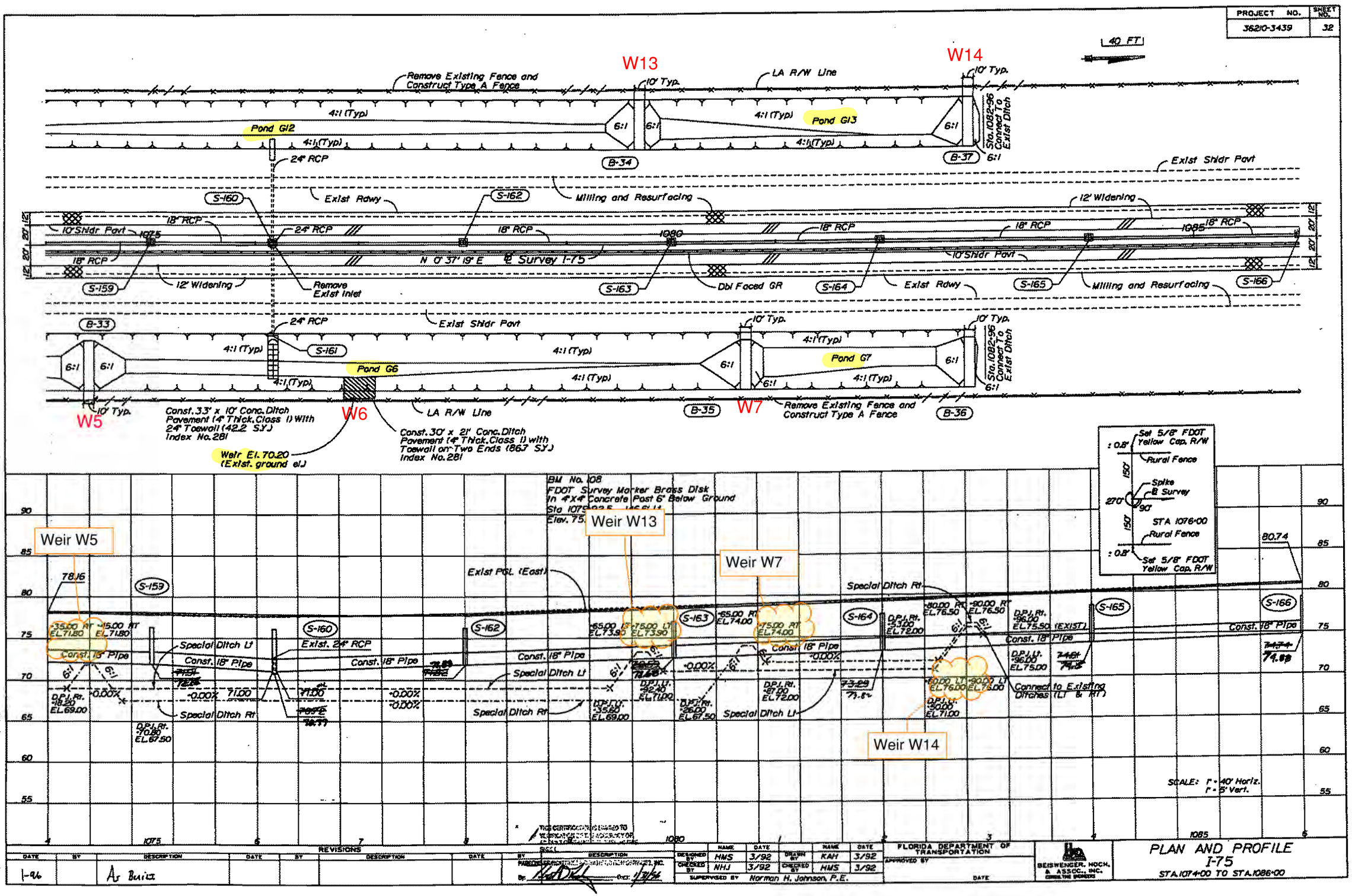
FLORIDA DEPARTMENT OF TRANSPORTATION
APPROVED BY
DATE

BEISWENGER, HOCH, & ASSOC., INC. CONSULTING ENGINEERS

PLAN AND PROFILE
I-75
STA. 1062+00 TO STA. 1074+00

07/15/93
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PROJECT NO.	SHEET NO.
36210-3439	32



| REVISIONS | | |

REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

	NAME	DATE		NAME	DATE
DESIGNED BY	K.J.L.	11-92	DRAWN BY	T.A.H.	11-92
CHECKED BY	M.M.K.	11-92	CHECKED BY	K.J.L.	11-92

SUPERVISED BY Norman H. Johnson, P.E.

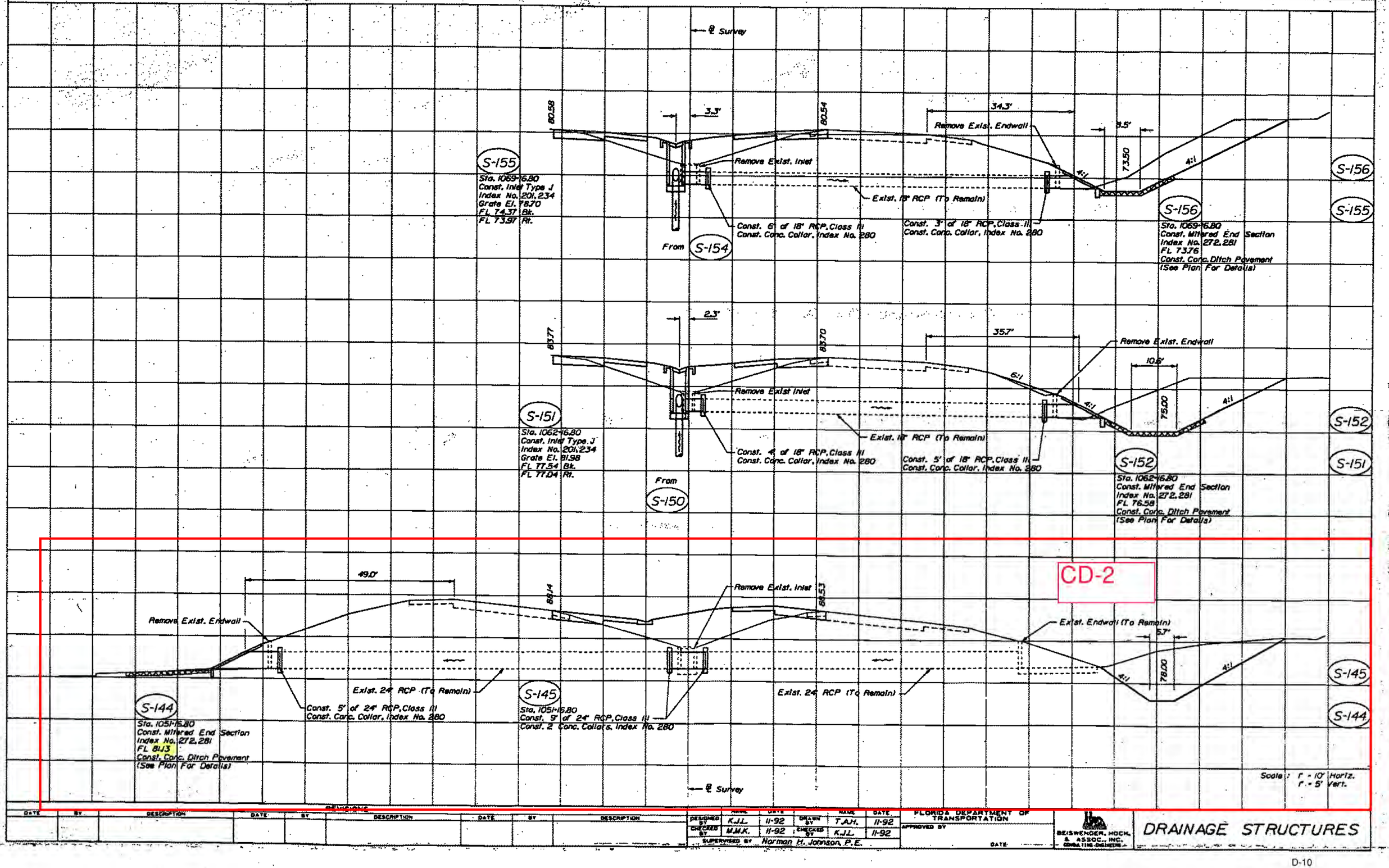
FLORIDA DEPARTMENT OF TRANSPORTATION
APPROVED BY
DATE

BEISWENGER, HOCH, & ASSOC., INC.
CONSULTING ENGINEERS

DRAINAGE STRUCTURES

07/15/93
H:\SURVS\DRAINS01.PRT

PROJECT NO.	SHEET NO.
36210-3439	48



REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

	NAME	DATE		NAME	DATE
DESIGNED BY	K.J.L.	11-92	DRAWN BY	T.A.H.	11-92
CHECKED BY	M.M.K.	11-92	CHECKED BY	K.J.L.	11-92
SUPERVISED BY	Norman H. Johnson, P.E.				

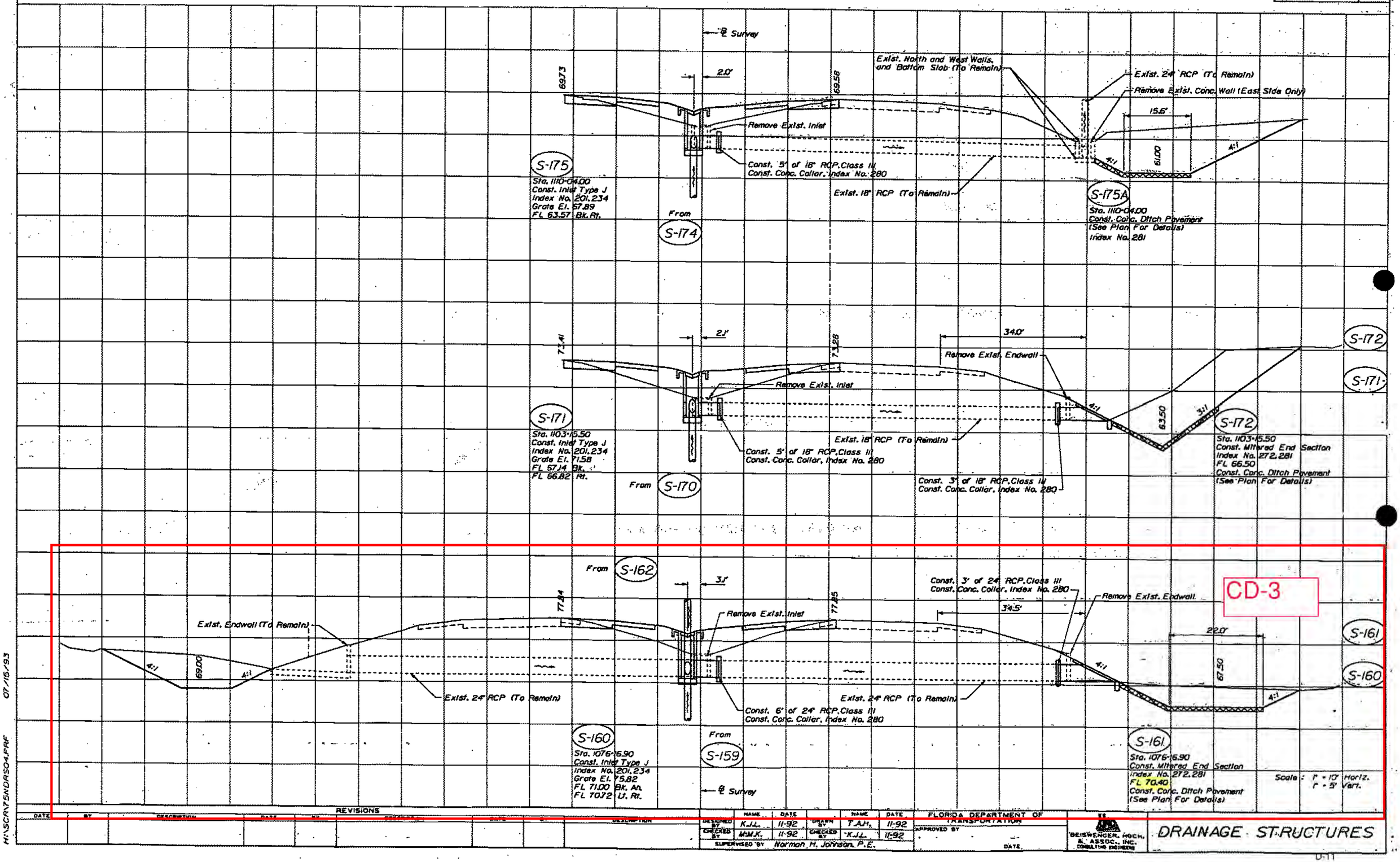
FLORIDA DEPARTMENT OF TRANSPORTATION
APPROVED BY
DATE

BEISWENGER, HOCH & ASSOC., INC. CONSULTING ENGINEERS

DRAINAGE STRUCTURES

H:\SCR75\NDH\S03.PRF 01/15/93

PROJECT NO.	SHEET NO.
3620-3439	49



REVISIONS									
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	

	NAME	DATE		NAME	DATE
DESIGNED BY	K.J.L.	11-92	DRAWN BY	T.A.H.	11-92
CHECKED BY	M.M.K.	11-92	CHECKED BY	K.J.L.	11-92

SUPERVISED BY Norman H. Johnson, P.E.

FLORIDA DEPARTMENT OF TRANSPORTATION
APPROVED BY
DATE

BEISWENGER, HOCH, & ASSOC., INC. CONSULTING ENGINEERS

DRAINAGE STRUCTURES

H:\SCR175\NDRS04.PRF 07/15/93

APPENDIX E

Excerpts from
Barracuda Boat & Storage
Plans and Permit

Transferred to Operation

MARION COUNTY PROJECT # 20110460011

AS-BUILT PLAN

BARRACUDA BOAT & RV STORAGE

A PORTION OF SECTION 34, TOWNSHIP 14 SOUTH, RANGE 21 EAST
MARION COUNTY, FLORIDA
PREPARED NOVEMBER 2011

WAIVERS:	DATE APPROVED
1 SECTION 6.2.5.a (1) (b) - MINIMUM DRIVEWAY SPACING	JANUARY 9, 2012
2 SECTION 6.2.5.a (2) (b) - PARALLEL ACCESS	JANUARY 9, 2012
3 SECTION 6.2.9.d (9) - AS-A MAINTENANCE BOND	JANUARY 9, 2012
4 SECTION 6.2.3.b.1 (7) (c) (i) - BUFFER REQUIREMENTS	JANUARY 9, 2012
5 SECTION 10.2 - 1.1.1.C - SCREENING OF ACTIVITIES	JANUARY 9, 2012

THIS DEVELOPMENT CONTAINS:
PROPERTY BOUNDARY = 9.53 ACRES
A.M. PEAK HOUR OF ADJACENT STREET = 8 TRIPS
PARCEL #13689-000-00
(ITE TRIP GENERATION MANUAL CODE 151)

LEGAL DESCRIPTION:

(TRACT "A")
A PORTION OF THE SOUTH 465.00 FEET OF THE NORTH 1050.00 FEET OF THE WEST 1/3 OF THE W.E. 1/4 OF SECTION 34, TOWNSHIP 14 SOUTH, RANGE 21 EAST, TOGETHER WITH A PORTION OF THE SOUTH 513.00 FEET OF THE NORTH 1050.00 FEET OF THE WEST 1/3 OF THE W.E. 1/4 OF SECTION 34, TOWNSHIP 14 SOUTH, RANGE 21 EAST, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE N.W. CORNER OF THE SOUTH 465.00 FEET OF THE NORTH 1050.00 FEET OF THE WEST 1/2 OF THE N.E. 1/4 OF SECTION 34, TOWNSHIP 14 SOUTH, RANGE 21 EAST; THENCE S.89°45'50"E., ALONG THE NORTH BOUNDARY OF THE SOUTH 465.00' OF THE NORTH 1050.00' OF THE WEST 1/2 OF THE N.E. 1/4 OF SECTION 34, TOWNSHIP 14 SOUTH, RANGE 21 EAST, A DISTANCE OF 66.87 FEET TO A POINT ON THE EAST RIGHT OF WAY LINE OF N.W. 44TH AVENUE (RIGHT OF WAY VARIES), SAID POINT BEING THE POINT OF BEGINNING; THENCE DEPARTING SAID EAST RIGHT OF WAY LINE, ALONG SAID NORTH BOUNDARY LINE S.89°45'50"E., A DISTANCE OF 378.64 FEET; THENCE DEPARTING SAID NORTH BOUNDARY N.00°33'41"E., A DISTANCE OF 33.00 FEET TO A POINT ON THE NORTH BOUNDARY OF THE SOUTH 513.00 FEET OF THE NORTH 1050.00 FEET OF THE WEST 1/3 OF THE N.E. 1/4 OF SECTION 34, TOWNSHIP 14 SOUTH, RANGE 21 EAST; THENCE S.89°45'50"E., ALONG SAID NORTH BOUNDARY OF THE SOUTH 513.00 FEET A DISTANCE OF 540.37 FEET TO A POINT ON THE WEST RIGHT OF WAY LINE OF INTERSTATE 75 (RIGHT OF WAY VARIES); SAID POINT BEING ON A 2424.57 FOOT RADIUS CURVE CONCAVE EASTERLY HAVING A CHORD BEARING AND DISTANCE OF S.08°37'03"E., 846.36 FEET; THENCE SOUTHEASTERLY ALONG SAID RIGHT OF WAY LINE AND SAID CURVE THROUGH A CENTRAL ANGLE OF 20°05'54", A DISTANCE OF 850.85 FEET; THENCE DEPARTING SAID WEST RIGHT OF WAY LINE, S.89°45'50"W., ALONG THE SOUTH BOUNDARY OF THE SOUTH 465.00 FEET OF THE NORTH 1050.00 FEET OF THE WEST 1/2 OF THE N.E. 1/4 OF SECTION 34, TOWNSHIP 14 SOUTH, RANGE 21 EAST, 465.81 FEET; THENCE DEPARTING SAID SOUTH BOUNDARY, N.44°00'41"E., A DISTANCE OF 334.53 FEET; THENCE N.89°28'56"W., A DISTANCE OF 515.34 FEET TO A POINT ON THE AFOR MENTIONED EAST RIGHT OF WAY LINE OF N.W. 44TH AVENUE; THENCE N.00°34'29"E., ALONG SAID EAST RIGHT OF WAY, 122.48 FEET TO THE POINT OF BEGINNING; SAID LANDS BEING SITUATE IN MARION COUNTY, FLORIDA AND CONTAINING 7.00 ACRES MORE OR LESS.

(TRACT "B")
COMMENCE AT THE N.W. CORNER OF THE SOUTH 465.00 FEET OF THE NORTH 1050.00 FEET OF THE WEST 1/3 OF THE N.E. 1/4 OF SECTION 34, TOWNSHIP 14 SOUTH, RANGE 21 EAST; THENCE S.89°45'50"E., ALONG THE NORTH BOUNDARY OF THE SOUTH 465.00' OF THE NORTH 1050.00' OF THE WEST 1/2 OF THE N.E. 1/4 OF SECTION 34, TOWNSHIP 14 SOUTH, RANGE 21 EAST, A DISTANCE OF 439.81 FEET; THENCE DEPARTING SAID NORTH BOUNDARY, S.00°33'41"E., A DISTANCE OF 33.00 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE S.00°33'41"E., A DISTANCE OF 198.09 FEET; THENCE S.89°45'50"E., A DISTANCE OF 372.65 FEET TO A POINT ON THE WEST RIGHT OF WAY LINE OF INTERSTATE 75 (NO SR VARIES); THENCE S.00°23'52"W., ALONG SAID WEST RIGHT OF WAY LINE, 40.50 FEET TO THE POINT OF CURVATURE OF A 2424.57 FOOT RADIUS CURVE, CONCAVE EASTERLY, HAVING A CHORD BEARING AND DISTANCE OF S.00°27'53"E., 149.51 FEET; THENCE SOUTHERLY, ALONG THE ARC OF SAID CURVE, 0.69.01 A CENTRAL ANGLE OF 03°36'03", A DISTANCE OF 149.53 FEET TO A POINT ON THE SOUTH BOUNDARY OF THE SOUTH 513.00 FEET OF THE NORTH 1050.00 FEET OF THE WEST 1/3 OF THE N.E. 1/4 OF SECTION 34, TOWNSHIP 14 SOUTH, RANGE 21 EAST; THENCE DEPARTING SAID WEST RIGHT OF WAY LINE, N.89°45'50"W., ALONG SAID NORTH BOUNDARY, 540.37 FEET TO THE POINT OF BEGINNING; SAID LANDS BEING SITUATE IN MARION COUNTY, FLORIDA AND CONTAINING 2.53 ACRES, MORE OR LESS.

BASIS OF BEARINGS:

ALL BEARINGS ARE ASSUMED, BASED ON THE EAST RIGHT-OF-WAY LINE OF NW 44th AVENUE, TO BEAR N00°34'29"E.

BENCHMARK:

THE VERTICAL DATUM WAS BASED ON THE CITY OF OCALA ENGINEERING DEPARTMENTS CONTROL POINT 0008, ELEVATION = 78.97, NAVD 88

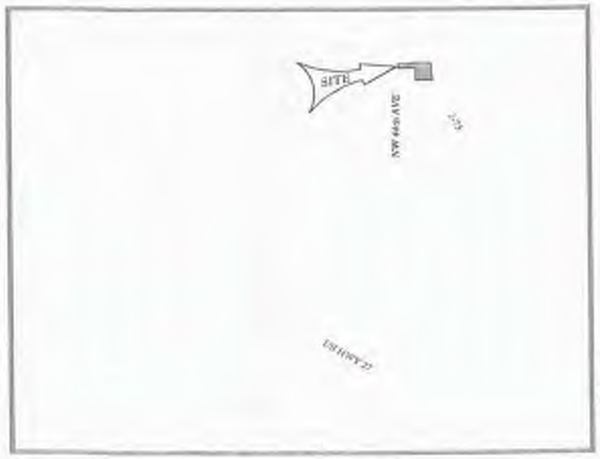
OWNER/DEVELOPER:
NW 44TH AVENUE PARTNERS, LLC
CONTACT: HARVEY VANDEVEN
4260 NE 35TH STREET
OCALA, FLORIDA 34479
PHONE (352) 236-3355
FAX (352)236-0038

SURVEYOR:
PREECE LAND SURVEYING, INC.
GLEN H. PREECE, JR. P.S.M. #5427
2201 SE 30th AVENUE, SUITE 102
OCALA, FLORIDA 34471
PHONE (352) 351-0091
FAX (352) 351-0093

PREPARED BY:
TILLMAN & ASSOCIATES ENGINEERING, LLC
1720 SE 16TH AVENUE, BLDG. 100
OCALA, FLORIDA 34471
PHONE (352) 307-1947
FAX (352) 307-2420

NOTES:

1. ALL CONSTRUCTION COVERED BY THESE PLANS SHALL COMPLY WITH THE MATERIAL REQUIREMENTS AND QUALITY CONTROL STANDARDS CONTAINED IN THE MARION COUNTY LAND DEVELOPMENT CODE AND THE MARION COUNTY UTILITY MANUAL AS APPLICABLE.
2. PROJECT IS LOCATED IN FLOOD ZONE X, PER FEMA FLOOD INSURANCE RATE MAP FOR MARION COUNTY, FLORIDA, PANEL NUMBER 12083C0502D, EFFECTIVE DATE AUGUST 28, 2008.
3. THIS PROJECT HAS NOT BEEN GRANTED CONCURRENCY APPROVAL AND/OR GRANTED AND/OR RESERVED ANY PUBLIC FACILITY CAPACITIES. FUTURE ROUTES TO DEVELOP THE PROPERTY ARE SUBJECT TO A DESIGNATED CONCURRENCY DETERMINATION AND FINAL APPROVAL. TO DATE OF THE PROPERTY HAS NOT BEEN OBTAINED. THE COMPLETION OF CONCURRENCY REVIEW AND/OR APPROVAL HAS BEEN DEFERRED TO LATER DEVELOPMENT REVIEW STAGES, SUCH AS, BUT NOT LIMITED TO, BUILDING PERMIT REVIEW.
4. ALL UTILITIES UNDER EXISTING OR PROPOSED PAVEMENT SHALL BE SLEEVED IN ACCORDANCE WITH SECTION 8.2.6a OF THE MARION COUNTY LAND DEVELOPMENT CODE.
5. THIS PROJECT IS LOCATED WITHIN THE SILVER SPRINGS SECONDARY SPRINGS PROTECTION ZONE.
6. PROPOSED INTERNAL ROADWAYS WILL BE DESIGNED FOR 30 MPH AND POSTED AT 15 MPH.
7. DEVELOPER WILL BE RESPONSIBLE FOR MAINTENANCE OF NEW AND REPLACEMENT STREET SIGNAGE.



VICINITY MAP
SCALE: 1"=2000'

INDEX OF SHEETS

1	COVER SHEET
2	GENERAL NOTES
3	PHASING PLAN
4	AERIAL PHOTOGRAPH
5	GEOMETRY PLAN
6	GRADING PLAN
7	UTILITY PLAN
8	ROADWAY AND PAVEMENT DETAILS
9	DRAINAGE DETAILS
10	WATER & SANITARY SEWER DETAILS
10A	PUMP STATION DETAILS & NOTES
11	EROSION CONTROL PLAN
12	EROSION CONTROL DETAILS
L1	LANDSCAPE PLAN
L2	PLANT LIST, NOTES & DETAILS
IR1	IRRIGATION PLAN
1 of 1	BOUNDARY & TOPOGRAPHIC SURVEY (BY PREECE LAND SURVEYING, INC.)

AS-BUILT NOTES:
1. AS BUILT INFORMATION IS SHOWN INSIDE AN OVAL OR WITH AN ASTERISK.
2. AS-BUILT INFORMATION IS SHOWN ON SHEETS 5, 6 AND 7 ONLY.
3. AS BUILT ELEVATIONS ARE BASED ON PROJECT BENCHMARKS.
4. AS-BUILT SURVEY DATE: 03-11-13

AS BUILT SURVEY PREPARED BY:
ROGERS ENGINEERING, INC.
1105 S.E. 3rd AVE.
OCALA, FL 34471

SURVEYOR'S CERTIFICATE:
I HEREBY CERTIFY THAT THE TOPOGRAPHIC SURVEY AND DRAWING WERE PREPARED UNDER MY SUPERVISION AND THE INFORMATION SHOWN IS TRUE AND CORRECT AND ALL ADJACENT PROPERTIES HAVE LEGAL ACCESS.

Glen H. Preece, Jr.
PREECE LAND SURVEYING, INC.
Registered Land Surveyor No. 5427
STATE OF FLORIDA

OWNER'S CERTIFICATION
I HEREBY CERTIFY THAT I AND MY SUCCESSORS AND ASSIGNS SHALL PERPETUALLY MAINTAIN THE IMPROVEMENTS AS SHOWN ON THIS PLAN.

Harvey Vandeven
NW 44TH AVENUE PARTNERS, LLC

ENGINEER CERTIFICATION
I HEREBY CERTIFY THAT THE DRAINAGE FACILITIES ARE DESIGNED IN ACCORDANCE WITH APPLICABLE REQUIREMENTS OF THE LAND DEVELOPMENT CODE OF MARION COUNTY AND THAT ADJACENT PROPERTIES WILL BE PROTECTED FROM STORMWATER DAMAGE AS A RESULT OF THE PROPOSED DEVELOPMENT, AND I HAVE SUBMITTED A PLAN TO THE APPROPRIATE WATER MANAGEMENT DISTRICT AND F.D.E.P. ALL ROADS ARE DESIGNED TO BE ABOVE THE 25 YEAR, 24 HOUR DESIGN FLOOD LEVEL, AND SIGHT DISTANCE AT ALL INTERSECTIONS COMPLIES WITH AASHTO REQUIREMENTS AND F.D.O.T. SITE IMPACT HANDBOOK. INTERNAL EVACUATION ROUTES ARE DESIGNED TO BE ABOVE THE 100 YEAR, 24 HOUR STORM EVENT.

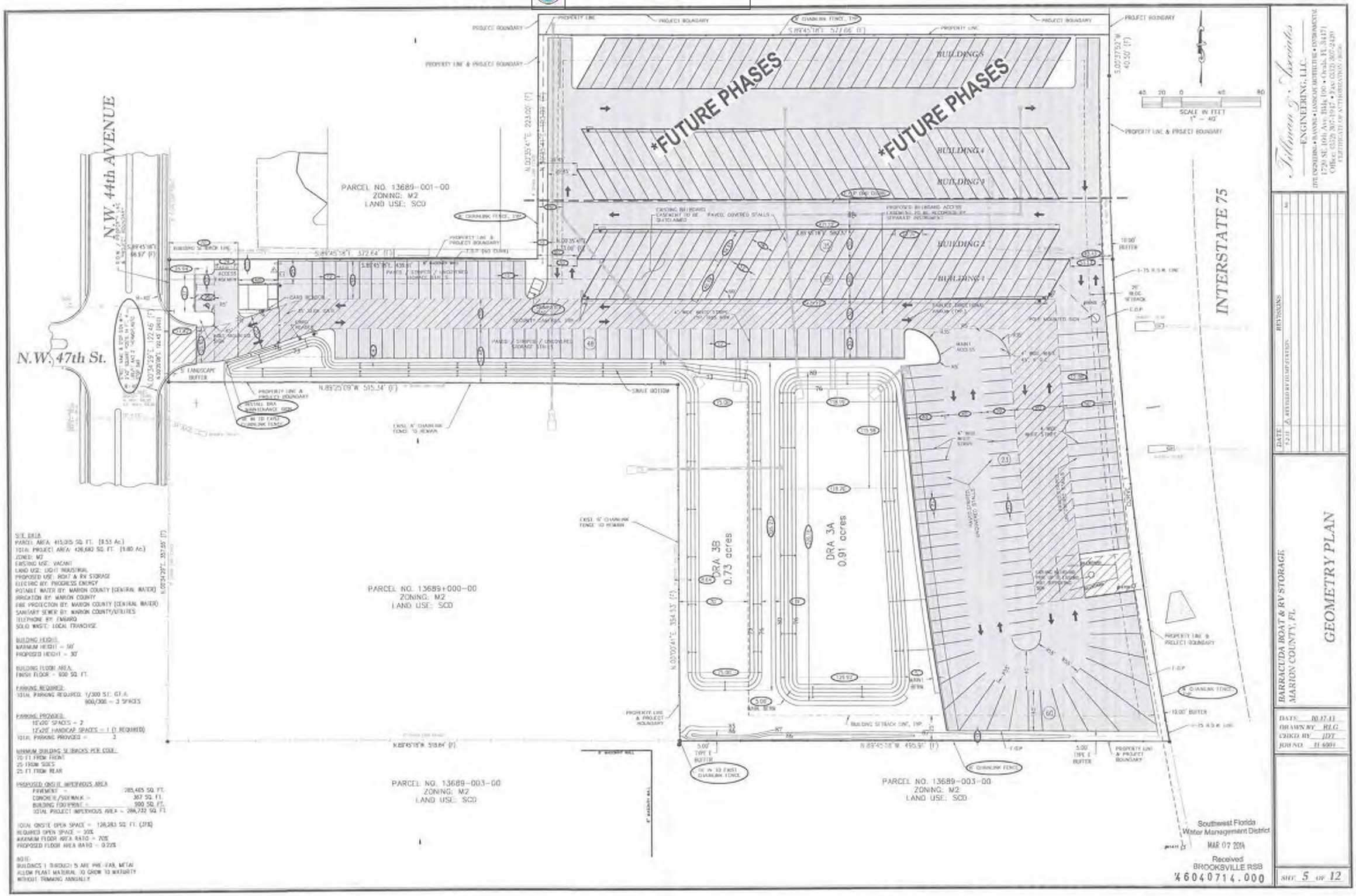
J. DAVID TILLMAN, P.E.
Registered Engineer No. 60251
STATE OF FLORIDA

Tillman & Associates
ENGINEERING, LLC
CIVIL ENGINEERING • PLANNING • LANDSCAPE ARCHITECTURE • ENVIRONMENTAL
1720 SE 16th Ave. Bldg 100 • Ocala, FL 34471
Office: (352) 307-1947 • Fax: (352) 307-2420
CERTIFICATE OF AUTHORIZATION #30356

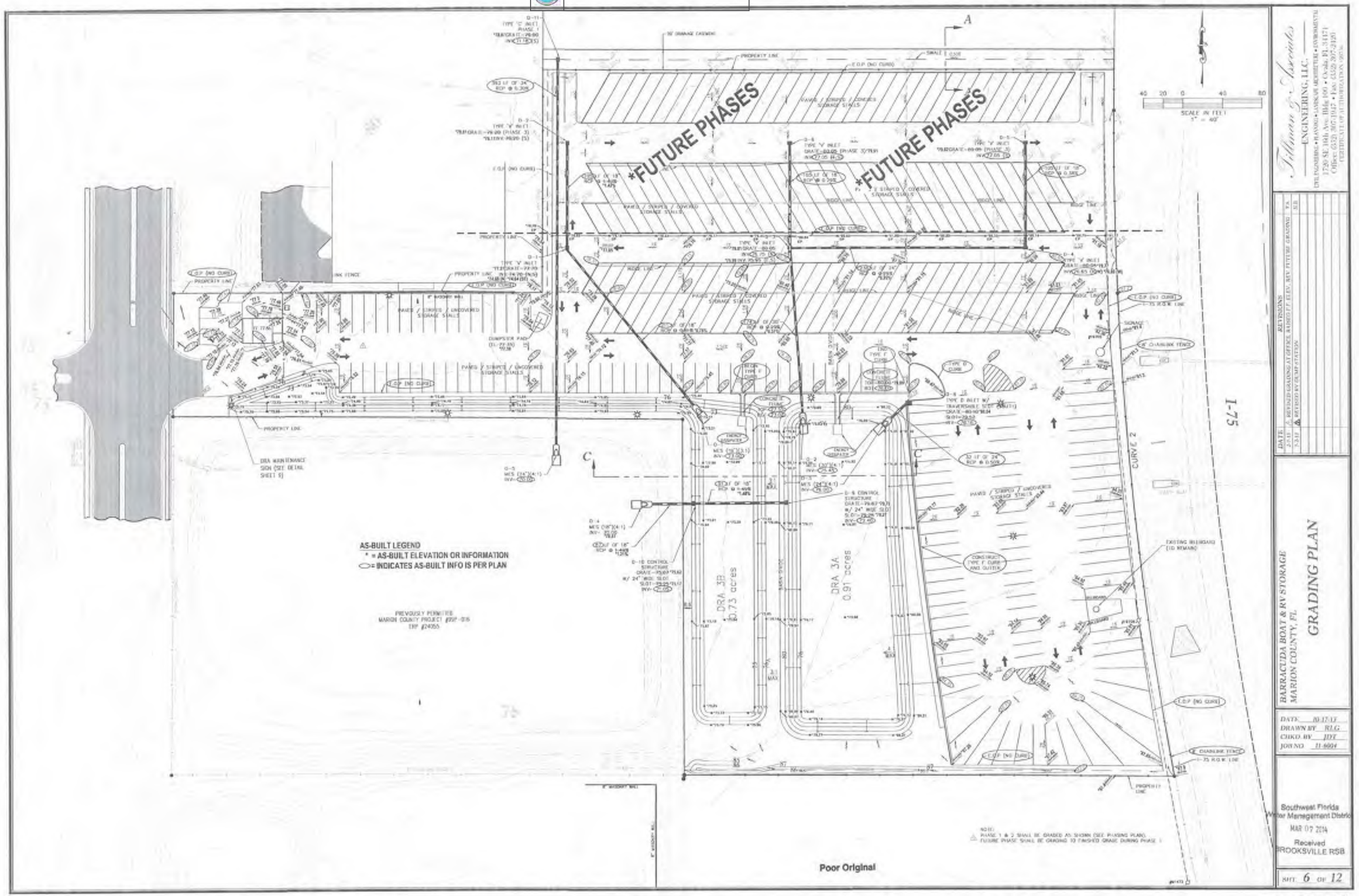
AUDREY E. ROGERS
P.S.M. NO. 5274

FOR
Southwest Florida
Water Management District
MAR 07 2014
Received
BROOKSVILLE RSB

Transferred to Operation

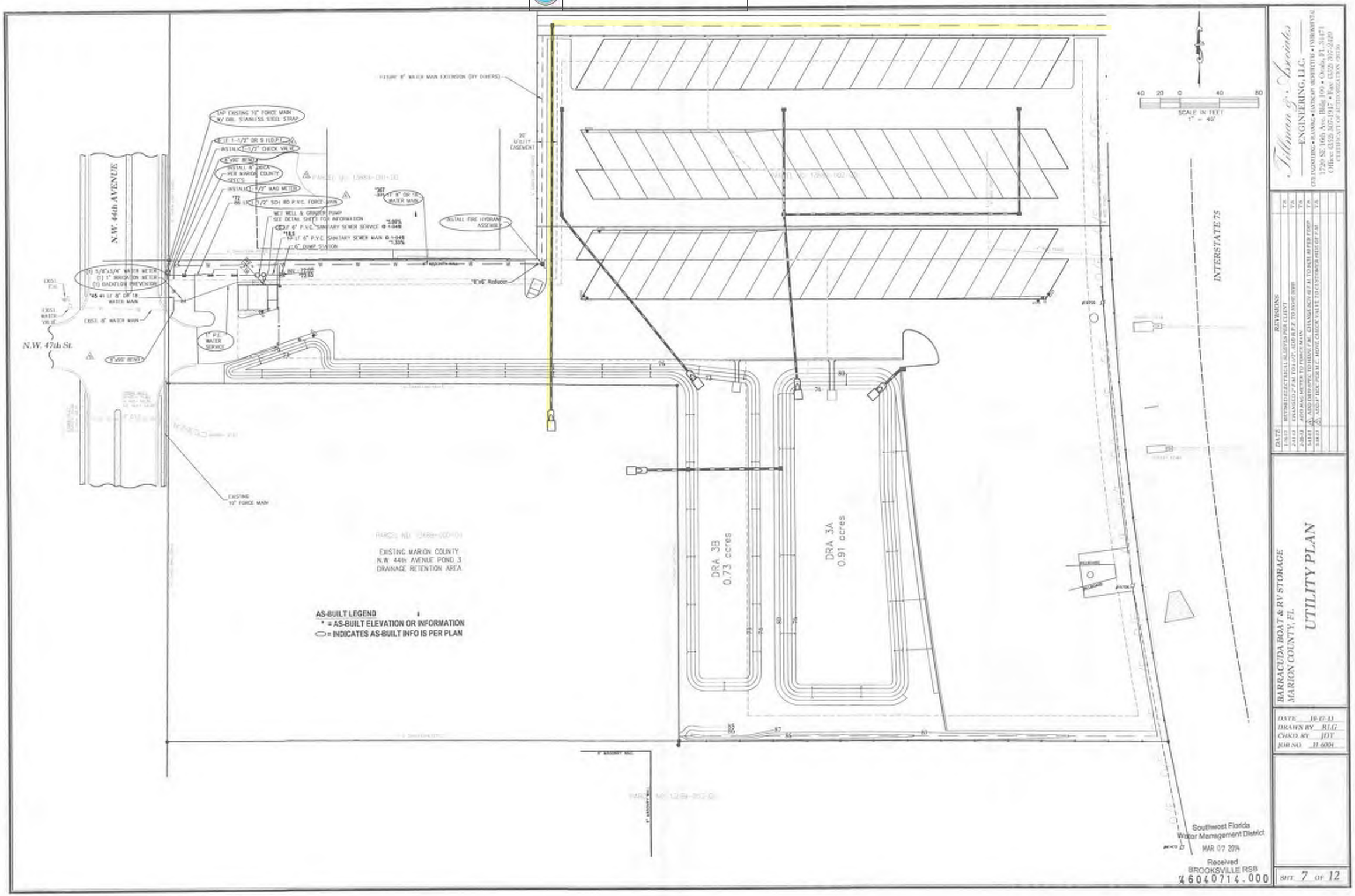


Transferred to Operation



46040714.000

Transferred to Operation



Tillman & Associates ENGINEERING, LLC
CIVIL ENGINEERING • PLANNING • SURVEYING SERVICES • TRANSPORTATION
3529 SE 10th Ave. Bldg 100 • Ocala, FL 34471
Office (352) 307-1917 • Fax (352) 307-2420
CERTIFICATE OF AUTHORIZATION #29196

DATE	REVISIONS	
10-5-11	REVISED GEOTECHNICAL SURVEY PER CLIENT	T.A.
2-11-12	CHANGED 2" F.M. TO 1-1/2" AND R.P.Z. TO MJ'S (SHT)	T.A.
2-28-12	ADD MAG METER TO FORCE MAIN	T.A.
5-11-12	(A) ADD DETAILS TO HDPE F.M.; CHANGE BOV 60' M. TO NEXT WATER FOUNT	T.A.
5-18-12	(B) ADD 4" DISC PER M.E.; MOVE GATE VALVE TO CONTINUOUS SIDE OF F.M.	T.A.

BARRACUDA BOAT & RV STORAGE
MARION COUNTY, FL.

UTILITY PLAN

DATE 10-17-11
DRAWN BY RLG
CHKD BY JDT
JOB NO. 11-6004

SHT. 7 OF 12

Southwest Florida Water Management District
MAR 07 2014
Received
BROOKSVILLE REGULATORY

46040714.000

OFF-SITE (NORTH) BASIN
5.82 Acres

TIME OF CONCENTRATION

BASIN 3A
5.63 Acres

BASIN 3B
3.57 Acres

100 50 0 100 200
SCALE IN FEET
1" = 100'

Tillman & Associates
ENGINEERING, LLC.
CIVIL ENGINEERING • PLANNING • LANDSCAPE ARCHITECTURE • ENVIRONMENTAL
1720 SE 16th Ave. Bldg 100 • Ocala, FL 34471
Office: (352) 307-1947 • Fax: (352) 307-2420
CERTIFICATE OF AUTHORIZATION #27-16

REVISIONS

DATE

BARRACUDA BOAT & RV STORAGE
MARION COUNTY, FL

POST DEVELOPMENT BASIN MAP

DATE 01-27-12
DRAWN BY HWB
CHKD. BY JDT
JOB NO. 11-6004

SHT. 1 OF 1

B-3A
POST - DEVELOPED
DRY RETENTION POND
AREA & STAGE-STORAGE VOLUME

POND 3 EXPANSION

Stage-Storage Volume @ T.O.B. *80.00* = *3.04* ac-ft

Stage (ft)	Area (ac)		Stor. Vol. (ac-ft)	
76.00	0.61	26674	0.00	BTM
77.00	0.68	29793	0.65	
78.00	0.76	33012	1.37	
79.00	0.83	36331	2.17	
80.00	0.91	39751	3.04	TOP

PONDS Version 3.3.0241
Retention Pond Recovery - Refined Method
Copyright 2011
Devo Seereeram, Ph.D., P.E.

Project Data

Project Name:	Barracuda Boat and RV Storage
Simulation Description:	Post Development B-3A
Project Number:	11-6004
Engineer :	Tim Brooker
Supervising Engineer:	J. David Tillman
Date:	01-12-2012

Aquifer Data

Base Of Aquifer Elevation, [B] (ft datum):	67.83
Water Table Elevation, [WT] (ft datum):	69.33
Horizontal Saturated Hydraulic Conductivity, [Kh] (ft/day):	12.70
Fillable Porosity, [n] (%):	30.00
Unsaturated Vertical Infiltration Rate, [Iv] (ft/day):	5.6
Maximum Area For Unsaturated Infiltration, [Av] (ft^2):	29470.0

Geometry Data

Equivalent Pond Length, [L] (ft):	335.0
Equivalent Pond Width, [W] (ft):	99.0

Ground water mound is expected to intersect the pond bottom

Stage vs Area Data

Stage (ft datum)	Area (ft^2)
76.00	26674.0
77.00	29793.0
78.00	33012.0
79.00	36331.0
80.00	39751.0

APPENDIX F

Excerpts from NW35th/ NW49th St Phase 2A Plans

IMPROVEMENT PLANS
FOR
MARION COUNTY, FLORIDA

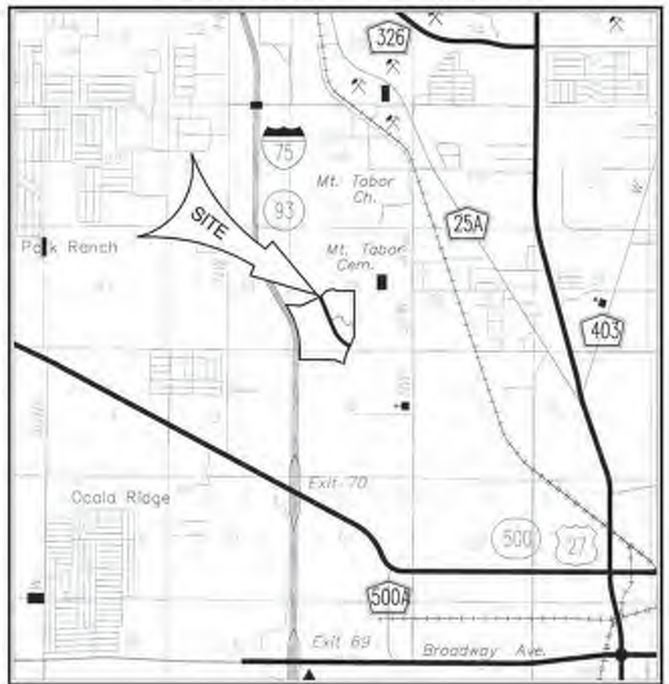
100% PLAN SUBMITTAL

OCALA 489, LLC
NW 35TH/49TH ST. PHASE 2A

THIS DEVELOPMENT CONTAINS A TOTAL OF
2,518 L.F. (0.48 MILES) OF ROAD
POSTED SPEED 45 M.P.H.
DESIGN SPEED 45 M.P.H.

PLANS PREPARED: 9/8/2015





VICINITY MAP

SECTION 35; TOWNSHIP 14 SOUTH; RANGE 21 EAST
CITY OF OCALA, FLORIDA

MARION COUNTY COMMISSIONERS
DISTRICT 1 - DAVID MOORE
DISTRICT 2 - KATHY BRYANT
DISTRICT 3 - STAN McCLAIN
DISTRICT 4 - CARL ZALAK, II
DISTRICT 5 - EARL ARNETT

COUNTY STAFF
ACTING COUNTY ADMINISTRATOR - MOUNIR BOUYOUNES, P.E.
COUNTY ENGINEER - TRACY STRAUB, P.E.
PROJECT MANAGER - BERT YANCEY

WATER & WASTEWATER:
CITY OF OCALA UTILITY SERVICES
1805 NE 30th AVENUE
OCALA, FL 34471
ED EARNEST, P.E.
(352) 351-6775

ELECTRIC:
CITY OF OCALA UTILITY SERVICES
1805 NE 30th AVENUE
OCALA, FL 34471
ERIC WEAVER
(352) 351-6620

ELECTRIC:
DUKE ENERGY
P.O. BOX 14042
ST. PETERSBURG, FL 33733
(800) 700-8744

Sheet List Table

Sheet Number	Sheet Title
01	COVER SHEET
02	NOTES
03	TYPICAL SECTIONS
04	AERIAL PHOTOGRAPH
05	MASTER PLAN
06	PRE-DEVELOPMENT DRAINAGE BASIN MAP
07	POST-DEVELOPMENT DRAINAGE BASIN MAP
08	PLAN & PROFILE
09	PLAN & PROFILE (2)
10	SIGNING AND MARKING PLAN
11	SIGNING AND MARKING PLAN (2)
12	UNDER DRAIN PLAN
13	SECTIONS
14	SECTIONS (2)
15	BORING PROFILES
E-1	EROSION CONTROL PLAN
E-2	EROSION CONTROL DETAILS
S-1	SURVEY CONTROL PLAN

Bearing Reference:
BEARINGS SHOWN HEREON ARE BASED ON THE FLORIDA STATE PLANE COORDINATE SYSTEM, WEST ZONE, 1983 NORTH AMERICAN DATUM, 1990 ADJUSTMENT.

BENCH MARK:
ELEVATIONS SHOWN HEREON ARE BASED UPON NORTH AMERICAN VERTICAL DATUM OF 1988 AND CHECKED TO CITY OF OCALA CONTROL POINT 9010 HAVING AN ELEVATION OF 79.13 FEET.

ENGINEERS CERTIFICATE:

I HEREBY CERTIFY THAT THESE PLANS AND CALCULATIONS WERE COMPLETED IN ACCORDANCE WITH ALL APPLICABLE REQUIREMENTS OF THE MARION COUNTY LAND DEVELOPMENT CODE (LDC), EXCEPT AS WAIVED

WOODROW L. CLYMER, P.E.
PROFESSIONAL ENGINEER NO. 69780
STATE OF FLORIDA

SEAL

GOVERNING STANDARDS AND SPECIFICATIONS:
Florida Department of Transportation, 2015 Design Standards and revised Index Drawings as appended herein, and 2015 Standard Specifications for Road and Bridge Construction, as amended by Contract Documents

For Design Standards click on the "Design Standards" link at the following web site:

http://www.dot.state.fl.us/rddesign/

For the Standard Specifications for Road and Bridge Construction click on the "Specifications" link at the following web site:

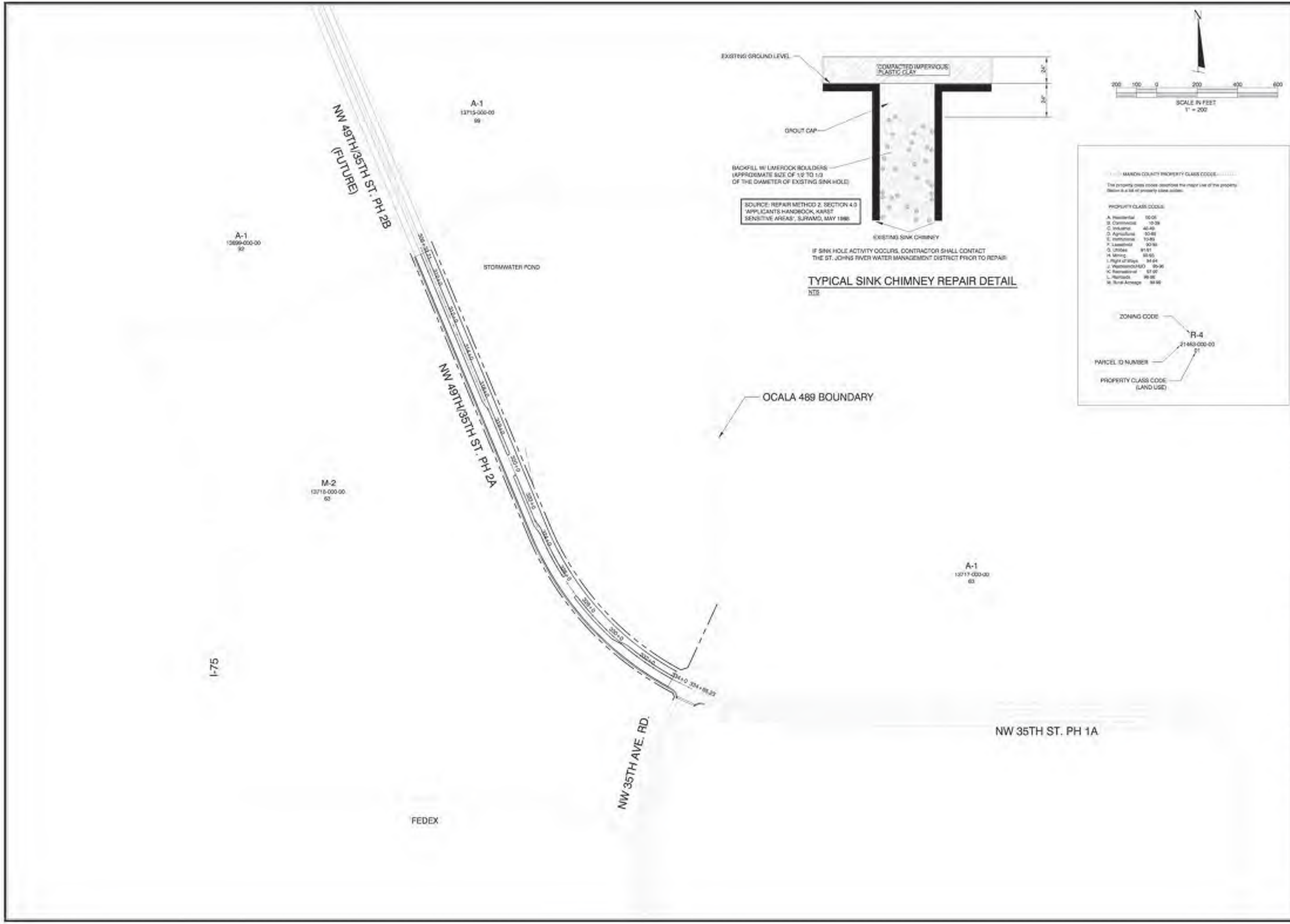
http://www.dot.state.fl.us/specificationsoffice/

OWNER:
MARION COUNTY BOARD OF COUNTY COMMISSIONERS
601 SE 25th AVE
OCALA, FL 34471

ENGINEER/SURVEYOR:
FARNER, BARLEY AND ASSOCIATES, INC.
4450 N.E. 83rd ROAD
WILDWOOD, FLORIDA 34785
LEE CLYMER, P.E.
FL. LIC. NO. 69780

FARNER BARLEY AND ASSOCIATES, INC.
▲ ENGINEERS
▲ SURVEYORS
▲ PLANNERS
Certificate of Authorization Number: 4709
4450 N.E. 83rd Road ◇ Wildwood, Florida 34785 ◇ (352) 748-3120

F-1



FARNER BARLEY AND ASSOCIATES, INC.
▲ ENGINEERS ▲ SURVEYORS ▲ PLANNERS
Certificate of Authorization Number: 4709
4460 N.E. 53rd Road ○ Wildwood, Florida 34785 ○ (352) 748-3126

OCALA 489, LLC
NW 35TH/49TH ST. PHASE 2A
MASTER PLAN

DATE: 9/8/15
DRAWN BY: MJT
CHKD BY: WLC
FILE NAME: 04-35TH/04-MP
JOB NO: ---

F-2

SHT: 05 OF 15

MATCHLINE

MATCHLINE

200 100 0 200 400 600

SCALE IN FEET
1" = 200'

LEGEND

BASIN LINE

POP OFF

EXISTING WETLAND
UPLAND BUFFER LINE

DRA 6-6
TOB = EL. 88.0
BTM = EL. 76.0

B-7

B-9

B-7A

B-8

NW 49TH ST. PH 2A

B-7B

B-7D

B-6

B-7C

NW 35TH AVENUE RD.

NW 35TH ST. PHASE 1A

BY

REVISIONS

DATE

FARNER BARLEY AND ASSOCIATES, INC.
▲ ENGINEERS
▲ SURVEYORS
▲ PLANNERS

Certificate of Authorization Number: 4799
4460 N.E. 83rd Road ○ Wildwood, Florida 34785 ○ (352) 748-8126

OCALA 489, LLC
NW 35TH/49TH ST. PHASE 2A

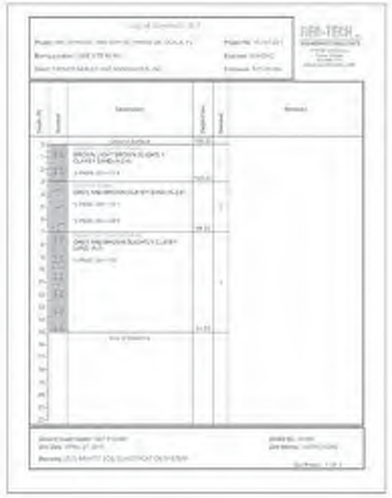
PRE-DEVELOPMENT
DRAINAGE BASIN MAP

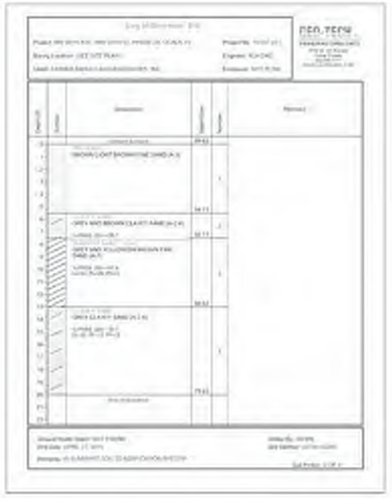
DATE 9/8/15
DRAWN BY MJF
CHKD BY WLC
FILE NAME 06-35TH2A.PRE
JOB NO. ----

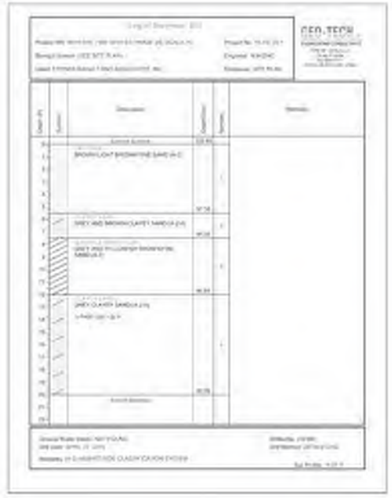
F-3

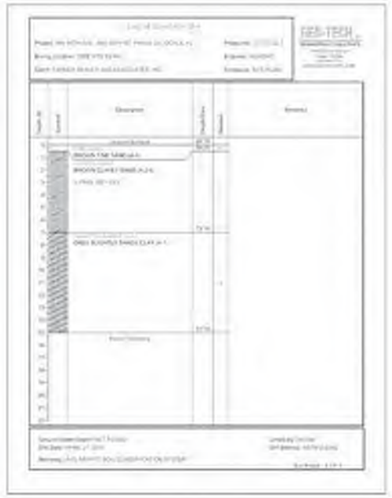
SHT. 06 OF 15

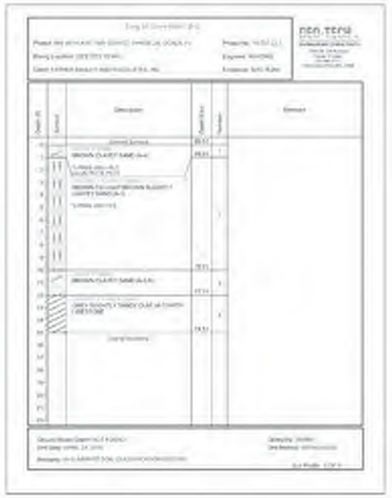
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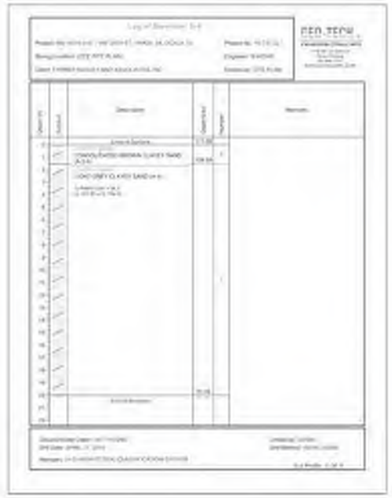




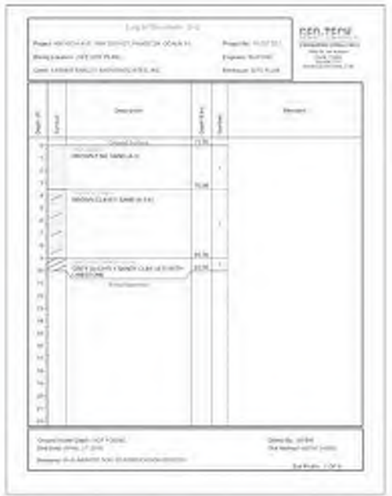


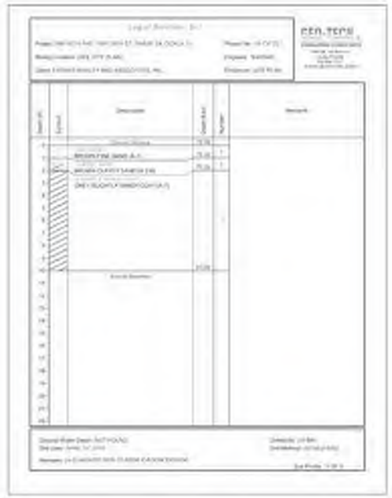












FARNER BARLEY AND ASSOCIATES, INC.
▲ ENGINEERS ▲ SURVEYORS ▲ PLANNERS
Certificate of Authorization Number: 6709
4450 N.E. 83rd Road ○ Wildwood, Florida 34785 ○ (352) 748-3126

OCALA 489, LLC
NW 35TH/49TH ST. PHASE 2A
BORING PROFILES

DATE: 9/8/15
DRAWN BY: MJT
CHKD BY: WLC
FILE NAME: 1-2015-02182
JOB NO.: ____

F-4

SHT. 15 OF 15

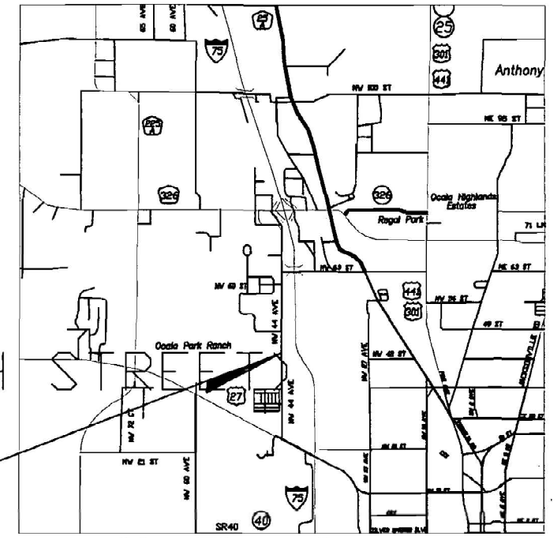
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APPENDIX G

Excerpts from
NW 44th Ave
Plans and Permit

MARION COUNTY
BOARD OF COUNTY COMMISSIONERS
TRANSPORTATION DEPARTMENT

N.W. 44th AVENUE
RECORD DRAWINGS
(U.S. 27 to NORTH OF N.W. 60TH STREET)



PROJECT LOCATION

PROJECT LOCATION MAP
(NOT TO SCALE)

COUNTY COMMISSIONERS

DISTRICT 1 - ANDY KESSELRING
DISTRICT 2 - JIM PAYTON
DISTRICT 3 - STAN MCCLAIN
DISTRICT 4 - BARBARA FITOS
DISTRICT 5 - CHARLIE STONE

COUNTY ADMINISTRATOR - PATRICK G. HOWARD

CONSTRUCTION REFERENCE

F.D.O.T. ROADWAY DESIGN STANDARDS, 2006

F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION, 2007

MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2003

MARION COUNTY LAND DEVELOPMENT CODE, LATEST REVISION

REVISIONS
SHEETS 1, 8-9, 14, 27-29, 34, 36 - 37, 62-65, 71, 76-77, 95 -96, 101-102, 112-113, 122-123, 128, 130-131, 143-145, 150, & 153 (REVISED 7/21/08)

SHEETS 1-2, 4-5, 10, 42-43, 60-87, 103, 105, & 142-160 (REVISED 9/08/08)

DRAWING INDEX	
SHEET NUMBER	DRAWING DESCRIPTION
1	KEY SHEET
2	GENERAL UTILITY, DRAINAGE & CONST.NOTES
3	LEGEND
4 - 5	TYPICAL SECTION
6 - 11	DRAINAGE MAPS
12 - 15	STORMWATER POND PLANS
16 - 17	BASELINE CONTROL
18 - 44	PLAN & PROFILE
45 - 45A	SIDE STREET LAYOUTS
46 - 90	ROADWAY & DRAINAGE STRUCTURES SECTIONS
91 - 98	POND CROSS SECTIONS
98A - 104	CONSTRUCTION SURFACE WATER MANAGMENT PLAN
105 - 133	TRAFFIC CONTROL
134 - 160	UTILITY ADJUSTMENTS
S1 - S30	SIGNING & PAVEMENT MARKING PLANS
T1 - T5	SIGNALIZATION PLANS

LENGTH OF PROJECT		
	LINEAR FEET	MILES
ROADWAY	14,492.19	2.749
BRIDGES	0.00	0.000
NET LENGTH OF PROJECT	14,492.19	2.749
EXCEPTIONS	0.00	0.000
GROSS LENGTH OF PROJECT	14,492.19	2.749

SECTION: 3, TOWNSHIP: 15 SOUTH, RANGE: 21 EAST
SECTION: 22, 27, 34, TOWNSHIP: 14 SOUTH, RANGE: 21 EAST
MARION COUNTY, FLORIDA

SJRWMD Received OCT 14 2010

UTILITY COMPANIES		
UTILITY COMPANY	CONTACT PERSON	PHONE NUMBER
EMBARQ	FRED WALKER	(352) 368-8781
CITY OF OCALA ELECTRIC	DAVID ANDERSON	(352) 351-6620
CITY OF OCALA WATER/SEWER	MIKE GROVES	(352) 629-8321
COX COMMUNICATIONS	WILLIAM COONES	(352) 873-5629
TECO PEOPLES GAS	BEN MOBLEY	(904) 443-7317
PROGRESS ENERGY	MICHAEL WELLER	(352) 694-8531
MARION COUNTY UTILITIES	FLIP MELLINGER	(352) 671-8549

APPROVED AS-BUILTS
☒ INSPECTION CONDUCTED BY DISTRICT 11-2-11
☐ INSPECTION NOT CONDUCTED BY DISTRICT
RIGHT RESERVED FOR FUTURE INSPECTION

AS-BUILT NOTES:
1. ALL AS-BUILT INFORMATION IS SHOWN IN A CLOUD
2. AS-BUILT SURVEY DATE: 2-10-10
3. THE BASE CONSTRUCTION PLAN SHOWN HEREON WAS PROVIDED BY HDR ENGINEERING INC, DATED 6-01-2009
4. ELEVATIONS BASED ON BENCHMARK PROVIDED BY ENGINEER.

AS-BUILT SURVEY PREPARED BY
ROGERS ENGINEERING COMPANY,INC.
1105 S.E. 3RD AVE.
OCALA, FL. 34471

RODNEY K. ROGERS, STATE OF FLORIDA, P.S.M. NO.5274 — DATE 4/28/16

NW 44th AVENUE RECORD DRAWINGS
SHEET 1

FILE OF RECORD 44010201.008

BUILDING

PROP. R/W/PROJECT AREA

R/W LINE PER DEED

THE FOUNTAINS

NW 47TH STREET

NW 44TH AVENUE

SCALE: 1" = 80'

FURNISH & INSTALL 6' HIGH CHAIN LINK FENCE AROUND ENTIRE DRA W/GATE AT PROPOSED DRIVEWAY. (SEE COUNTY FENCE DETAIL 28)

STA. 100+53.94 (80.40 LT)
CONST FLARED END SECTION (66")
INDEX 270
FL 66.8 66.5
CONST SUMP (BOTTOM EL. 66.8) 66.5
AND 10'x10' SAND CEMENT RIP-RAP
PER FDOT INDEX NO 281

POND BOTTOM ~~71.8~~ 70.8

CONST 20' GATE

R/W LINE PER DEED

R/W LINE PER DEED

FILL AREA BETWEEN EXISTING EL. 77.0' AND PROPOSED BERM EL. 76.7'.

AS-BUILT NOTES

1. ALL AS-BUILT INFORMATION IS SHOWN IN A CLOUD
2. AS-BUILT SURVEY DATE: 2-10-10
3. THE BASE CONSTRUCTION PLAN SHOWN HEREON WAS PROVIDED BY HDR ENGINEERING, INC. DATED 6-01-2009.
4. ELEVATIONS BASED ON BENCHMARK PROVIDED BY ENGINEER.

AS-BUILT SURVEY PREPARED BY:
ROGERS ENGINEERING COMPANY, INC. RODNEY K. ROGERS DATE
1105 SE 3RD AVE.
OCALA, FL. 34471
P.S.M. NO5274

BOARD OF COUNTY COMMISSIONERS
MARION COUNTY, FLORIDA
TRANSPORTATION DEPARTMENT
412 SE 25TH AVENUE
OCALA, FL 34471

NW 44TH AVENUE AS-BUILT STORMWATER POND 3 PLAN

SHEET 14

SOD | SEED AND MULCH | SOD | PROP. R/W
12' | 15' | 444' | 15' | 12' VARIES
6'
EL. 76.0
FINAL EXCAVATION AT COMPLETION OF CONSTRUCTION EL. ~~71.8~~ 70.8
EXISTING GROUND
PRELIMINARY EXCAVATION EL. 72.0
EL. 76.0
2:1 TIE TO EXISTING GROUND
EL. 76.7
3:1

SECTION A-A
N.T.S.

PROP. R/W | SOD | SEED AND MULCH | SOD | PROP. R/W
VARIES 12' | 15' | 266' | 15' | 12' VARIES
5'
6'
EL. 76.7
EL. 76.0
EL. 76.0
EXISTING GROUND
PRELIMINARY EXCAVATION EL. 72.0
VARIES
EL. 76.7
3:1
FINAL EXCAVATION AT COMPLETION OF CONSTRUCTION EL. ~~71.8~~ 70.8

SJRWMD Received OCT 14 2011 BRO-REC

SECTION B-B
N.T.S.

CURVE CL6
PI STA 87+07.06
Δ = 8° 08' 30" (LT)
D= 2° 45' 00"
T= 148.28
L= 296.07
R= 2,083.48
PC STA 85+58.78
PT STA 88+54.84
e= NC

REPLACE FENCE IN KIND
+00.00 49.0' LT.
+00.00 46.0' LT.
PROP. R/W
NW 44TH AVENUE
T.C.E.
5' CONC. S/W
+56.20 46.50' LT.
+45.49 61.0' LT.
+45.49 48.9' LT.
+77.49 61.0' LT.
+29.22 61.0' LT.
+29.22 48.8' LT.
56' LT. EL. 83.2
+60.65 61.0' LT.
+60.66 46.8' LT.
+75.48 46.6' LT.
+60.65 61.0' LT.
56' LT. +27.15 61.0' LT.
+27.15 46.7' LT.
+75.48 61.0' LT.
56' LT. EL. 83.2
+60.66 46.6' LT.
BT
OE
C & G TYPE F
6' TRAFFIC SEPARATOR (MONOLITHIC)
+66.18 0.75' LT.
+16.18 9.75' LT.
S-309
M-13
S-311
+91.56 0.75' LT.
+61.5
+44.0
+43.0
+91.5
6' TRAFFIC SEPARATOR (MONOLITHIC)
MATCHLINE STA. 86+40.00
MATCHLINE STA. 92+00.00
PT STA. 88+54.84
46.00'
36.00'
24.00'
7.5%
60.97'
87
88
89
90
91
CL6
67' OF 18" RCP (PVC)
65
S-310
30" RCP (PVC)
C & G TYPE F
284' OF 36" RCP (SRASP)
+41.56 9.75' RT.
65
67' OF 18" RCP (PVC)
S-312
146' OF 36" RCP (SRASP)
5' CONC. S/W
PROP. R/W
+00.00 46.0' RT.
+00.00 48.0' RT.
T.C.E.
REPLACE FENCE IN KIND

0 10 40
Feet

BM 11
STATION: 86+58
OFFSET: 67' LEFT
ELEVATION: 85.277'
NAIL IN EAST SIDE OF 36" HICKORY TREE

135' V.C.
+27.500 EL. 81.94
+62.500 EL. 81.81
EXISTING GROUND LINE
PROFILE GRADE LINE
(-)0.50%
(+)0.30%
(+)0.30%
PI +85.00 EL. 81.61
Const. 30" RCP
Const. 18" RCP
Const. 36" RCP
Const. 36" RCP
Const. 18" RCP
FL 75.40 (75.19)
FL 74.90 N=74.92 S=75.01
FL 75.70 (74.60)
FL 74.70 N=74.68 S=74.70
82.38
83.4
82.82
84.0
86
84
82
80
78
76
74
72
87
88
89
90
91
92

AS-BUILT NOTES:
1. WATER & FIBER MAIN AS-BUILT INFORMATION SHOWN IN A GUIDE
2. AS-BUILT SURVEY DATED 4-09-18.
3. AS-BUILT ELEVATIONS ARE BASED ON THE PROJECT'S TEMPORARY BENCHMARKS (TBM) AS SHOWN HEREIN.

AS-BUILT SURVEY PREPARED BY:
ROGERS ENGINEERING CORPORATION
1205 S.E. 3RD AVE.
OCALA, FL 34471
ROBERTS ROGERS P.S.M. #6574
DATE

HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 4'

BOARD OF COUNTY COMMISSIONERS
MARION COUNTY, FLORIDA
TRANSPORTATION DEPARTMENT
601 S.E. 25th AVENUE
OCALA, FL 34471

REVISIONS	DESCRIPTION	BY	DATE

	NAME	DATE
DRAWN BY	BDK	10/25/08
REVIEWED BY	DRH	
SUPERVISED BY: D. HOLCOMB		

NW 44TH AVENUE
PLAN AND PROFILE
STA 86+40.00 TO STA. 92+00.00

SHEET 32

SJRWMD
Received
OCT 14 2019
BRO-REG

NW 45TH STREET				
RETURN	PC STATION	OFFSET	PT STATION	OFFSET
NO. 1	92+89.23	33.75' LT	93+39.22	84.51' LT
NO. 2	93+63.25	82.99' LT	94+13.24	33.75' LT

PIPE #	TYPE	S. INVERT	N. INVERT	W. INVERT	E. INVERT
NO. 1	18" CMP	78.83	78.65	N/A	N/A
NO. 2	18" CMP	78.58	78.14	N/A	N/A
NO. 3	18" CMP	N/A	N/A	79.38	79.59

RMS COMMUNICATIONS

BM 12A
STATION 94+98
OFFSET: 28' RIGHT
ELEVATION: 82.800'
CHISELED 'X' IN NORTH SIDE OF CONCRETE DRAINAGE MANHOLE INLET STRUCTURE

BM 13A
STATION: 97+06
OFFSET: 8' RIGHT
ELEVATION: 82.130'
CHISELED NOTCH IN TOP OF MITERED END SECTION

HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 4'

NW 44TH AVENUE PLAN AND PROFILE
STA. 92+00.00 TO STA. 97+60.00

BOARD OF COUNTY COMMISSIONERS
MARION COUNTY, FLORIDA
TRANSPORTATION DEPARTMENT
OCALA, FL 34479

MARION COUNTY BOARD OF COUNTY COMMISSIONERS
TRANSPORTATION DEPARTMENT

REVISIONS			
NO.	DESCRIPTION	BY	DATE

	NAME	DATE
DRAWN BY	BSK	10/25/08
REVIEWED BY	DRH	10/25/08
SUPERVISED BY: D. HOLCOMB		

SHEET 33

Received
NOV 14 2011
WMD
ERO-REG

THE FOUNDATIONS

NW 47TH STREET

NW 44TH AVENUE

RETURN NO. 1

RETURN NO. 2

RETURN NO. 3

RETURN NO. 4

MATCH EXIST. 61.6' LT., EL. 76.3

EXIST. R/W

PROP. R/W

5' CONC. S/W

C & G TYPE F

6' TRAFFIC SEPARATOR (MONOLITHIC)

PIPE HANDRAIL

T.C.E.

CR 21

S-316 S-317 S-318 S-319 S-320 S-321 S-322

M-13

POND 3
SEE STORMWATER POND 3 PLAN SHEET

STA. 10+00.00 POND 3)= STA. 99+34.91 (CONST.

MATCHLINE STA. 97+60.00

MATCHLINE STA. 103+20.00

494.73'

60.95'

28.23'

15.27'

24.00'

60.97'

36.00'

7.50'

24.00'

46.00'

36'

89°25'31"

+92+59 9.75' LT.

+88.73 0.75' LT.

+88.73 8.25' LT.

+88.73 2.25' LT.

+96.76 2.25' RT.

+96.76 8.25' RT.

+38.73 9.75' RT.

+37.80 61.59' LT

+47.85 61.58' LT

+66.99 EL. 76.67

+02.82 EL. 77.06 76.99

+82.48 EL. 76.56 76.48

+18.19 76.66 EL. 76.39 76.55 EL. 76.45

EL. 76.77 76.83

+85.00 44.25' RT.

+25.15 78.0' RT.

+27.76 78.0' RT.

+27.64 57.5' RT.

+05.15 46.0' RT.

17.2'

16.8'

40.0' R

6.0' R

3.00' R

CONST 67' OF 18" RCP (PVC)

CONST 67' OF 18" RCP (PVC)

CONST 146' OF 66" RCP SRASP

CONST 297' OF 66" RCP SRASP

CONST 48' OF 66" RCP SRASP

67' OF 18" RCP (PVC)

296' OF 36" RCP SRASP

EL. 77.0

(CONST.

NW 47TH STREET						
RETURN	PC STATION	OFFSET	POC STATION	OFFSET	PT STATION	OFFSET
NO. 1	100+82.48	33.75' LT.	101+18.19	55.72' LT.	--	--
NO. 2	--	--	101+66.99	55.97' LT.	102+02.82	33.75' LT.

RETURN	PC STATION	OFFSET	POC STATION	OFFSET	PT STATION	OFFSET
NO. 3	100+84.59	33.75' RT.	--	--	101+24.65	73.75' RT.
NO. 4	101+60.65	73.75' RT.	--	--	102+00.65	33.75' RT.

0 10 40
Feet

175' V.C.

PROFILE GRADE LINE

EXISTING GROUND LINE

(-)1.60%

(+)0.44%

+32.500 EL. 78.55 78.13 78.01 78.45 77.73 78.06 77.58 77.79 77.32 77.50 77.18 77.39 77.08 77.26 77.04 77.22 77.04 77.16 77.02 77.34

+07.500 EL. 77.42 77.38

PI +20.00 EL 76.73

S=72.67
S=72.73
V=72.73

FL 73.70

FL 70.20 66.20

S=69.23

FL 66.90

FL 70.70

FL 67.00

Const. 36" RCP SRASP

Const. 66" RCP SRASP

18" RCP PVC

66" RCP SRASP

HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 4'

AS-BUILT NOTES:
1. WATER & FORCE MAIN AS-BUILT INFORMATION SHOWN IN A CLOUD.
2. AS-BUILT SURVEY DATED 4-29-15.
3. AS-BUILT ELEVATIONS ARE BASED ON THE PROJECT'S TEMPORARY BENCHMARK (TBM) AS SHOWN HEREON.

AS-BUILT SURVEY PREPARED BY:
ROGERS ENGINEERING COMPANY, INC.
1120 SE 3RD AVE
OCALA, FL 34471

ROBERT K. ROGERS DATE
P.S.M. #5824

SHEET NO. 14

BOARD OF COUNTY COMMISSIONERS
MARION COUNTY, FLORIDA
TRANSPORTATION DEPARTMENT
412 SW 25TH AVENUE
OCALA, FL 34471

MARION COUNTY BOARD OF COUNTY COMMISSIONERS TRANSPORTATION DEPARTMENT

REVISIONS			
DESCRIPTION	BY	DATE	

	NAME	DATE
DRAWN BY	BDK	10/25/05
REVIEWED BY	DRH	10/25/05
SUPERVISED BY: D. HOLCOMB		

NW 44TH AVENUE
PLAN AND PROFILE
STA. 97+60.00 TO STA. 103+20.00

SWFWMD
Received
OCT 14 2011

G-5

NW 49TH STREET				
RETURN	PC STATION	OFFSET	PT STATION	OFFSET
NO. 1	107+58.23	33.75' LT	108+08.23	83.40' LT
NO. 2	108+32.45	84.85' LT	108+84.55	33.75' LT

PIPE #	TYPE	W. INVERT	E. INVERT
NO. 4	24" RCP	78.67	79.05

NW 44TH AVENUE

EXIST. R/W/PROJECT AREA

5' CONC. S/W

BT

OE

C & G TYPE F

6' TRAFFIC SEPARATOR (MONOLITHIC)

+96.76 0.75' RT.

+46.76 9.75' LT.

+91.0

104

105

106

107

108

+48.03 0.75' LT.

+98.03 9.75' RT.

+50.00 44.25' RT.

M-13

66" RCP SRASP

256' OF 66" RCP SRASP

(CONST.

+48.03 2.25' LT.

+48.03 8.25' LT.

3.00' R

113

18" OF 18" RCP PVC

MATCH EXIST. 94.4' LT., EL. 77.4

24" OF 18" RCP PVC

+08.23 EL. 77.61 77.46

50.0' R EL. (77.84)

+58.23 EL. (78.07)

S-324

CR 21

49TH STREET

PC STA. 108+27.36

+32.45 EL. 77.84 77.69

S-326A

RETURN NO. 2

EL. 78.22 (78.02)

50.0' R

89' OF 66" RCP SRASP

S-325

S-326

S-326B

+79.72 46.0' RT.

+79.36 62.7' RT.

CL7

4

9' OF 18" RCP PVC

+27.61 46.0' RT.

+27.64 52.0' RT.

T.C.E.

+60.15 46.0' RT.

+60.08 52.0' RT.

+59.94 62.3' RT.

REPLACE FENCE IN KIND

MATCHLINE STA. 103+20.00

MATCHLINE STA. 108+80.00

60.97'

36.00'

46.00'

24.00'

7.50

55.05'

69.15'

46.00'

36'

PIPE HANDRAIL

T.C.E.

+71.10 57.5' RT.

+71.10 62.0' RT.

30'

+11.10 46.0' RT.

+11.10 62.0' RT.

S-323

PROP. R/W

5' CONC. S/W

VOYAGER INC.

CURVE CL7
PI STA 109+75.07
Δ = 8° 06' 38" (LT)
D= 2° 45' 00"
T= 147.71
L= 294.93
R= 2,083.48
PC STA 108+27.36
PT STA 111+22.29
e= NC

0 10 40
Feet

135' V.C.

EXISTING GROUND LINE

PROFILE GRADE LINE

(+)0.44%

(-)0.30%

(+)1.00%

PI +65.00 EL 79.13 SRASP

+97.500 EL. 79.03

+32.500 EL. 79.23

+47.500 EL. 78.56

PI +15.00 EL. 78.38

18" RCP

FL 72.70

FL 67.40

FL 67.50

Const. 66" RCP SRASP

S-67.18

FL 67.20

80.4

78.05

78.7

82

80

78

76

74

72

70

68

104

105

106

107

108

HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 4'

AS-BUILT NOTES
1. WATER & FENCE MAIN AS-BUILT INFORMATION SHOWN IN A CLOSED
2. AS-BUILT SURVEY, DATED 4-08-10
3. AS-BUILT ELEVATIONS ARE BASED ON THE PROJECT'S TEMPORARY BENCHMARKS (TBM) AS SHOWN HEREON.

AS-BUILT SURVEY PREPARED BY:
RIGGINS ENGINEERING CORPORATION
1111 SE 3RD AVE.
OCALA, FL 34471

RIGGINS, RICHARD P.E. #36874 DATE 4/29/10

SWFWMD Received OCT 14 2011 ERP-REG

MARION COUNTY BOARD OF COUNTY COMMISSIONERS TRANSPORTATION DIVISION

REVISIONS			
DESCRIPTION	BY	DATE	NAME
		10/25/08	BDK
		10/25/08	DRH

DRAWN BY
REVIEWED BY
SUPERVISED BY: D. HOLCOMB

BOARD OF COUNTY COMMISSIONERS MARION COUNTY, FLORIDA
TRANSPORTATION DEPARTMENT 412 SE 25TH AVENUE OCALA, FL 34471

NW 44TH AVENUE PLAN AND PROFILE STA. 103+20.00 TO STA. 108+80.00

SHEET 35

NW 44TH AVENUE

CURVE CL7
PI STA 109+75.07
Δ = 8° 06' 38" (LT)
D= 2° 45' 00"
T= 147.71
L= 294.93
R= 2,083.48
PC STA 108+27.36
PT STA 111+22.29
e= NC

CURVE CL8
PI STA 112+66.97
Δ = 7° 36' 41" (RT)
D= 2° 45' 00"
T= 144.68
L= 288.90
R= 2,083.48
PC STA 111+22.29
PT STA 114+11.19
e= NC

PIPE #	TYPE	W. INVERT	E. INVERT
NO. 5	18" RCP	?	76.94
NO. 6	18" RCP	76.95	76.79

0 10 40
Feet

BM 14
STA. 109+97
OFFSET: 33' LT
ELEVATION 80.652'
NAIL AND DISK MARKED "R.M. BARRINEAU PCP 3432" IN PAVEMENT

PROFILE GRADE LINE
EXISTING GROUND LINE
225' V.C.
(+)1.00%
(-)1.00%
FL 67.80
FL 67.90
Const. 66" RCP SRASP

AS-BUILT NOTES:
1. WATER & FIBER MAIN AS-BUILT INFORMATION SHOWN IN A CLOUD & AS-BUILT SURVEY, DATED 3-27-13.
2. AS-BUILT ELEVATIONS ARE BASED ON THE PROJECT'S TEMPORARY BENCHMARKS (TBM) AS SHOWN HEREON.
AS-BUILT SURVEY PREPARED BY:
ROGERS ENGINEERING CORPORATION
1105 S.E. 3RD AVE.
OCALA, FL 34471
ROBERT E. ROGERS DATE
FLEX MEMBER

HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 4'

MARION COUNTY BOARD OF COUNTY COMMISSIONERS
TRANSPORTATION DEPARTMENT

REVISIONS	DESCRIPTION	BY	DATE

	NAME	DATE
DRAWN BY	BDK	10/25/08
REVIEWED BY	DRH	10/25/08
SUPERVISED BY: D. HOLCOMB		

BOARD OF COUNTY COMMISSIONERS
MARION COUNTY, FLORIDA
TRANSPORTATION DEPARTMENT
412 SE 25th AVENUE
OCALA, FL 34471

NW 44TH AVENUE
PLAN AND PROFILE
STA. 108+80.00 TO STA. 114+40.00

SHEET 38

SWFWMD Received OCT 14 2011 ERP-REG

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
ENVIRONMENTAL RESOURCE
GENERAL CONSTRUCTION
PERMIT NO. 44010201.008

Expiration Date: March 7, 2012

PERMIT ISSUE DATE: March 7, 2007

This permit is issued under the provisions of Chapter 373, Florida Statutes, (F.S.), and the Rules contained in Chapters 40D-4 and 40, Florida Administrative Code, (F.A.C.). The permit authorizes the Permittee to proceed with the construction of a surface water management system in accordance with the information outlined herein and shown by the application, approved drawings, plans, specifications, and other documents, attached hereto and kept on file at the Southwest Florida Water Management District (District). Unless otherwise stated by permit specific condition, permit issuance constitutes certification of compliance with state water quality standards under Section 401 of the Clean Water Act, 33 U.S.C. 1341. All construction, operation and maintenance of the surface water management system authorized by this permit shall occur in compliance with Florida Statutes and Administrative Code and the conditions of this permit.

PROJECT NAME: Marion County - NW 44th Avenue, From US 27 to North of NW 60th Street

GRANTED TO: Marion County Board of County Commissioners
601 SE 25th Avenue
Ocala, FL 34471

ABSTRACT: This permit is for the construction of a new surface water management system to serve a 50.40-acre project. The project involves the widening of NW 44th Avenue from US 27 to south of NW 63rd Street, in Marion County. Information regarding the surface water management system and wetlands is contained within the tables below.

OP. & MAINT. ENTITY: Marion County Board of County Commissioners

COUNTY: Marion

SEC/TWP/RGE: 3/15S/21E; 22,27,34/14S/21E

TOTAL ACRES OWNED OR UNDER CONTROL: 50.40

PROJECT SIZE: 50.40 Acres

LAND USE: Road Project

DATE APPLICATION FILED: August 9, 2006

AMENDED DATE: N/A

I. Water Quantity/Quality

POND NO.	AREA ACRES @ TOP OF BANK	TREATMENT TYPE
One	0.98	On-line Retention
Two	3.49	On-line Retention
Three	3.58	On-line Retention
Four	2.78	On-line Retention
TOTAL	10.83	

A mixing zone is not required.
A variance is not required.

II. 100-Year Floodplain

Encroachment (Acre-Feet of fill)	Compensation (Acre-Feet of excavation)	Compensation Type*	Encroachment Result**(feet)
0.00	0.00	**NE** [X]	Depth [N/A]

***Codes** [X] for the type or method of compensation provided are as follows:
NE = No Encroachment
MI = Minimal Impact based on modeling of existing stages vs. post-project encroachment.
N/A = Not Applicable

Depth of change in flood stage (level) over existing receiving water stage resulting from floodplain encroachment caused by a project that claims **MI type of compensation.

III. Environmental Considerations

No wetlands or other surface waters exist within the project area.

A regulatory conservation easement is not required.

A proprietary conservation easement is not required.

SPECIFIC CONDITIONS

1. If the ownership of the project area covered by the subject permit is divided, with someone other than the Permittee becoming the owner of part of the project area, this permit shall terminate, pursuant to Section 40D-1.6105, F.A.C. In such situations, each land owner shall obtain a permit (which may be a modification of this permit) for the land owned by that person. This condition shall not apply to the division and sale of lots or units in residential subdivisions or condominiums.

2. Unless specified otherwise herein, two copies of all information and reports required by this permit shall be submitted to:

Brooksville Regulation Department
Southwest Florida Water Management District
2379 Broad Street
Brooksville, FL 34604-6899

The permit number, title of report or information and event (for recurring report or information submittal) shall be identified on all information and reports submitted.

3. The Permittee shall retain the design engineer, or other professional engineer registered in Florida, to conduct on-site observations of construction and assist with the as-built certification requirements of this project. The Permittee shall inform the District in writing of the name, address and phone number of the professional engineer so employed. This information shall be submitted prior to construction.

4. Within 30 days after completion of construction of the permitted activity, the Permittee shall submit to the Brooksville Service Office a written statement of completion and certification by a registered professional engineer or other appropriate individual as authorized by law, utilizing the required Statement of Completion and Request for Transfer to Operation Entity form identified in Chapter 40D-1.659, F.A.C., and signed, dated and sealed as-built drawings. The as-built drawings shall identify any deviations from the approved construction drawings.

5. The District reserves the right, upon prior notice to the Permittee, to conduct on-site research to assess the pollutant removal efficiency of the surface water management system. The Permittee may be required to cooperate in this regard by allowing on-site access by District representatives, by allowing the installation and operation of testing and monitoring equipment, and by allowing other assistance measures as needed on site.

6. All construction is prohibited within the permitted project area until the Permittee acquires legal ownership or legal control of the project area as delineated in the permitted construction drawings.

7. The operation and maintenance entity shall submit inspection reports in the form required by the District, in accordance with the following schedule.

   For systems utilizing retention or wet detention, the inspections shall be performed two (2) years after operation is authorized and every two (2) years thereafter.

8. If limestone bedrock is encountered during construction of the surface water management system, the District must be notified and construction in the affected area shall cease.

9. The Permittee shall notify the District of any sinkhole development in the surface water management system within 48 hours of discovery and must submit a detailed sinkhole evaluation and repair plan for approval by the District within 30 days of discovery.

10. The District, upon prior notice to the Permittee, may conduct on-site inspections to assess the effectiveness of the erosion control barriers and other measures employed to prevent violations of state water quality standards and avoid downstream impacts. Such barriers or other measures should control discharges, erosion, and sediment transport during construction and thereafter. The District will also determine any potential environmental problems that may develop as a result of leaving or removing the barriers and other measures during construction or after construction of the project has been completed. The Permittee must provide any remedial measures that are needed.

11. This permit is issued based upon the design prepared by the Permittee's consultant. If at any time it is determined by the District that the Conditions for Issuance of Permits in Rules 40D-4.301 and 40D-4.302, F.A.C., have not been met, upon written notice by the District, the Permittee shall obtain a permit modification and perform any construction necessary thereunder to correct any deficiencies in the system design or construction to meet District rule criteria. The Permittee is advised that the correction of deficiencies may require re-construction of the surface water management system and/or mitigation areas.

GENERAL CONDITIONS

1. The general conditions attached hereto as Exhibit "A" are hereby incorporated into this permit by reference and the Permittee shall comply with them.

Authorized Signature

HENRY ROBERT LUE, P.E., DIRECTOR
BROOKSVILLE REGULATION DEPARTMENT

EXHIBIT "A"

1. All activities shall be implemented as set forth in the plans, specifications and performance criteria as approved by this permit. Any deviation from the permitted activity and the conditions for undertaking that activity shall constitute a violation of this permit.

2. This permit or a copy thereof, complete with all conditions, attachments, exhibits, and modifications, shall be kept at the work site of the permitted activity. The complete permit shall be available for review at the work site upon request by District staff. The permittee shall require the contractor to review the complete permit prior to commencement of the activity authorized by this permit.

3. For general permits authorizing incidental site activities, the following limiting general conditions shall also apply:

   a. If the decision to issue the associated individual permit is not final within 90 days of issuance of the incidental site activities permit, the site must be restored by the permittee within 90 days after notification by the District. Restoration must be completed by re-contouring the disturbed site to previous grades and slopes re-establishing and maintaining suitable vegetation and erosion control to provide stabilized hydraulic conditions. The period for completing restoration may be extended if requested by the permittee and determined by the District to be warranted due to adverse weather conditions or other good cause. In addition, the permittee shall institute stabilization measures for erosion and sediment control as soon as practicable, but in no case more than 7 days after notification by the District.

   b. The incidental site activities are commenced at the permittee's own risk. The Governing Board will not consider the monetary costs associated with the incidental site activities or any potential restoration costs in making its decision to approve or deny the individual environmental resource permit application. Issuance of this permit shall not in any way be construed as commitment to issue the associated individual environmental resource permit.

4. Activities approved by this permit shall be conducted in a manner which does not cause violations of state water quality standards. The permittee shall implement best management practices for erosion and a pollution control to prevent violation of state water quality standards. Temporary erosion control shall be implemented prior to and during construction, and permanent control measures shall be completed within 7 days of any construction activity. Turbidity barriers shall be installed and maintained at all locations where the possibility of transferring suspended solids into the receiving waterbody exists due to the permitted work. Turbidity barriers shall remain in place at all locations until construction is completed and soils are stabilized and vegetation has been established. Thereafter the permittee shall be responsible for the removal of the barriers. The permittee shall correct any erosion or shoaling that causes adverse impacts to the water resources.

5. Water quality data for the water discharged from the permittee's property or into the surface waters of the state shall be submitted to the District as required by the permit. Analyses shall be performed according to procedures outlined in the current edition of Standard Methods for the Examination of Water and Wastewater by the American Public Health Association or Methods for Chemical Analyses of Water and Wastes by the U.S. Environmental Protection Agency. If water quality data are required, the permittee shall provide data as required on volumes of water discharged, including total volume discharged during the days of sampling and total monthly volume discharged from the property or into surface waters of the state.

6. District staff must be notified in advance of any proposed construction dewatering. If the dewatering activity is likely to result in offsite discharge or sediment transport into wetlands or surface waters, a written dewatering plan must either have been submitted and approved with the permit application or submitted to the District as a permit prior to the dewatering event as a permit modification. A water use permit may be required prior to any use exceeding the thresholds in Chapter 40D-2, F.A.C.

7. Stabilization measures shall be initiated for erosion and sediment control on disturbed areas as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 7 days after the construction activity in that portion of the site has temporarily or permanently ceased.

8. Off-site discharges during construction and development shall be made only through the facilities authorized by this permit. Water discharged from the project shall be through structures having a mechanism suitable for regulating upstream stages. Stages may be subject to operating schedules satisfactory to the District.

9. The permittee shall complete construction of all aspects of the surface water management system, including wetland compensation (grading, mulching, planting), water quality treatment features, and discharge control facilities prior to beneficial occupancy or use of the development being served by this system.

10. The following shall be properly abandoned and/or removed in accordance with the applicable regulations:

    a. Any existing wells in the path of construction shall be properly plugged and abandoned by a licensed well contractor.
    b. Any existing septic tanks on site shall be abandoned at the beginning of construction.
    c. Any existing fuel storage tanks and fuel pumps shall be removed at the beginning of construction.

11. All surface water management systems shall be operated to conserve water in order to maintain environmental quality and resource protection; to increase the efficiency of transport, application and use; to decrease waste; to minimize unnatural runoff from the property and to minimize dewatering of offsite property.

12. At least 48 hours prior to commencement of activity authorized by this permit, the permittee shall submit to the District a written notification of commencement indicating the actual start date and the expected completion date.

13. Each phase or independent portion of the permitted system must be completed in accordance with the permitted plans and permit conditions prior to the occupation of the site or operation of site infrastructure located within the area served by that portion or phase of the system. Each phase or independent portion of the system must be completed in accordance with the permitted plans and permit conditions prior to transfer of responsibility for operation and maintenance of that phase or portion of the system to a local government or other responsible entity.

14. Within 30 days after completion of construction of the permitted activity, the permittee shall submit a written statement of completion and certification by a registered professional engineer or other appropriate individual as authorized by law, utilizing the required Statement of Completion and Request for Transfer to Operation Entity form identified in Chapter 40D-1, F.A.C. Additionally, if deviation from the approved drawings are discovered during the certification process the certification must be accompanied by a copy of the approved permit drawings with deviations noted.

15. This permit is valid only for the specific processes, operations and designs indicated on the approved drawings or exhibits submitted in support of the permit application. Any substantial deviation from the approved drawings, exhibits, specifications or permit conditions, including construction within the total land area but outside the approved project area(s), may constitute grounds for revocation or enforcement action by the District, unless a modification has been applied for and approved. Examples of substantial deviations include excavation of ponds, ditches or sump areas deeper than shown on the approved plans.

16. The operation phase of this permit shall not become effective until the permittee has complied with the requirements of the conditions herein, the District determines the system to be in compliance with the permitted plans, and the entity approved by the District accepts responsibility for operation and maintenance of the system. The permit may not be transferred to the operation and maintenance entity approved by the District until the operation phase of the permit becomes effective. Following inspection and approval of the permitted system by the District, the permittee shall request transfer of the permit to the responsible operation and maintenance entity approved by the District, if different from the permittee. Until a transfer is approved by the District, the permittee shall be liable for compliance with the terms of the permit.

17. Should any other regulatory agency require changes to the permitted system, the District shall be notified of the changes prior to implementation so that a determination can be made whether a permit modification is required.

18. This permit does not eliminate the necessity to obtain any required federal, state, local and special District authorizations including a determination of the proposed activities' compliance with the applicable comprehensive plan prior to the start of any activity approved by this permit.

19. This permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the permit and Chapter 40D-4 or Chapter 40D-40, F.A.C.

20. The permittee shall hold and save the District harmless from any and all damages, claims, or liabilities which may arise by reason of the activities authorized by the permit or any use of the permitted system.

21. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under section 373.421(2), F.S., provides otherwise.

22. The permittee shall notify the District in writing within 30 days of any sale, conveyance, or other transfer of ownership or control of the permitted system or the real property at which the permitted system is located. All transfers of ownership or transfers of a permit are subject to the requirements of Rule 40D-4.351, F.A.C. The permittee transferring the permit shall remain liable for any corrective actions that may be required as a result of any permit violations prior to such sale, conveyance or other transfer.

23. Upon reasonable notice to the permittee, District authorized staff with proper identification shall have permission to enter, inspect, sample and test the system to insure conformity with District rules, regulations and conditions of the permits.

24. If historical or archaeological artifacts are discovered at any time on the project site, the permittee shall immediately notify the District and the Florida Department of State, Division of Historical Resources.

25. The permittee shall immediately notify the District in writing of any previously submitted information that is later discovered to be inaccurate.

PROFESSIONAL CERTIFICATION*
FOR THE ENG[redacted]ERING EVALUATION REPORT

MSSW/ERP Permit Number:	44010201.008
Date Application Received:	August 9, 2006
Permittee's Name:	Marion County Board of County Commissioners
Address:	601 SE 25th Avenue Ocala, FL 34471
Project Name:	Marion County - NW 44th Avenue, From US 27 to North of NW 60th Street
Project Description:	Road Project
Project Size:	50.40 Acres
Activity:	Construction
Section(s)/Township/Range:	3/15S/21E; 22,27,34/14S/21E

I HEREBY CERTIFY that the engineering features described in the referenced application to construct and/or operate a surface water management system associated with the indicated project have been evaluated regarding provision of reasonable assurance of compliance with Part IV, Chapter 373, Florida Statutes, and Chapters 40D-4, 40D-40 or 40D-400, Florida Administrative Code, (F.A.C.), as applicable. I have not evaluated and do not make any certifications as to other aspects of the proposal.

3/7/07

_____(Seal)

C. Clay Black, FL P.E. # 40879
Senior Professional Engineer
Brooksville Regulation Department
Southwest Florida Water Management District

* When required by Subsection 61G15-26.001(1), F.A.C., a professional engineer's seal, signature and date (i.e., "Professional Certification") means that the work indicated has been conducted under the responsible supervision, direction or control of a person licensed by the State to practice engineering, who by authority of their license is required to have some specialized knowledge of engineering. Professional Certification is not a guaranty or warranty of fitness or suitability, either explicit or implied.

APPENDIX H

Excerpts from
I-75 Permit

MANAGEMENT AND STORAGE OF SURFACE WATERS TECHNICAL STAFF REPORT
April 16, 1993

APPLICANT: Florida Department of Transportation
C/O Karen Snyder
719 South Woodland Boulevard
Deland, Florida 32720

AGENT: Beiswenger, Hoch and Associates, Inc.
Massoud M. Keshani
385 Whooping Loop, Suite 1315
Altamonte Springs, FL 32701

COUNTY: Marion PROJECT NAME: Interstate 75
SECTION(S): 2,34,35,27 TOWNSHIP(S): 14S & 15S RANGE(S): 21E
ACRES OWNED: 157 PROJECT ACREAGE: 157

AUTHORITY: 40C-4.041(2)(b)2,4, F.A.C.

GENERAL DESCRIPTION OF APPLICATION NO. 4-083-0163AG
This application is for authorization to construct a surface water management system consisting of the addition of two traffic lanes and the associated stormwater management facilities to the existing Interstate 75 from U.S. 27 to C.R. 326 in Marion County, Florida.

RECEIVING WATER BODY(IES): Groundwater

EXISTING LAND USE: Interstate 75 and grassed median

OPERATION AND MAINTENANCE ENTITY: Florida Department of Transportation

STAFF COMMENTS:
The Florida Department of Transportation proposes to add an additional travel lane to both the north and south bound lanes of Interstate 75 from U.S. 27 to C.R. 326 in Marion County. The additional lanes will be constructed within the existing median of I-75. Stormwater runoff from the proposed project will be collected in median inlets and routed to a series of dry retention areas and swale/ditch block systems on the outside of the travel lanes for the required water quality treatment and peak rate/volume attenuation. All of the proposed work will be done within the existing right-of-way of Interstate 75.

No wetlands exist on the project site. The project conforms with the wetland review criteria of 10.7.4 A.H. Staff believes that this project, as proposed and conditioned, is consistent with the District objectives and criteria set forth in chapters 40C-4, 40C-41, and 40C-42 F.A.C.

MSSW WETLAND INVENTORY

TOTAL WETLANDS INVOLVED:	0.00
TOTAL WETLANDS PRESERVED:	0.00
TOTAL WETLANDS DISTURBED:	0.00
TOTAL WETLANDS LOST:	0.00
TOTAL WETLANDS RESTORED/CREATED:	0.00
TOTAL WETLANDS ENHANCED:	0.00

RECOMMENDATION: APPROVAL

CONDITIONS FOR APPLICATION NUMBER 4-083-0163AG

GENERAL (SEE CONDITION SHEET): 2, 3, 4, 5, 6, 7, 8

SPECIAL (SEE CONDITION SHEET): 1, 2, 6, 13, 14, 15, 29, 30, 39

OTHER CONDITIONS:

1. The proposed surface water management system must be constructed as per the plans received by the District on January 11, 1993, as modified by plans received by the District on March 5, 1993.

Register/McGee

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BASIN "E"

Basin "E" was designed as a Dry Retention-Detention facility located between stations 1032+00 and 1050+35 west of the existing Interstate 75 alignment. Basin consists of five interconnected ponds and five ditch block systems. All ponds have 4:1 front and back slopes, a variable bottom width, and a 10 foot maintenance berm abutting the Right-of-Way. Ditch Block Systems have varied front slopes from 4:1 to 6:1, variable bottoms, and 4:1 backslopes, with a 10 foot minimum maintenance berm. Ditch Blocks have slopes at 10:1 with a flat 10 foot top width.

The drainage area associated with Basin "E" (including contributing offsite drainage area) consists of 18.24 acres. The primary conveyance system for Basin "E" are culvert pipes in the median and extensive use of ditches. The MODRET (Version 4.0) computer modelling was used for all ponds and ditch block systems by computing seepage through bottom and sideslopes using horizontal hydraulic conductivity with safety factor of 2.

Basin "E" was routed with Advanced Interconnected Pond Routing (Advanced ICPR v. 1.30) package by Streamline Technologies, Inc. and used a 25yr/96hr storm event for analysis.

Q (Pre-Improvement Discharge) = 63.93 CFS
Q (Post-Improvement Discharge) = 62.02 CFS

POND	BOTTOM ELEVATION	DESIGN HIGH WATER ELEVATION	REQUIRED TREATMENT VOLUME (AC-FT)	RECOVERED VOLUME WITHIN 72 HOURS (AC-FT)	VERTICAL INFILTRATION RATE (FT/DAY)
E1	90.00	91.81	0.194	0.092	0.7
E2	88.50	90.42	0.147	0.295	0.7
E3	86.00	89.35	0.337	0.190	0.7
E4	82.50	86.21	0.665	0.604	0.7
E5	81.00	84.49	0.1775	0.217	0.7

Total Required Treatment Volume = 1.52 Ac-Ft

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Florida Department of Transportation

VOLUME III OF VI

100% DRAINAGE COMPUTATION

I-75 NORTH
From SR 500 to CR 326
State Project No. 36210-1439
Work Program Item No. 5146282

Beiswenger Hoch and Associates

APRIL 1993

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BASIN "G"

Basin "G" was designed as a Dry Retention-Detention facility located between stations 1056+75 and 1088+00 east of the existing Interstate 75 alignment. Basin consists of twelve interconnected ponds and thirteen ditch block systems. All ponds have 4:1 front and back slopes, a variable bottom width, and a 10 foot maintenance berm abutting the Right-of-Way. Ditch Block Systems have varied front slopes from 4:1 to 6:1, variable bottoms, and 4:1 backslopes, with a 10 foot minimum maintenance berm. Ditch Blocks have slopes at 10:1 with a flat 10 foot top width.

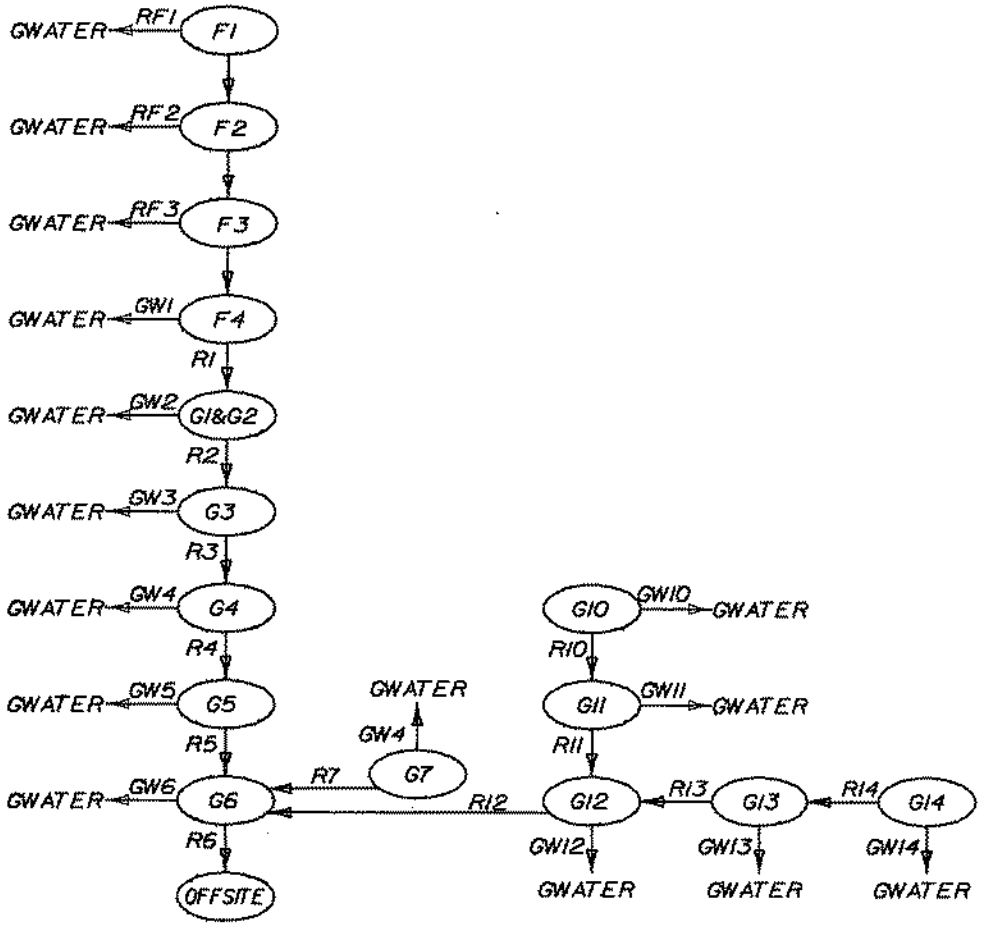
The drainage area associated with Basin "G" (including contributing offsite drainage area) consists of 28.50 acres. The primary conveyance system for Basin "G" are culvert pipes in the median and extensive use of ditches. The MODRET (Version 4.0) computer modelling was used for all ponds and ditch block systems by computing seepage through bottom and sideslopes using horizontal hydraulic conductivity with safety factor of 2.

Basin "G" was routed with Advanced Interconnected Pond Routing (Advanced ICPR v. 1.30) and ICPR (v. 2.80) package by Streamline Technologies, Inc. and used a 25yr/96hr storm event for analysis.

Q (Pre-Improvement Discharge) = 112.90 CFS
Q (Post-Improvement Discharge) = 96.09 CFS

POND	BOTTOM ELEVATION	DESIGN HIGH WATER ELEVATION	REQUIRED TREATMENT VOLUME (AC-FT)	RECOVERED VOLUME WITHIN 72 HOURS (AC-FT)	VERTICAL INFILTRATION RATE (FT/DAY)
G1	75.00	77.36	0.056	0.248	6.5
G3	73.50	75.94	0.256	0.086	6.5
G4	72.00	74.92	0.046	0.153	6.5
G5	69.00	72.70	0.049	0.374	6.0
G6	67.50	71.20	0.458	1.036	6.0
G7	72.00	74.38	0.164	0.220	6.0
G10	72.50	75.55	0.498	0.200	6.0
G11	71.00	73.95	0.046	0.147	6.0
G12	69.00	74.74	0.139	0.465	6.0
G13	71.00	74.32	0.072	0.327	6.0
G14	75.00	76.36	0.249	0.037	6.0

BASIN "G"



LEGEND

NODE

REACH

GWATER — GROUND WATER INFILTRATION*

* Used for recovery calculations only.

DRAWN BY	JOB NUMBER
K.A.H.	96N
CHECKED BY	DATE
M.M.K.	11-92

ICPR NODAL ROUTING DIAGRAM

BEISWENGER, HOCH AND ASSOCIATES, INC. CONSULTING ENGINEERS, ALTAMONTE SPRINGS, FLORIDA

N:\TBH\cad\d.dgn
H:\SCRIPTS\NGNOD.PRV

PROPOSED CONDITION

PROPOSED CONDITION

SUB-BASIN G1:

^{A}(Pavement) = 0.19 AC, ^{A}(Grass) = 0.48 AC, ^{A}(Total) = 0.67 AC

SUB-BASIN G2:

^{A}(Pavement) = 1.97 AC, ^{A}(Grass) = 1.95 AC, ^{A}(Offsite) = 1.20 AC

^{A}(Total) = 5.12 AC

SUB-BASIN G3:

^{A}(Pavement) = 1.03 AC, ^{A}(Grass) = 0.84 AC, ^{A}(Offsite) = 1.20 AC

^{A}(Total) = 3.07 AC

SUB-BASIN G4:

^{A}(Pavement) = 0.16 AC, ^{A}(Grass) = 0.39 AC, ^{A}(Total) = 0.55 AC

SUB-BASIN G5:

^{A}(Pavement) = 0.17 AC, ^{A}(Grass) = 0.42 AC, ^{A}(Total) = 0.59 AC

SUB-BASIN G6:

^{A}(Pavement) = 2.61 AC, ^{A}(Grass) = 1.87 AC, ^{A}(Total) = 4.48 AC

SUB-BASIN G7 and G8:

^{A}(Pavement) = 0.57 AC, ^{A}(Grass) = 1.40 AC, ^{A}(Total) = 1.97 AC

SUB-BASIN G9 and G10:

^{A}(Pavement) = 1.06 AC, ^{A}(Grass) = 2.62 AC, ^{A}(Offsite) = 2.30 AC

^{A}(Total) = 5.98 AC

SUB-BASIN G11:

^{A}(Pavement) = 0.16 AC, ^{A}(Grass) = 0.39 AC, ^{A}(Total) = 0.55 AC

SUB-BASIN G12:

^{A}(Pavement) = 0.48 AC, ^{A}(Grass) = 1.19 AC, ^{A}(Total) = 1.67 AC

SUB-BASIN G13:

^{A}(Pavement) = 0.25 AC, ^{A}(Grass) = 0.61 AC, ^{A}(Total) = 0.86 AC

SUB-BASIN G14:

^{A}(Pavement) = 0.40 AC, ^{A}(Grass) = 0.99 AC, ^{A}(Offsite) = 1.60 AC

^{A}(Total) = 2.99 AC

SUMMARY BASIN "G" (PROPOSED CONDITION)

^{A}(Total) = G1 + G2 + G3 +G4 + G5 + G6 + G7 + G8 + G9 + G10 + G11 + G12 + G13 + G14

^{A}(Total) = 0.67 AC + 5.12 AC + 3.07 AC + 0.55 AC + 0.59 AC + 4.48 AC + 1.97 AC + 5.98 AC + 0.55 AC +1.67 AC + 0.86 AC + 2.99 AC = 28.50 AC

^{A}(Pavement) = 9.05 AC

^{A}(Grass) = 13.15 AC

^{A}(Offsite) = 6.30 AC

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BASIN "G" (G1 THRU. G6)-PROPOSED CONDITION-25YR/96HRS
4/13/93

BASIN NAME	G1	G2	OFF-G2	G3	OFF-G3
NODE NAME	NG1	NG1	NG2	NG3	NG3
TIME INCREMENT (min)	3.00	3.00	5.00	3.00	3.00
RAINFALL FILE	SJRWMD96	SJRWMD96	SJRWMD96	SJRWMD96	SJRWMD96
RAIN AMOUNT (in)	11.50	11.50	11.50	11.50	11.50
STORM DURATION (hrs)	96.00	96.00	96.00	96.00	96.00
AREA (ac)	.67	3.92	1.20	1.87	1.20
CURVE NUMBER	62.90	73.63	49.00	75.99	49.00
DCIA (%)	.00	.00	.00	.00	.00
TC (mins)	10.00	10.00	10.00	10.00	10.00
LAG TIME (hrs)	.00	.00	.00	.00	.00
BASIN STATUS	ONSITE	ONSITE	OFFSITE	ONSITE	OFFSITE

BASIN	QMX (cfs)	TMX (hrs)	VOL (in)	NOTES
G1	2.83	59.95	6.57	
G2	19.55	59.95	8.09	
OFF-G2	3.51	59.92	4.47	
G3	9.58	59.95	8.42	
OFF-G3	3.57	59.95	4.47	

BASIN NAME	G4	G5	G6	F1	F2
NODE NAME	NG4	NG5	NG6	NF1	NF2
TIME INCREMENT (min)	3.00	3.00	3.00	3.00	3.00
RAINFALL FILE	SJRWMD96	SJRWMD96	SJRWMD96	SJRWMD96	SJRWMD96
RAIN AMOUNT (in)	11.50	11.50	11.50	11.50	11.50
STORM DURATION (hrs)	96.00	96.00	96.00	96.00	96.00
AREA (ac)	.55	.59	4.48	8.10	1.68
CURVE NUMBER	63.25	63.12	77.54	55.96	58.04
DCIA (%)	.00	.00	.00	.00	.00
TC (mins)	10.00	10.00	10.00	10.00	10.00
LAG TIME (hrs)	.00	.00	.00	.00	.00
BASIN STATUS	ONSITE	ONSITE	ONSITE	ONSITE	ONSITE

BASIN	QMX (cfs)	TMX (hrs)	VOL (in)	NOTES
G4	2.34	59.95	6.62	
G5	2.51	59.95	6.60	
G6	23.34	59.95	8.63	
F1	29.47	59.95	5.53	
F2	6.42	59.95	5.85	

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BASIN "G" (G1 THRU. G6)-PROPOSED CONDITION-25YR/96HRS
4/13/93

BASIN NAME	F3	F4
NODE NAME	NF3	NF4
TIME INCREMENT (min)	3.00	3.00
RAINFALL FILE	SJRWMD96	SJRWMD96
RAIN AMOUNT (in)	11.50	11.50
STORM DURATION (hrs)	96.00	96.00
AREA (ac)	1.45	4.55
CURVE NUMBER	59.14	58.69
DCIA (%)	.00	.00
TC (mins)	10.00	10.00
LAG TIME (hrs)	.00	.00
BASIN STATUS	ONSITE	ONSITE

BASIN	QMX (cfs)	TMX (hrs)	VOL (in)	NOTES
F3	5.68	59.95	6.01	
F4	17.65	59.95	5.94	

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BASIN "G" (G1 THRU. G6)-PROPOSED CONDITION-25YR/96HRS
4/13/93

CONTROL PARAMETERS

START TIME: .00
END TIME: 120.00

TO TIME (hours)	SIMULATION INC (secs)	PRINT INC (mins)
120.00	10.00	60.00

RUNOFF HYDROGRAPH FILE: DEFAULT
OFFSITE HYDROGRAPH FILE: DEFAULT
BOUNDARY DATABASE FILE: NONE

NOTE:

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BASIN "G" (G1 THRU. G6)-PROPOSED CONDITION-25YR/96HRS
4/13/93

NODE NAME	NODE TYPE	INI STAGE (ft)	X-COOR (ft)	Y-COOR (ft)	LENGTH (ft)	STAGE (ft)	AREA/TIME (ac)/(hr)
NG1	AREA	75.000	.000	.000	.000	75.000	.000
						75.400	.284
						75.800	.360
						76.200	.437
						76.600	.514
						77.000	.592
						77.400	.684
						77.800	.777
						78.200	.873
						78.800	1.021
NG3	AREA	73.500	.000	.000	.000	73.500	.000
						73.800	.034
						74.100	.049
						74.400	.064
						74.700	.081
						75.000	.098
						75.300	.118
						75.600	.140
						76.000	.169
NG4	AREA	72.000	.000	.000	.000	72.000	.000
						72.400	.054
						72.800	.067
						73.200	.082
						73.600	.099
						74.000	.118
						74.400	.139
						74.800	.160
						75.000	.171
NG5	AREA	69.000	.000	.000	.000	69.000	.000
						69.500	.057
						70.000	.074
						70.500	.093
						71.000	.114
						71.500	.137
						72.000	.161
						72.500	.188
						72.900	.210

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BASIN "G" (G1 THRU. G6)-PROPOSED CONDITION-25YR/96HRS
4/13/93

NODE NAME	NODE TYPE	INI STAGE (ft)	X-COOR (ft)	Y-COOR (ft)	LENGTH (ft)	STAGE (ft)	AREA/TIME (ac)/(hr)
NG6	TIME	67.500	.000	.000	.000	67.500	.000
						68.000	12.000
						68.500	24.000
						69.000	36.000
						69.500	48.000
						70.000	84.000
						70.500	96.000
NF1	AREA	85.000	.000	.000	.000	85.000	.000
						85.300	.022
						85.600	.034
						85.900	.048
						86.200	.063
						86.500	.081
						86.800	.099
						87.100	.119
						87.400	.140
NF2	AREA	83.000	.000	.000	.000	83.000	.000
						83.300	.084
						83.600	.098
						83.900	.112
						84.200	.126
						84.500	.140
						84.800	.155
						85.100	.171
						85.400	.186
						86.000	.224
NF3	AREA	81.000	.000	.000	.000	81.000	.000
						81.400	.085
						81.800	.103
						82.200	.121
						82.600	.139
						83.000	.158
						83.400	.178
						83.800	.198
						84.200	.221
						84.600	.246
NF4	AREA	78.000	.000	.000	.000	78.000	.000
						78.500	.302
						79.000	.366
						79.500	.432
						80.000	.499
						80.500	.567
						81.000	.636
						81.500	.706
						81.900	.776

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        BASIN "G" (G1 THRU. G6)-PROPOSED CONDITION-25YR/96HRS
        4/13/93

))REACH NAME        : R1
  FROM NODE         : NF4
  TO NODE           : NG1
  REACH TYPE        : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION    : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft):  80.800 BTM. WIDTH (ft):  10.000   LEFT SS (h/v):  10.000
     RGHT SS (h/v):  10.000    OPENING (ft): 999.000      WEIR COEF.:   3.200
        GATE COEF.:    .600 NUMBER OF ELEM.:   1.000
              NOTE:

))REACH NAME        : R2
  FROM NODE         : NG1
  TO NODE           : NG3
  REACH TYPE        : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION    : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft):  76.500 BTM. WIDTH (ft):  10.000   LEFT SS (h/v):  10.000
     RGHT SS (h/v):  10.000    OPENING (ft): 999.000      WEIR COEF.:   3.200
        GATE COEF.:    .600 NUMBER OF ELEM.:   1.000
              NOTE:

))REACH NAME        : R3
  FROM NODE         : NG3
  TO NODE           : NG4
  REACH TYPE        : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION    : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft):  75.000 BTM. WIDTH (ft):  10.000   LEFT SS (h/v):  10.000
     RGHT SS (h/v):  10.000    OPENING (ft): 999.000      WEIR COEF.:   3.200
        GATE COEF.:    .600 NUMBER OF ELEM.:   1.000
              NOTE:

))REACH NAME        : R4
  FROM NODE         : NG4
  TO NODE           : NG5
  REACH TYPE        : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION    : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft):  74.000 BTM. WIDTH (ft):  10.000   LEFT SS (h/v):  10.000
     RGHT SS (h/v):  10.000    OPENING (ft): 999.000      WEIR COEF.:   3.200
        GATE COEF.:    .600 NUMBER OF ELEM.:   1.000
              NOTE:

))REACH NAME        : R5
  FROM NODE         : NG5
  TO NODE           : NG6
  REACH TYPE        : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION    : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft):  71.800 BTM. WIDTH (ft):  10.000   LEFT SS (h/v):  10.000
     RGHT SS (h/v):  10.000    OPENING (ft): 999.000      WEIR COEF.:   3.200
        GATE COEF.:    .600 NUMBER OF ELEM.:   1.000
              NOTE:
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BASIN "G" (G1 THRU. G6)-PROPOSED CONDITION-25YR/96HRS
4/13/93

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))REACH NAME        : RF3
  FROM NODE         : NF3
  TO NODE           : NF4
  REACH TYPE        : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION    : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft): 83.800 BTM. WIDTH (ft):  10.000   LEFT SS (h/v):  10.000
     RGHT SS (h/v): 10.000    OPENING (ft): 999.000      WEIR COEF.:   3.200
        GATE COEF.:   .600 NUMBER OF ELEM.:   1.000
              NOTE:

))REACH NAME        : RF2
  FROM NODE         : NF2
  TO NODE           : NF3
  REACH TYPE        : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION    : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft): 85.500 BTM. WIDTH (ft):  10.000   LEFT SS (h/v):  10.000
     RGHT SS (h/v): 10.000    OPENING (ft): 999.000      WEIR COEF.:   3.200
        GATE COEF.:   .600 NUMBER OF ELEM.:   1.000
              NOTE:

))REACH NAME        : RF1
  FROM NODE         : NF1
  TO NODE           : NF2
  REACH TYPE        : TRAPEZOIDAL WEIR/GATE/ORIFICE, MAVIS EQ.
  FLOW DIRECTION    : POSITIVE AND NEGATIVE FLOWS ALLOWED
    CREST EL. (ft): 87.000 BTM. WIDTH (ft):  10.000   LEFT SS (h/v):  10.000
     RGHT SS (h/v): 10.000    OPENING (ft): 999.000      WEIR COEF.:   3.200
        GATE COEF.:   .600 NUMBER OF ELEM.:   1.000
              NOTE:
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BASIN "G" (G6,G7,G10,G11,G12,G13,G14)-PROPOSED CONDITION
4/13/93

NODAL STAGE/VOLUME/FLOW REPORT

NODE ID: OFF-LOW

TIME (hrs)	STAGE (ft)	VOLUME (af)	INFLOW RUNOFF (cfs)	INFLOW OFFSITE (cfs)	INFLOW OTHER (cfs)	OUTFLOW (cfs)
88.00	70.57	9.31	.00	.00	.77	.00
89.00	70.57	9.37	.00	.00	.77	.00
90.00	70.57	9.44	.00	.00	.78	.00
91.00	70.58	9.50	.00	.00	.78	.00
92.00	70.58	9.57	.00	.00	.78	.00
93.00	70.59	9.63	.00	.00	.78	.00
94.00	70.59	9.70	.00	.00	.78	.00
95.00	70.60	9.76	.00	.00	.78	.00
96.00	70.60	9.82	.00	.00	.66	.00
97.00	70.60	9.86	.00	.00	.38	.00
98.00	70.61	9.89	.00	.00	.24	.00
99.00	70.61	9.90	.00	.00	.16	.00
100.00	70.62	9.91	.00	.00	.10	.00
101.00	70.62	9.92	.00	.00	.07	.00
102.00	70.63	9.93	.00	.00	.05	.00
103.00	70.63	9.93	.00	.00	.03	.00
104.00	70.63	9.93	.00	.00	.02	.00
105.00	70.64	9.94	.00	.00	.02	.00
106.00	70.64	9.94	.00	.00	.01	.00
107.00	70.65	9.94	.00	.00	.01	.00
108.00	70.65	9.94	.00	.00	.01	.00
109.00	70.65	9.94	.00	.00	.00	.00
110.00	70.66	9.94	.00	.00	-.01	.00
111.00	70.66	9.94	.00	.00	-.01	.00
112.00	70.67	9.94	.00	.00	-.01	.00
113.00	70.67	9.94	.00	.00	-.01	.00
114.00	70.67	9.93	.00	.00	-.01	.00
115.00	70.68	9.93	.00	.00	-.01	.00
116.00	70.68	9.93	.00	.00	-.01	.00
117.00	70.69	9.93	.00	.00	-.02	.00
118.00	70.69	9.93	.00	.00	-.02	.00
119.00	70.70	9.93	.00	.00	-.02	.00
120.00	70.70	9.93	.00	.00	-.02	.00

Inflow to Depression 2

RECOVERY CALCULATION

POLLUTION ABATEMENT VOLUME ANALYSIS
USING 'MODRET 4' PROGRAM

Written by: Nicolas E. Andreyev,P.E. (May, 1992)
(Sponsored by: SWFWMD/PSI)

SUMMARY OF INPUT PARAMETERS

POND NAME / NUMBER : G1

AVERAGE WETTED POND LENGTH	170.000 ft
AVERAGE WETTED POND WIDTH	31.330 ft
AVERAGE ELEVATION OF BOTTOM OF AQUIFER	66.000 ft
AVERAGE ELEVATION OF DESIGN GROUNDWATER TABLE	72.000 ft
AVERAGE ELEVATION OF POND BOTTOM	79.000 ft
AVERAGE HORIZONTAL HYDRAULIC CONDUCTIVITY	29.250 ft/d
AVERAGE EFFECTIVE STORAGE COEFF. OF SOIL	0.200
AVERAGE STORAGE COEFFICIENT OF POND AREA	1.000
POLLUTION ABATEMENT VOLUME TO BE TREATED	0.248 ac-ft
TIME INCREMENTS AFTER STORM EVENT	12.00 hours
No. OF TIME INCREMENTS AFTER STORM EVENT	6.00
NUMBER OF GROUNDWATER CONTROL FEATURES	0.00

SUMMARY OF POLLUTION ABATEMENT MODEL RESULTS

POND NAME / No.: G1

CUMMULATIVE TIME (hrs.)	WATER ELEVATION (feet)	INSTANTANEOUS INFILTRATION RATE (cfs)	AVERAGE INFILTRATION RATE (cfs)
0.000	79.000	0.286 *	
			0.2234
12.000	77.188	0.161	
			0.0986
24.000	76.388	0.081	
			0.0636
36.000	75.873	0.055	
			0.0464
48.000	75.496	0.041	
			0.0363
60.000	75.202	0.033	
			0.0297
72.000	74.961		

* This value (with associated time) is an equivalent instantaneous infiltration rate to be used with a stormwater routing model (such as ADICPR or others). Just before this time, the infiltration is zero (prior to runoff reaching the pond).

POLLUTION ABATEMENT VOLUME ANALYSIS
USING 'MODRET 4' PROGRAM

Written by: Nicolas E. Andreyev,P.E. (May, 1992)
(Sponsored by: SWFWMD/PSI)

SUMMARY OF INPUT PARAMETERS

POND NAME / NUMBER : G2

AVERAGE WETTED POND LENGTH	745.000	ft
AVERAGE WETTED POND WIDTH	14.500	ft
AVERAGE ELEVATION OF BOTTOM OF AQUIFER	64.000	ft
AVERAGE ELEVATION OF DESIGN GROUNDWATER TABLE	70.000	ft
AVERAGE ELEVATION OF POND BOTTOM	76.500	ft
AVERAGE HORIZONTAL HYDRAULIC CONDUCTIVITY	29.250	ft/d
AVERAGE EFFECTIVE STORAGE COEFF. OF SOIL	0.200	
AVERAGE STORAGE COEFFICIENT OF POND AREA	1.000	
POLLUTION ABATEMENT VOLUME TO BE TREATED	0.396	ac-ft
TIME INCREMENTS AFTER STORM EVENT	12.00	hours
No. OF TIME INCREMENTS AFTER STORM EVENT	6.00	
NUMBER OF GROUNDWATER CONTROL FEATURES	0.00	

SUMMARY OF POLLUTION ABATEMENT MODEL RESULTS

POND NAME / No.: G2

CUMMULATIVE TIME (hrs.)	WATER ELEVATION (feet)	INSTANTANEOUS INFILTRATION RATE (cfs)	AVERAGE INFILTRATION RATE (cfs)
0.000	76.500	0.852 *	
			0.6335
12.000	73.967	0.414	
			0.1955
24.000	73.185	0.152	
			0.1079
36.000	72.753	0.098	
			0.0725
48.000	72.463	0.062	
			0.0523
60.000	72.254	0.047	
			0.0408
72.000	72.091		

* This value (with associated time) is an equivalent instantaneous infiltration rate to be used with a stormwater routing model (such as ADICPR or others). Just before this time, the infiltration is zero (prior to runoff reaching the pond).

POLLUTION ABATEMENT VOLUME ANALYSIS
USING 'MODRET 4' PROGRAM

Written by: Nicolas E. Andreyev,P.E. (May, 1992)
(Sponsored by: SWFWMD/PSI)

SUMMARY OF INPUT PARAMETERS

POND NAME / NUMBER : G3

AVERAGE WETTED POND LENGTH	)	260.000 ft
AVERAGE WETTED POND WIDTH	)	9.250 ft
AVERAGE ELEVATION OF BOTTOM OF AQUIFER	)	59.000 ft
AVERAGE ELEVATION OF DESIGN GROUNDWATER TABLE	)	67.000 ft
AVERAGE ELEVATION OF POND BOTTOM	)	75.000 ft
AVERAGE HORIZONTAL HYDRAULIC CONDUCTIVITY	)	29.250 ft/d
AVERAGE EFFECTIVE STORAGE COEFF. OF SOIL	)	0.200
AVERAGE STORAGE COEFFICIENT OF POND AREA	)	1.000
POLLUTION ABATEMENT VOLUME TO BE TREATED	)	0.086 ac-ft
TIME INCREMENTS AFTER STORM EVENT	)	12.00 hours
No. OF TIME INCREMENTS AFTER STORM EVENT	)	6.00
NUMBER OF GROUNDWATER CONTROL FEATURES	)	0.00

SUMMARY OF POLLUTION ABATEMENT MODEL RESULTS

POND NAME / No.: G3

CUMMULATIVE TIME (hrs.)	WATER ELEVATION (feet)	INSTANTANEOUS INFILTRATION RATE (cfs)	AVERAGE INFILTRATION RATE (cfs)
0.000	75.000	0.334 *	
			0.2422
12.000	70.649	0.151	
			0.0589
24.000	69.592	0.044	
			0.0290
36.000	69.070	0.023	
			0.0179
48.000	68.748	0.015	
			0.0126
60.000	68.522	0.011	
			0.0093
72.000	68.354		

* This value (with associated time) is an equivalent instantaneous infiltration rate to be used with a stormwater routing model (such as ADICPR or others). Just before this time, the infiltration is zero (prior to runoff reaching the pond).

POLLUTION ABATEMENT VOLUME ANALYSIS
USING 'MODRET 4' PROGRAM

Written by: Nicolas E. Andreyev,P.E. (May, 1992)
(Sponsored by: SWFWMD/PSI)

SUMMARY OF INPUT PARAMETERS

POND NAME / NUMBER : G4

AVERAGE WETTED POND LENGTH	155.000 ft
AVERAGE WETTED POND WIDTH	20.670 ft
AVERAGE ELEVATION OF BOTTOM OF AQUIFER	50.000 ft
AVERAGE ELEVATION OF DESIGN GROUNDWATER TABLE	67.000 ft
AVERAGE ELEVATION OF POND BOTTOM	74.000 ft
AVERAGE HORIZONTAL HYDRAULIC CONDUCTIVITY	29.250 ft/d
AVERAGE EFFECTIVE STORAGE COEFF. OF SOIL	0.200
AVERAGE STORAGE COEFFICIENT OF POND AREA	1.000
POLLUTION ABATEMENT VOLUME TO BE TREATED	0.153 ac-ft
TIME INCREMENTS AFTER STORM EVENT	12.00 hours
No. OF TIME INCREMENTS AFTER STORM EVENT	6.00
NUMBER OF GROUNDWATER CONTROL FEATURES	0.00

SUMMARY OF POLLUTION ABATEMENT MODEL RESULTS

POND NAME / No.: G4

CUMMULATIVE TIME (hrs.)	WATER ELEVATION (feet)	INSTANTANEOUS INFILTRATION RATE (cfs)	AVERAGE INFILTRATION RATE (cfs)
0.000	74.000	0.263 *	
			0.1999
12.000	71.385	0.136	
			0.0727
24.000	70.324	0.057	
			0.0421
36.000	69.756	0.035	
			0.0287
48.000	69.368	0.025	
			0.0212
60.000	69.082	0.019	
			0.0164
72.000	68.862		

* This value (with associated time) is an equivalent instantaneous infiltration rate to be used with a stormwater routing model (such as ADICPR or others). Just before this time, the infiltration is zero (prior to runoff reaching the pond).

POLLUTION ABATEMENT VOLUME ANALYSIS
USING 'MODRET 4' PROGRAM

Written by: Nicolas E. Andreyev,P.E. (May, 1992)
(Sponsored by: SWFWMD/PSI)

SUMMARY OF INPUT PARAMETERS

POND NAME / NUMBER : G5

AVERAGE WETTED POND LENGTH	)	155.000 ft
AVERAGE WETTED POND WIDTH	)	29.000 ft
AVERAGE ELEVATION OF BOTTOM OF AQUIFER	)	56.000 ft
AVERAGE ELEVATION OF DESIGN GROUNDWATER TABLE	)	64.000 ft
AVERAGE ELEVATION OF POND BOTTOM	)	72.500 ft
AVERAGE HORIZONTAL HYDRAULIC CONDUCTIVITY	)	27.000 ft/d
AVERAGE EFFECTIVE STORAGE COEFF. OF SOIL	)	0.200
AVERAGE STORAGE COEFFICIENT OF POND AREA	)	1.000
POLLUTION ABATEMENT VOLUME TO BE TREATED	)	0.374 ac-ft
TIME INCREMENTS AFTER STORM EVENT	)	12.00 hours
No. OF TIME INCREMENTS AFTER STORM EVENT	)	6.00
NUMBER OF GROUNDWATER CONTROL FEATURES	)	0.00

SUMMARY OF POLLUTION ABATEMENT MODEL RESULTS

POND NAME / No.: G5

CUMMULATIVE TIME (hrs.)	WATER ELEVATION (feet)	INSTANTANEOUS INFILTRATION RATE (cfs)	AVERAGE INFILTRATION RATE (cfs)
0.000	72.500	0.341 *	
			0.2645
12.000	69.958	0.188	
			0.1112
24.000	68.890	0.090	
			0.0693
36.000	68.224	0.059	
			0.0495
48.000	67.748	0.044	
			0.0379
60.000	67.384	0.034	
			0.0308
72.000	67.087		

* This value (with associated time) is an equivalent instantaneous infiltration rate to be used with a stormwater routing model (such as ADICPR or others). Just before this time, the infiltration is zero (prior to runoff reaching the pond).

POLLUTION ABATEMENT VOLUME ANALYSIS
USING 'MODRET 4' PROGRAM

Written by: Nicolas E. Andreyev,P.E. (May, 1992)
(Sponsored by: SWFWMD/PSI)

SUMMARY OF INPUT PARAMETERS

POND NAME / NUMBER : G6

AVERAGE WETTED POND LENGTH	535.000 ft
AVERAGE WETTED POND WIDTH	23.330 ft
AVERAGE ELEVATION OF BOTTOM OF AQUIFER	56.000 ft
AVERAGE ELEVATION OF DESIGN GROUNDWATER TABLE	62.000 ft
AVERAGE ELEVATION OF POND BOTTOM	71.000 ft
AVERAGE HORIZONTAL HYDRAULIC CONDUCTIVITY	27.000 ft/d
AVERAGE EFFECTIVE STORAGE COEFF. OF SOIL	0.200
AVERAGE STORAGE COEFFICIENT OF POND AREA	1.000
POLLUTION ABATEMENT VOLUME TO BE TREATED	1.036 ac-ft
TIME INCREMENTS AFTER STORM EVENT	12.00 hours
No. OF TIME INCREMENTS AFTER STORM EVENT	6.00
NUMBER OF GROUNDWATER CONTROL FEATURES	0.00

SUMMARY OF POLLUTION ABATEMENT MODEL RESULTS

POND NAME / No.: G6

CUMMULATIVE TIME (hrs.)	WATER ELEVATION (feet)	INSTANTANEOUS INFILTRATION RATE (cfs)	AVERAGE INFILTRATION RATE (cfs)
0.000	71.000	0.993 *	
			0.7551
12.000	68.387	0.517	
			0.2786
24.000	67.422	0.223	
			0.1678
36.000	66.842	0.143	
			0.1187
48.000	66.431	0.105	
			0.0908
60.000	66.117	0.082	
			0.0742
72.000	65.860		

* This value (with associated time) is an equivalent instantaneous infiltration rate to be used with a stormwater routing model (such as ADICPR or others). Just before this time, the infiltration is zero (prior to runoff reaching the pond).

POLLUTION ABATEMENT VOLUME ANALYSIS
USING 'MODRET 4' PROGRAM

Written by: Nicolas E. Andreyev,P.E. (May, 1992)
(Sponsored by: SWFWMD/PSI)

SUMMARY OF INPUT PARAMETERS
==========

POND NAME / NUMBER : G7

AVERAGE WETTED POND LENGTH ==========)	160.000 ft
AVERAGE WETTED POND WIDTH ==========)	30.500 ft
AVERAGE ELEVATION OF BOTTOM OF AQUIFER ==========)	58.000 ft
AVERAGE ELEVATION OF DESIGN GROUNDWATER TABLE ===)	64.000 ft
AVERAGE ELEVATION OF POND BOTTOM ==========)	74.000 ft
AVERAGE HORIZONTAL HYDRAULIC CONDUCTIVITY =======)	27.000 ft/d
AVERAGE EFFECTIVE STORAGE COEFF. OF SOIL ========)	0.200
AVERAGE STORAGE COEFFICIENT OF POND AREA ========)	1.000
POLLUTION ABATEMENT VOLUME TO BE TREATED ========)	0.220 ac-ft
TIME INCREMENTS AFTER STORM EVENT ==========)	12.00 hours
No. OF TIME INCREMENTS AFTER STORM EVENT ========)	6.00
NUMBER OF GROUNDWATER CONTROL FEATURES ==========)	0.00

SUMMARY OF POLLUTION ABATEMENT MODEL RESULTS

POND NAME / No.: G7

CUMMULATIVE TIME (hrs.)	WATER ELEVATION (feet)	INSTANTANEOUS INFILTRATION RATE (cfs)	AVERAGE INFILTRATION RATE (cfs)
0.000	74.000	0.394 *	
			0.3071
12.000	71.282	0.220	
			0.1325
24.000	70.108	0.100	
			0.0841
36.000	69.364	0.072	
			0.0608
48.000	68.826	0.054	
			0.0473
60.000	68.408	0.043	
			0.0381
72.000	68.070		

* This value (with associated time) is an equivalent instantaneous infiltration rate to be used with a stormwater routing model (such as ADICPR or others). Just before this time, the infiltration is zero (prior to runoff reaching the pond).

POLLUTION ABATEMENT VOLUME ANALYSIS
USING 'MODRET 4' PROGRAM

Written by: Nicolas E. Andreyev,P.E. (May, 1992)
(Sponsored by: SWFWMD/PSI)

SUMMARY OF INPUT PARAMETERS
==========

POND NAME / NUMBER : G10

AVERAGE WETTED POND LENGTH ==========)	250.000 ft
AVERAGE WETTED POND WIDTH ==========)	15.000 ft
AVERAGE ELEVATION OF BOTTOM OF AQUIFER ==========)	61.000 ft
AVERAGE ELEVATION OF DESIGN GROUNDWATER TABLE ===)	68.000 ft
AVERAGE ELEVATION OF POND BOTTOM ==========)	75.000 ft
AVERAGE HORIZONTAL HYDRAULIC CONDUCTIVITY =======)	27.000 ft/d
AVERAGE EFFECTIVE STORAGE COEFF. OF SOIL ========)	0.200
AVERAGE STORAGE COEFFICIENT OF POND AREA ========)	1.000
POLLUTION ABATEMENT VOLUME TO BE TREATED ========)	0.200 ac-ft
TIME INCREMENTS AFTER STORM EVENT ==========)	12.00 hours
No. OF TIME INCREMENTS AFTER STORM EVENT ========)	6.00
NUMBER OF GROUNDWATER CONTROL FEATURES ==========)	0.00

SUMMARY OF POLLUTION ABATEMENT MODEL RESULTS

POND NAME / No.: G10

CUMMULATIVE TIME (hrs.)	WATER ELEVATION (feet)	INSTANTANEOUS INFILTRATION RATE (cfs)	AVERAGE INFILTRATION RATE (cfs)
0.000	75.000	0.327 *	
			0.2444
12.000	72.185	0.162	
			0.0792
24.000	71.272	0.062	
			0.0446
36.000	70.758	0.037	
			0.0300
48.000	70.413	0.026	
			0.0224
60.000	70.155	0.020	
			0.0170
72.000	69.959		

* This value (with associated time) is an equivalent instantaneous infiltration rate to be used with a stormwater routing model (such as ADICPR or others). Just before this time, the infiltration is zero (prior to runoff reaching the pond).

POLLUTION ABATEMENT VOLUME ANALYSIS
USING 'MODRET 4' PROGRAM

Written by: Nicolas E. Andreyev,P.E. (May, 1992)
(Sponsored by: SWFWMD/PSI)

SUMMARY OF INPUT PARAMETERS

POND NAME / NUMBER : G11

AVERAGE WETTED POND LENGTH	150.000	ft
AVERAGE WETTED POND WIDTH	21.330	ft
AVERAGE ELEVATION OF BOTTOM OF AQUIFER	61.000	ft
AVERAGE ELEVATION OF DESIGN GROUNDWATER TABLE	67.000	ft
AVERAGE ELEVATION OF POND BOTTOM	73.000	ft
AVERAGE HORIZONTAL HYDRAULIC CONDUCTIVITY	27.000	ft/d
AVERAGE EFFECTIVE STORAGE COEFF. OF SOIL	0.200	
AVERAGE STORAGE COEFFICIENT OF POND AREA	1.000	
POLLUTION ABATEMENT VOLUME TO BE TREATED	0.148	ac-ft
TIME INCREMENTS AFTER STORM EVENT	12.00	hours
No. OF TIME INCREMENTS AFTER STORM EVENT	6.00	
NUMBER OF GROUNDWATER CONTROL FEATURES	0.00	

SUMMARY OF POLLUTION ABATEMENT MODEL RESULTS

POND NAME / No.: G11

CUMMULATIVE TIME (hrs.)	WATER ELEVATION (feet)	INSTANTANEOUS INFILTRATION RATE (cfs)	AVERAGE INFILTRATION RATE (cfs)
0.000	73.000	0.187 *	
			0.1439
12.000	71.057	0.100	
			0.0569
24.000	70.288	0.046	
			0.0347
36.000	69.820	0.030	
			0.0246
48.000	69.488	0.022	
			0.0186
60.000	69.237	0.017	
			0.0147
72.000	69.038		

* This value (with associated time) is an equivalent instantaneous infiltration rate to be used with a stormwater routing model (such as ADICPR or others). Just before this time, the infiltration is zero (prior to runoff reaching the pond).

POLLUTION ABATEMENT VOLUME ANALYSIS
USING 'MODRET 4' PROGRAM

Written by: Nicolas E. Andreyev,P.E. (May, 1992)
(Sponsored by: SWFWMD/PSI)

SUMMARY OF INPUT PARAMETERS

POND NAME / NUMBER : G12

AVERAGE WETTED POND LENGTH	540.000	ft
AVERAGE WETTED POND WIDTH	17.570	ft
AVERAGE ELEVATION OF BOTTOM OF AQUIFER	56.000	ft
AVERAGE ELEVATION OF DESIGN GROUNDWATER TABLE	63.000	ft
AVERAGE ELEVATION OF POND BOTTOM	71.000	ft
AVERAGE HORIZONTAL HYDRAULIC CONDUCTIVITY	27.000	ft/d
AVERAGE EFFECTIVE STORAGE COEFF. OF SOIL	0.200	
AVERAGE STORAGE COEFFICIENT OF POND AREA	1.000	
POLLUTION ABATEMENT VOLUME TO BE TREATED	0.465	ac-ft
TIME INCREMENTS AFTER STORM EVENT	12.00	hours
No. OF TIME INCREMENTS AFTER STORM EVENT	6.00	
NUMBER OF GROUNDWATER CONTROL FEATURES	0.00	

SUMMARY OF POLLUTION ABATEMENT MODEL RESULTS

POND NAME / No.: G12

CUMMULATIVE TIME (hrs.)	WATER ELEVATION (feet)	INSTANTANEOUS INFILTRATION RATE (cfs)	AVERAGE INFILTRATION RATE (cfs)
0.000	71.000	0.841 *	
			0.6300
12.000	68.132	0.419	
			0.2079
24.000	67.185	0.163	
			0.1182
36.000	66.647	0.100	
			0.0813
48.000	66.277	0.071	
			0.0608
60.000	66.000	0.055	
			0.0483
72.000	65.780		

* This value (with associated time) is an equivalent instantaneous infiltration rate to be used with a stormwater routing model (such as ADICPR or others). Just before this time, the infiltration is zero (prior to runoff reaching the pond).

POLLUTION ABATEMENT VOLUME ANALYSIS
USING 'MODRET 4' PROGRAM

Written by: Nicolas E. Andreyev,P.E. (May, 1992)
(Sponsored by: SWFWMD/PSI)

SUMMARY OF INPUT PARAMETERS

POND NAME / NUMBER : 613

AVERAGE WETTED POND LENGTH	260.000	ft
AVERAGE WETTED POND WIDTH	17.500	ft
AVERAGE ELEVATION OF BOTTOM OF AQUIFER	56.000	ft
AVERAGE ELEVATION OF DESIGN GROUNDWATER TABLE	63.000	ft
AVERAGE ELEVATION OF POND BOTTOM	74.000	ft
AVERAGE HORIZONTAL HYDRAULIC CONDUCTIVITY	27.000	ft/d
AVERAGE EFFECTIVE STORAGE COEFF. OF SOIL	0.200	
AVERAGE STORAGE COEFFICIENT OF POND AREA	1.000	
POLLUTION ABATEMENT VOLUME TO BE TREATED	0.327	ac-ft
TIME INCREMENTS AFTER STORM EVENT	12.00	hours
No. OF TIME INCREMENTS AFTER STORM EVENT	6.00	
NUMBER OF GROUNDWATER CONTROL FEATURES	0.00	

SUMMARY OF POLLUTION ABATEMENT MODEL RESULTS

POND NAME / No.: G13

CUMMULATIVE TIME (hrs.)	WATER ELEVATION (feet)	INSTANTANEOUS INFILTRATION RATE (cfs)	AVERAGE INFILTRATION RATE (cfs)
0.000	74.000	0.593 *	
			0.4443
12.000	69.782	0.296	
			0.1469
24.000	68.387	0.116	
			0.0841
36.000	67.588	0.071	
			0.0571
48.000	67.046	0.050	
			0.0427
60.000	66.641	0.038	
			0.0331
72.000	66.327		

* This value (with associated time) is an equivalent instantaneous infiltration rate to be used with a stormwater routing model (such as ADICPR or others). Just before this time, the infiltration is zero (prior to runoff reaching the pond).

POLLUTION ABATEMENT VOLUME ANALYSIS
USING 'MODRET 4' PROGRAM

Written by: Nicolas E. Andreyev,P.E. (May, 1992)
(Sponsored by: SWFWMD/PSI)

SUMMARY OF INPUT PARAMETERS

POND NAME / NUMBER : G14

AVERAGE WETTED POND LENGTH	305.000 ft
AVERAGE WETTED POND WIDTH	9.000 ft
AVERAGE ELEVATION OF BOTTOM OF AQUIFER	62.000 ft
AVERAGE ELEVATION OF DESIGN GROUNDWATER TABLE	69.000 ft
AVERAGE ELEVATION OF POND BOTTOM	76.000 ft
AVERAGE HORIZONTAL HYDRAULIC CONDUCTIVITY	27.000 ft/d
AVERAGE EFFECTIVE STORAGE COEFF. OF SOIL	0.200
AVERAGE STORAGE COEFFICIENT OF POND AREA	1.000
POLLUTION ABATEMENT VOLUME TO BE TREATED	0.037 ac-ft
TIME INCREMENTS AFTER STORM EVENT	12.00 hours
No. OF TIME INCREMENTS AFTER STORM EVENT	6.00
NUMBER OF GROUNDWATER CONTROL FEATURES	0.00

SUMMARY OF POLLUTION ABATEMENT MODEL RESULTS

POND NAME / No.: G14

CUMMULATIVE TIME (hrs.)	WATER ELEVATION (feet)	INSTANTANEOUS INFILTRATION RATE (cfs)	AVERAGE INFILTRATION RATE (cfs)
0.000	76.000	0.317 *	
			0.2318
12.000	72.365	0.144	
			0.0579
24.000	71.453	0.043	
			0.0290
36.000	70.997	0.024	
			0.0183
48.000	70.709	0.016	
			0.0129
60.000	70.507	0.011	
			0.0096
72.000	70.355		

* This value (with associated time) is an equivalent instantaneous infiltration rate to be used with a stormwater routing model (such as ADICPR or others). Just before this time, the infiltration is zero (prior to runoff reaching the pond).

POLLUTION ABATEMENT VOLUME ANALYSIS
USING 'MODRET 4' PROGRAM

Written by: Nicolas E. Andreyev,P.E. (May, 1992)
(Sponsored by: SWFWMD/PSI)

SUMMARY OF INPUT PARAMETERS

POND NAME / NUMBER : F1

AVERAGE WETTED POND LENGTH	190.000 ft
AVERAGE WETTED POND WIDTH	12.000 ft
AVERAGE ELEVATION OF BOTTOM OF AQUIFER	73.000 ft
AVERAGE ELEVATION OF DESIGN GROUNDWATER TABLE	80.000 ft
AVERAGE ELEVATION OF POND BOTTOM	87.000 ft
AVERAGE HORIZONTAL HYDRAULIC CONDUCTIVITY	4.500 ft/d
AVERAGE EFFECTIVE STORAGE COEFF. OF SOIL	0.200
AVERAGE STORAGE COEFFICIENT OF POND AREA	1.000
POLLUTION ABATEMENT VOLUME TO BE TREATED	0.112 ac-ft
TIME INCREMENTS AFTER STORM EVENT	12.00 hours
No. OF TIME INCREMENTS AFTER STORM EVENT	6.00
NUMBER OF GROUNDWATER CONTROL FEATURES	0.00

SUMMARY OF POLLUTION ABATEMENT MODEL RESULTS

POND NAME / No.: F1

CUMMULATIVE TIME (hrs.)	WATER ELEVATION (feet)	INSTANTANEOUS INFILTRATION RATE (cfs)	AVERAGE INFILTRATION RATE (cfs)
0.000	87.000	0.118 *	
			0.0913
12.000	85.269	0.064	
			0.0373
24.000	84.562	0.030	
			0.0234
36.000	84.119	0.020	
			0.0173
48.000	83.792	0.015	
			0.0134
60.000	83.538	0.012	
			0.0111
72.000	83.328		

* This value (with associated time) is an equivalent instantaneous infiltration rate to be used with a stormwater routing model (such as ADICPR or others). Just before this time, the infiltration is zero (prior to runoff reaching the pond).

POLLUTION ABATEMENT VOLUME ANALYSIS
USING 'MODRET 4' PROGRAM

Written by: Nicolas E. Andreyev,P.E. (May, 1992)
(Sponsored by: SWFWMD/PSI)

SUMMARY OF INPUT PARAMETERS

POND NAME / NUMBER : F2

AVERAGE WETTED POND LENGTH	265.000 ft
AVERAGE WETTED POND WIDTH	23.750 ft
AVERAGE ELEVATION OF BOTTOM OF AQUIFER	72.000 ft
AVERAGE ELEVATION OF DESIGN GROUNDWATER TABLE	79.000 ft
AVERAGE ELEVATION OF POND BOTTOM	85.500 ft
AVERAGE HORIZONTAL HYDRAULIC CONDUCTIVITY	4.500 ft/d
AVERAGE EFFECTIVE STORAGE COEFF. OF SOIL	0.200
AVERAGE STORAGE COEFFICIENT OF POND AREA	1.000
POLLUTION ABATEMENT VOLUME TO BE TREATED	0.305 ac-ft
TIME INCREMENTS AFTER STORM EVENT	12.00 hours
No. OF TIME INCREMENTS AFTER STORM EVENT	6.00
NUMBER OF GROUNDWATER CONTROL FEATURES	0.00

SUMMARY OF POLLUTION ABATEMENT MODEL RESULTS

POND NAME / No.: F2

CUMMULATIVE TIME (hrs.)	WATER ELEVATION (feet)	INSTANTANEOUS INFILTRATION RATE (cfs)	AVERAGE INFILTRATION RATE (cfs)
0.000	85.500	0.155 *	
			0.1248
12.000	84.643	0.095	
			0.0645
24.000	84.201	0.054	
			0.0439
36.000	83.839	0.039	
			0.0336
48.000	83.668	0.031	
			0.0279
60.000	83.477	0.026	
			0.0240
72.000	83.312		

* This value (with associated time) is an equivalent instantaneous infiltration rate to be used with a stormwater routing model (such as ABICPR or others). Just before this time, the infiltration is zero (prior to runoff reaching the pond).

POLLUTION ABATEMENT VOLUME ANALYSIS
USING 'MODRET 4' PROGRAM

Written by: Nicolas E. Andreyev,P.E. (May, 1992)
(Sponsored by: SWFWMD/PSI)

SUMMARY OF INPUT PARAMETERS

POND NAME / NUMBER : F3

AVERAGE WETTED POND LENGTH	230.000	ft
AVERAGE WETTED POND WIDTH	25.670	ft
AVERAGE ELEVATION OF BOTTOM OF AQUIFER	69.000	ft
AVERAGE ELEVATION OF DESIGN GROUNDWATER TABLE	75.000	ft
AVERAGE ELEVATION OF POND BOTTOM	84.000	ft
AVERAGE HORIZONTAL HYDRAULIC CONDUCTIVITY	31.500	ft/d
AVERAGE EFFECTIVE STORAGE COEFF. OF SOIL	0.200	
AVERAGE STORAGE COEFFICIENT OF POND AREA	1.000	
POLLUTION ABATEMENT VOLUME TO BE TREATED	0.379	ac-ft
TIME INCREMENTS AFTER STORM EVENT	12.00	hours
No. OF TIME INCREMENTS AFTER STORM EVENT	6.00	
NUMBER OF GROUNDWATER CONTROL FEATURES	0.00	

SUMMARY OF POLLUTION ABATEMENT MODEL RESULTS

POND NAME / No.: F3

CUMMULATIVE TIME (hrs.)	WATER ELEVATION (feet)	INSTANTANEOUS INFILTRATION RATE (cfs)	AVERAGE INFILTRATION RATE (cfs)
0.000	84.000	0.467 *	
			0.3589
12.000	81.374	0.251	
			0.1433
24.000	80.326	0.116	
			0.0894
36.000	79.672	0.077	
			0.0645
48.000	79.200	0.057	
			0.0494
60.000	78.838	0.045	
			0.0401
72.000	78.545		

* This value (with associated time) is an equivalent instantaneous infiltration rate to be used with a stormwater routing model (such as ADICPR or others). Just before this time, the infiltration is zero (prior to runoff reaching the pond).

POLLUTION ABATEMENT VOLUME ANALYSIS
USING 'MODRET 4' PROGRAM

Written by: Nicolas E. Andreyev,P.E. (May, 1992)
(Sponsored by: SWFWMD/PSI)

SUMMARY OF INPUT PARAMETERS

POND NAME / NUMBER : F4

AVERAGE WETTED POND LENGTH	)	747.500 ft
AVERAGE WETTED POND WIDTH	)	28.500 ft
AVERAGE ELEVATION OF BOTTOM OF AQUIFER	)	65.000 ft
AVERAGE ELEVATION OF DESIGN GROUNDWATER TABLE	)	73.000 ft
AVERAGE ELEVATION OF POND BOTTOM	)	81.750 ft
AVERAGE HORIZONTAL HYDRAULIC CONDUCTIVITY	)	31.500 ft/d
AVERAGE EFFECTIVE STORAGE COEFF. OF SOIL	)	0.200
AVERAGE STORAGE COEFFICIENT OF POND AREA	)	1.000
POLLUTION ABATEMENT VOLUME TO BE TREATED	)	1.692 ac-ft
TIME INCREMENTS AFTER STORM EVENT	)	12.00 hours
No. OF TIME INCREMENTS AFTER STORM EVENT	)	6.00
NUMBER OF GROUNDWATER CONTROL FEATURES	)	0.00

SUMMARY OF POLLUTION ABATEMENT MODEL RESULTS

POND NAME / No.: F4

CUMMULATIVE TIME (hrs.)	WATER ELEVATION (feet)	INSTANTANEOUS INFILTRATION RATE (cfs)	AVERAGE INFILTRATION RATE (cfs)
0.000	81.750	1.593 *	
			1.2148
12.000	79.287	0.836	
			0.4578
24.000	78.358	0.367	
			0.2762
36.000	77.798	0.236	
			0.1964
48.000	77.400	0.174	
			0.1512
60.000	77.093	0.137	
			0.1237
72.000	76.842		

* This value (with associated time) is an equivalent instantaneous infiltration rate to be used with a stormwater routing model (such as ADICPR or others). Just before this time, the infiltration is zero (prior to runoff reaching the pond).

APPENDIX I

Isopluvial Maps

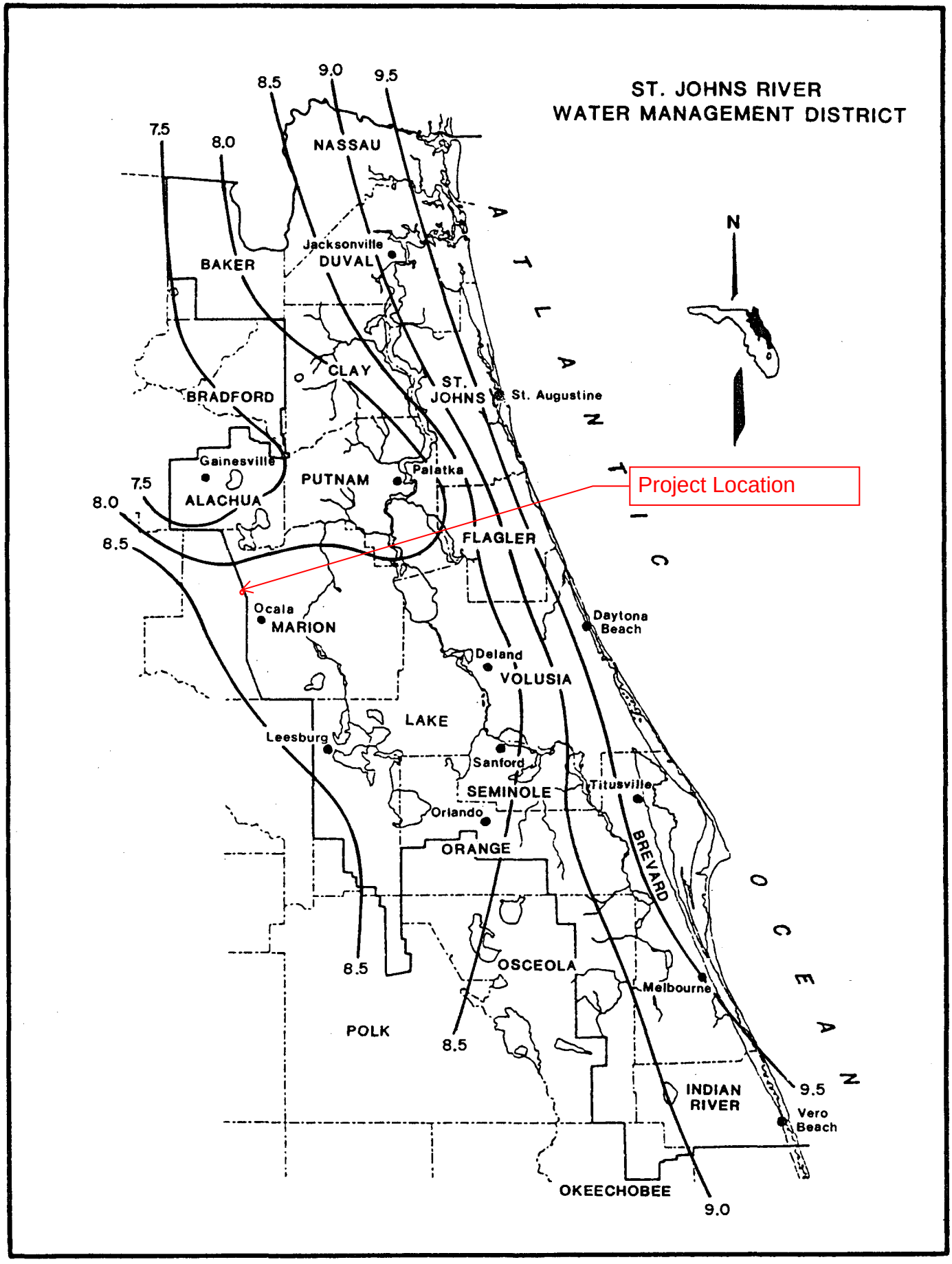


Figure 7. 25-Year 24-Hour Maximum Rainfall for Northeast Florida, Inches.

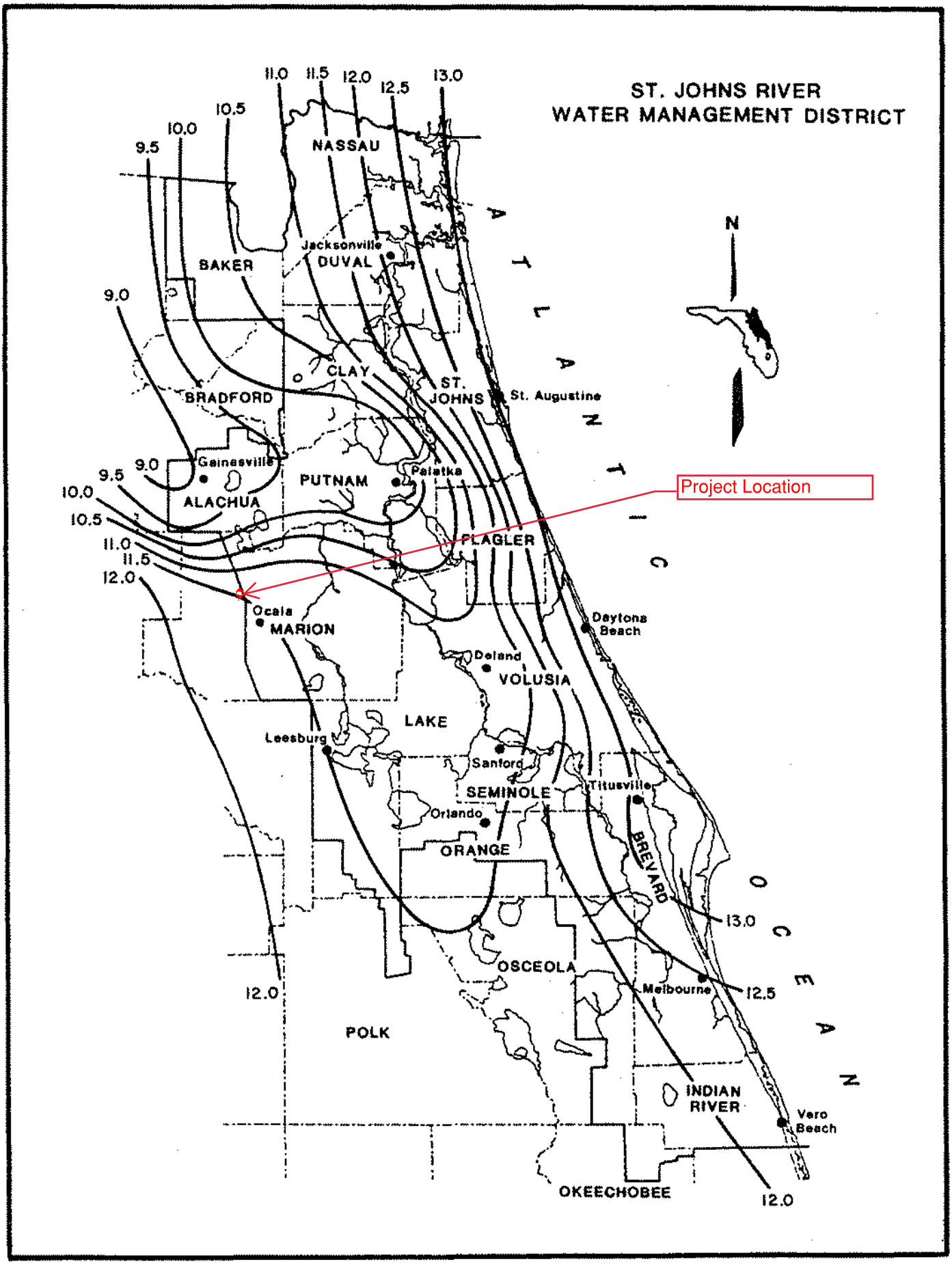


Figure 8. 100-Year 24-Hour Maximum Rainfall for Northeast Florida, Inches.

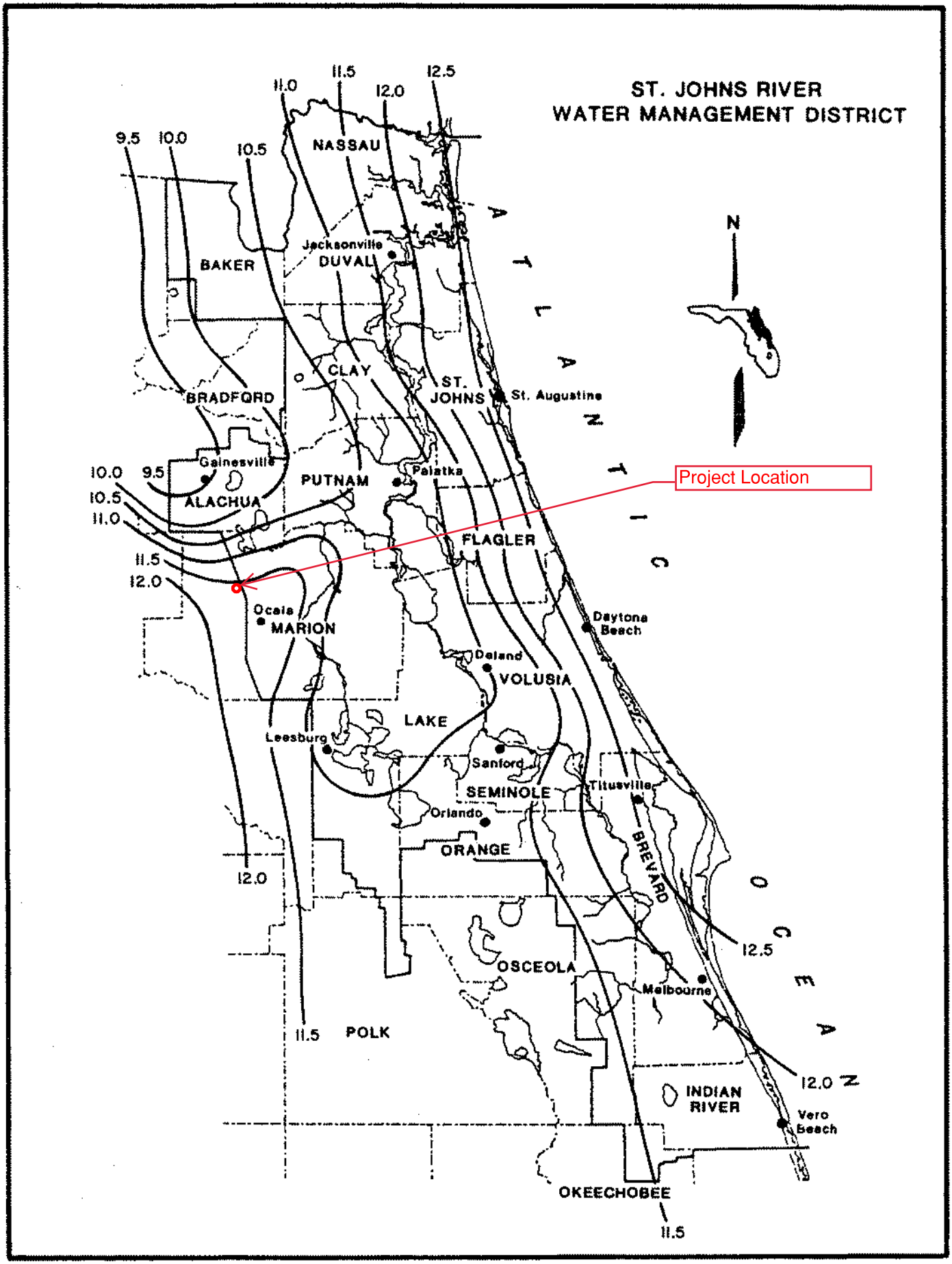


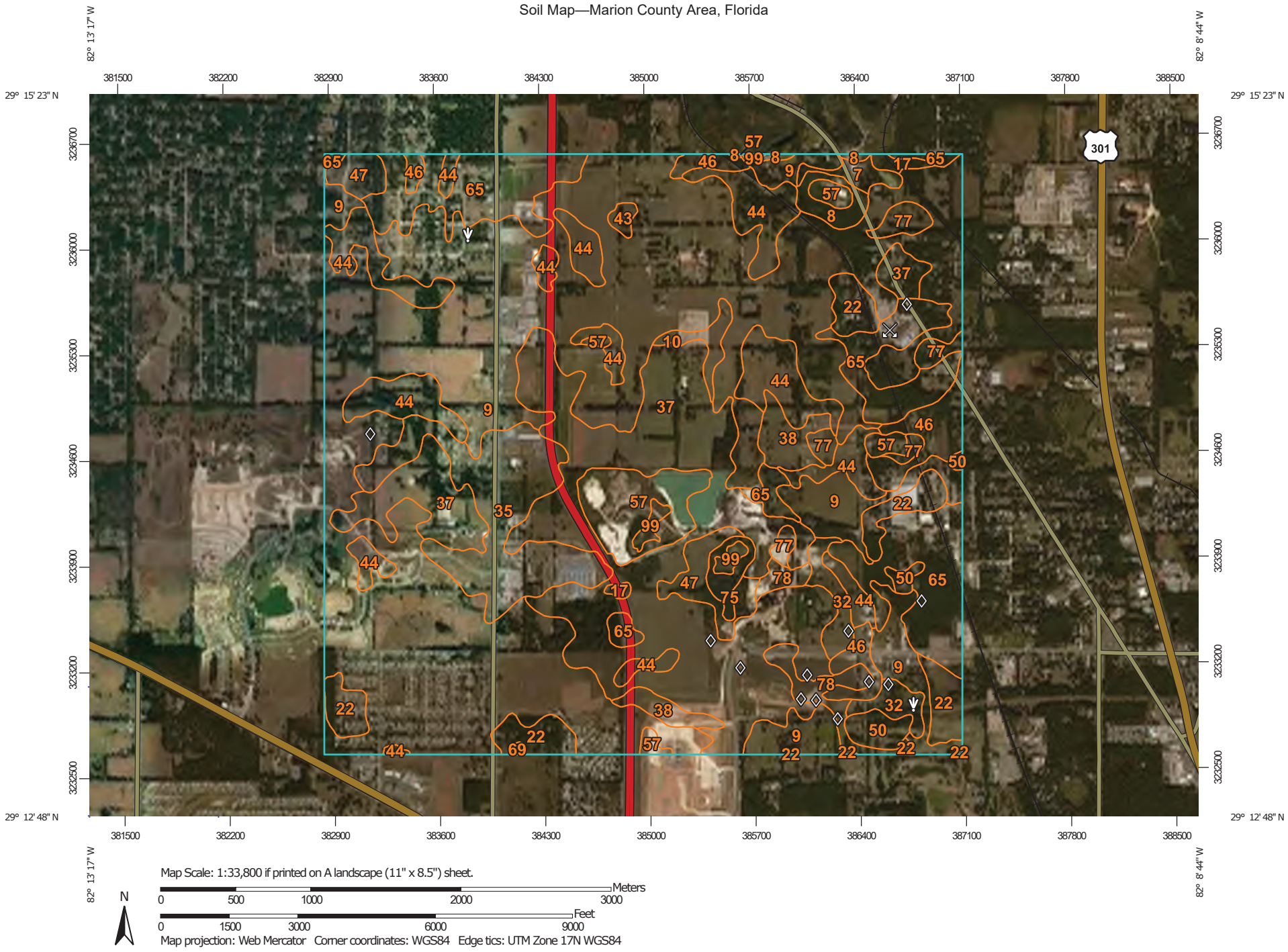
Figure 13. 25-Year 96-Hour Maximum Rainfall for Northeast Florida, Inches.

APPENDIX J

Preliminary Soil Report
& Geotechnical Data

Preliminary Soil Report

FIGURE 6


Soil Map—Marion County Area, Florida
82° 13' 17" W
82° 8' 44" W
29° 15' 23" N
29° 12' 48" N
381500
382200
382900
383600
384300
385000
385700
386400
387100
387800
388500
3236700
3236000
3235300
3234600
3233900
3233200
3232500
301
Map Scale: 1:33,800 if printed on A landscape (11" x 8.5") sheet.
N
Meters
0 500 1000 2000 3000
Feet
0 1500 3000 6000 9000
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

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

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

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

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

Soil Survey Area: Marion County Area, Florida
Survey Area Data: Version 16, Sep 12, 2018

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

Date(s) aerial images were photographed: Dec 29, 2010—Jan 17, 2019

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
7	Udalfic Arents, 0 to 5 percent slopes	17.3	0.4%
8	Udalfic Arents, 15 to 60 percent slopes	26.6	0.6%
9	Arredondo sand, 0 to 5 percent slopes	1,823.9	43.5%
10	Arredondo sand, 5 to 8 percent slopes	19.8	0.5%
17	Blichton sand, 2 to 5 percent slopes	11.0	0.3%
22	Candler sand, 0 to 5 percent slopes	134.7	3.2%
32	Fellowship gravelly loamy sand, gravelly subsoil variant, 5 to 8 percent slopes	49.1	1.2%
35	Gainesville loamy sand, 0 to 5 percent slopes	209.6	5.0%
37	Hague sand, 2 to 5 percent slopes	722.6	17.3%
38	Hague sand, 5 to 8 percent slopes	54.4	1.3%
43	Kanapaha-Kanapaha, wet, fine sand, 0 to 5 percent slopes	7.2	0.2%
44	Kendrick loamy sand, 0 to 5 percent slopes	314.7	7.5%
46	Lochloosa fine sand, 0 to 5 percent slopes	90.4	2.2%
47	Lochloosa fine sand, 5 to 8 percent slopes	63.5	1.5%
50	Micanopy fine sand, 2 to 5 percent slopes	30.6	0.7%
57	Pits	116.1	2.8%
65	Sparr fine sand, 0 to 5 percent slopes	365.3	8.7%
69	Tavares sand, 0 to 5 percent slopes	1.7	0.0%
75	Wacahoota gravelly sand, gravelly subsoil variant, 5 to 8 percent slopes	18.7	0.4%
77	Zuber loamy sand, 2 to 5 percent slopes	47.5	1.1%
78	Zuber loamy sand, 5 to 8 percent slopes	48.7	1.2%
99	Water	15.6	0.4%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Totals for Area of Interest		**4,189.0**	**100.0%**

Excerpts from Geotechnical Report

TABLE 2

Summary of Seasonal High Groundwater Table Estimates for Ponds
I-75 (SR 93) at NE 49th Street PD&E Study from End of NW 49th Street to End of NW 35th Street
Marion County, Florida
FPN: 435209-1-22-01
Tierra Project No: 5511-16-033

Boring Number	Boring Location[1] B/L Survey SR 93		Boring Depth[2]	Ground Surface Elevation NAVD88[1]	Measured GWT		Date Groundwater Table Recorded	USDA Soil Survey		Estimated SHGWT[4]	
	Station (feet)	Offset (feet)	(feet)	(feet)	Depth Below Ground Surface (feet)	Elevation NAVD88 (feet)		Soil Map Unit	SHGWT Depth[3] (feet)	Depth Below Ground Surface (feet)	Elevation NAVD88 (feet)
PBS - 1	2483+57	919 LT	20.0	85.6	GNA[5]	< 75.6	07/31/2018	9	> 6.0	12.0[6]	73.6
PBS - 2	2483+67	482 LT	20.0	86.4	GNA[5]	< 76.4	07/31/2018	37	> 6.0	6.0[6]	80.4
PBS - 3	2488+68	371 LT	20.0	85.5	GNA[5]	< 75.5	07/31/2018	37	> 6.0	> 20.0	< 65.5
PBS - 4	2492+37	276 LT	20.0	83.8	GNA[5]	< 73.8	07/31/2018	37	> 6.0	3.0[6]	80.8
PBS - 5	2490+80	255 RT	20.0	82.9	GNA[5]	< 72.9	08/21/2018	9	> 6.0	4.0[6]	78.9
PBS - 6	2487+62	422 RT	25.0	72.7	GNA[5]	< 62.7	08/21/2018	37	> 6.0	12.0[6]	60.7
PBS - 7	2483+43	347 RT	20.0	75.7	GNA[5]	< 65.7	08/21/2018	37	> 6.0	12.0[6]	63.7
PBS - 8	2485+27	683 RT	30.0	67.6	GNA[5]	< 57.6	08/21/2018	9	> 6.0	6.5[6]	61.1
PBS - 9	2483+63	1018 RT	20.0	74.2	GNA[5]	< 64.2	08/21/2018	9	> 6.0	3.0[6]	71.2
PBS - 10	2486+27	1439 RT	20.0	82.2	GNA[5]	< 72.2	08/22/2018	9	> 6.0	8.0[6]	74.2
PBS - 11	2482+79	1413 RT	20.0	79.4	GNA[5]	< 69.4	08/22/2018	9	> 6.0	7.0[6]	72.4
PBS - 12	2476+28	1509 RT	20.0	95.8	GNA[5]	< 85.8	08/24/2018	9/37	> 6.0	> 20.0	< 75.8
PBS - 13	2479+85	1304 RT	20.0	85.4	GNA[5]	< 75.4	08/22/2018	9	> 6.0	2.5[6]	82.9
PBS - 14	2478+22	870 RT	20.0	89.5	GNA[5]	< 79.5	08/22/2018	9	> 6.0	> 20.0	< 69.5
PBS - 15	2479+53	517 RT	20.0	82.0	GNA[5]	< 72.0	08/22/2018	37	> 6.0	6.5[6]	75.5
PBS - 16	2477+56	202 RT	20.0	83.5	GNA[5]	< 73.5	08/22/2018	37	> 6.0	> 20.0	< 63.5
PBS - 17	2474+18	368 RT	20.0	88.8	GNA[5]	< 78.8	08/24/2018	37	> 6.0	5.0[6]	83.8
PBS - 18	2470+53	190 RT	20.0	88.6	GNA[5]	< 78.6	08/22/2018	35	> 6.0	2.0[6]	86.6
PBS - 19	2476+86	417 LT	20.0	80.9	GNA[5]	< 70.9	08/24/2018	35	> 6.0	1.5[6]	79.4
PBS - 20	2479+41	579 LT	20.0	86.5	GNA[5]	< 76.5	07/31/2018	9	> 6.0	0.5[6]	86.0
PBS - 21	2479+06	894 LT	20.0	81.2	GNA[5]	<71.2	01/24/2019	9	> 6.0	0.0[6]	81.2
PBS - 22	2486+47	934 LT	20.0	85.5	GNA[5]	< 75.5	01/24/2019	9	> 6.0	>20.0	< 65.5
PBS - 23	2485+16	735 LT	20.0	86.2	GNA[5]	< 76.2	01/24/2019	9/37	> 6.0	12.0[6]	74.2
PBS - 24	2486+39	514 LT	20.0	85.2	GNA[5]	< 75.2	01/24/2019	37	> 6.0	12.0[6]	73.2
PBS - 25	2459+54	166 RT	20.0	101.5	GNA[5]	< 91.5	03/22/2019	37	> 6.0	4.0[6]	97.5
PBS - 26	2463+36	171 RT	20.0	98.9	GNA[5]	< 88.9	03/22/2019	37	> 6.0	4.0 [6]	94.9

TABLE 2

Summary of Seasonal High Groundwater Table Estimates for Ponds
I-75 (SR 93) at NE 49th Street PD&E Study from End of NW 49th Street to End of NW 35th Street
Marion County, Florida
FPN: 435209-1-22-01
Tierra Project No: 5511-16-033

Boring Number	Boring Location[1] B/L Survey SR 93		Boring Depth[2]	Ground Surface Elevation NAVD88[1]	Measured GWT		Date Groundwater Table Recorded	USDA Soil Survey		Estimated SHGWT[4]	
	Station (feet)	Offset (feet)	(feet)	(feet)	Depth Below Ground Surface (feet)	Elevation NAVD88 (feet)		Soil Map Unit	SHGWT Depth[3] (feet)	Depth Below Ground Surface (feet)	Elevation NAVD88 (feet)
PBS - 27	2467+27	189 RT	20.0	93.2	GNA[5]	< 83.2	03/22/2019	37	> 6.0	4.0 [6]	89.2
PBS - 28	2468+30	413 RT	20.0	97.1	GNA[5]	< 87.1	01/23/2019	37	> 6.0	8.0[6]	89.1
PBS - 29	2467+04	752 RT	20.0	108.1	GNA[5]	< 98.1	01/23/2019	37	> 6.0	> 20.0	< 88.1
PBS - 30	2471+64	643 RT	20.0	96.0	GNA[5]	< 86.0	01/23/2019	37	> 6.0	2.0[6]	94.0
PBS - 31	2475+88	612 RT	20.0	90.2	GNA[5]	< 80.2	01/24/2019	37	> 6.0	2.0[6]	88.2
PBS - 32	2473+87	975 RT	20.0	95.9	GNA[5]	< 85.9	01/23/2019	37	> 6.0	2.0[6]	93.9
PBS - 33	2487+86	652 RT	20.0	67.5	GNA[5]	< 57.5	02/19/2019	37	> 6.0	6.0	61.5
PBS - 34	2487+13	955 RT	20.0	67.2	GNA[5]	< 57.2	02/19/2019	9	> 6.0	6.0	61.2
PBS - 35	2490+11	910 RT	20.0	67.2	GNA[5]	< 57.2	02/20/2019	9	> 6.0	6.0	61.2
PBS - 36	2490+95	524 RT	20.0	81.5	GNA[5]	< 71.5	02/20/2019	9	> 6.0	> 20.0	< 61.5
PBS - 37	2493+45	221 RT	20.0	82.0	GNA[5]	< 72.0	02/19/2019	9	> 6.0	4.0[6]	78.0
PBS - 38	2493+66	594 RT	20.0	79.7	GNA[5]	< 69.7	02/20/2019	9	> 6.0	16.0[6]	63.7
PBS - 39	2495+42	361 RT	20.0	79.3	GNA[5]	< 69.3	02/19/2019	9	> 6.0	8.0[6]	71.3
PBS - 40	2498+22	244 RT	20.0	70.8	GNA[5]	< 60.8	02/19/2019	9	> 6.0	8.0[6]	62.8

[1] Boring locations (station and offset) and ground elevations provided by Metric.

[2] Depth below existing grades at time of field services.

[3] Seasonal high groundwater table depth reported in the Soil Survey of Marion County, Florida published by the USDA/NRCS.

[4] Seasonal high groundwater table depth estimated based on soil stratigraphy, measured groundwater levels from the borings, the USDA NRCS Soil Survey information, and surrounding topography.

[5] GNA: Groundwater not apparent to a depth of approximately 10 feet due to the introduction of drilling fluid.

[6] Perched seasonal high groundwater table depth estimated based on soil stratigraphy.

TABLE 5
SUMMARY OF HYDRAULIC CONDUCTIVITY TEST RESULTS
I-75 (SR 93) at NW 49th Street PD&E Study from End of NW 49th Street to End of NW 35th Street
Marion County, Florida
FPN: 435209-1-22-01
Tierra Project No.: 5511-16-033

Boring Number	Boring/Test Location[1] Baseline Survey SR 93 (I-75)		Ground Surface Elevation[1] (feet, NAVD 88)	Test Elevation (feet, NAVD 88)	Estimated SHGW Elevation (feet, NAVD 88)	Vertical Hydraulic Conductivity[3] (feet/day)	Horizontal Hydraulic Conductivity[3] (feet/day)	Confining Layer Elevation (feet, NAVD 88)	Effective Porosity (%)
	Station	Offset							
PBS-1	2483+57	919 LT	85.6	84.1	73.6[2]	3	5	81.6	20
PBS-2	2483+67	482 LT	86.4	84.9	80.4[2]	5	8	80.4	20
PBS-3	2488+68	371 LT	85.5	84.0	< 65.5	16	24	75.8	25
PBS-4	2492+37	276 LT	83.8	82.3	80.8[2]	2	3	79.3	20
PBS-5	2490+80	255 RT	82.9	81.4	78.9[2]	5	8	78.9	20
PBS-6	2487+62	422 RT	72.7	71.2	60.7[2]	34	40	60.7	25
PBS-7	2483+43	347 RT	75.7	74.2	63.7[2]	3	5	71.7	20
PBS-8	2485+27	683 RT	67.6	66.1	61.1[2]	4	6	61.1	20
PBS-9	2483+63	1018 RT	74.2	72.7	71.2[2]	2	3	71.2	20
PBS-10	2486+27	1439 RT	82.2	80.7	74.2[2]	2	3	74.2	20
PBS-11	2482+79	1413 RT	79.4	77.9	72.4[2]	4	6	72.4	20
PBS-12	2476+28	1509 RT	95.8	94.3	< 75.8	6	9	91.8	20
PBS-13	2479+85	1304 RT	85.4	83.9	82.9[2]	2	3	83.9	20
PBS-14	2478+22	870 RT	89.5	88.0	< 69.5	4	6	< 69.5	20
PBS-15	2479+53	517 RT	82.0	80.5	75.5[2]	1	2	75.5	20
PBS-16	2477+56	202 RT	83.5	82.0	< 63.5	7	11	< 63.5	25
PBS-17	2474+18	368 RT	88.8	87.3	83.8[2]	2	3	83.8	20
PBS-18	2470+53	190 RT	88.6	87.1	86.6[2]	1	2	87.1	20
PBS-19	2476+86	417 LT	80.9	79.4	79.4[2]	1	2	79.4	20
PBS-20	2479+41	579 LT	86.5	85.0	86.0[2]	3	5	85.0	20
PBS-22	2486+47	934 LT	85.5	80.5	< 65.5	24	36	72.5	25
PBS-24	2486+39	514 LT	85.2	80.2	73.2[2]	40	40	77.2	25
PBS-26	2463+36	171 RT	98.9	93.9	94.9[2]	8	13	93.9	25

TABLE 5
SUMMARY OF HYDRAULIC CONDUCTIVITY TEST RESULTS
I-75 (SR 93) at NW 49th Street PD&E Study from End of NW 49th Street to End of NW 35th Street
Marion County, Florida
FPN: 435209-1-22-01
Tierra Project No.: 5511-16-033

Boring Number	Boring/Test Location[1] Baseline Survey SR 93 (I-75)		Ground Surface Elevation[1] (feet, NAVD 88)	Test Elevation (feet, NAVD 88)	Estimated SHGW Elevation (feet, NAVD 88)	Vertical Hydraulic Conductivity[3] (feet/day)	Horizontal Hydraulic Conductivity[3] (feet/day)	Confining Layer Elevation (feet, NAVD 88)	Effective Porosity (%)
	Station	Offset							
PBS-28	2468+30	413 RT	97.1	95.6	89.1[2]	1	2	95.6	20
PBS-30	2471+64	643 RT	96.0	94.0	94.0[2]	12	18	94.0	25
PBS-32	2473+87	975 RT	95.9	92.9	93.9[2]	1	2	92.9	20
PBS-34	2487+13	955 RT	67.2	62.2	61.2	5	8	55.2	20
PBS-36	2490+95	524 RT	81.5	78.5	< 61.5	15	23	78.5	25
PBS-38	2493+66	594 RT	79.7	75.7	63.7[2]	5	8	73.7	20
PBS-40	2498+22	244 RT	70.8	65.8	62.8[2]	5	8	62.8	20

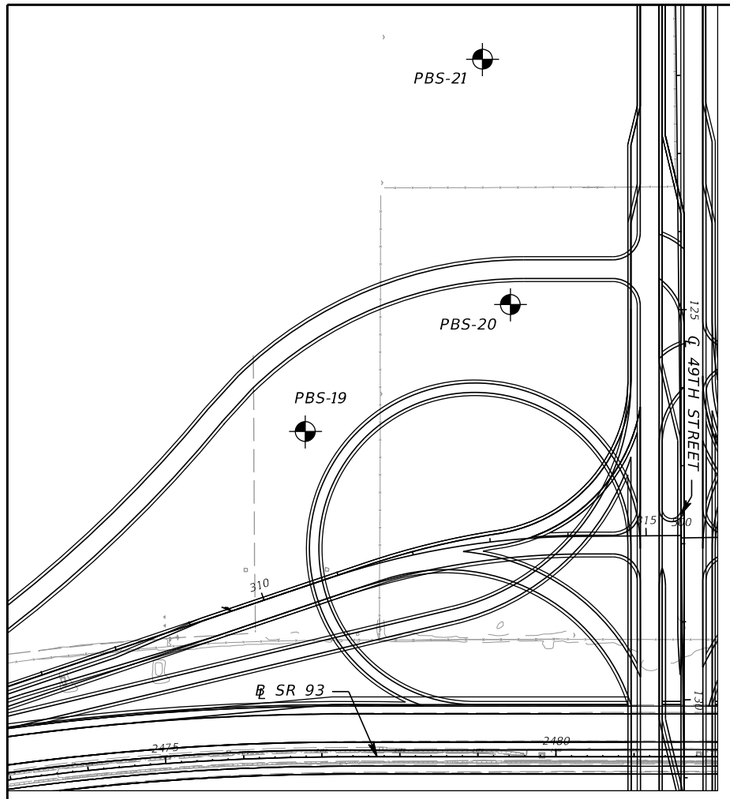
G1-1

Notes:

[1] Station, offset, and elevation of the test borings were determined using the design files provided by Metric, Inc. and GPS coordinates obtained by Tierra, Inc. at the time of fieldwork.

[2] Perched seasonal high groundwater table estimated based on soil stratigraphy.

[3] Measured hydraulic conductivity rates of soils encountered at the time of testing. No reduction or safety factors have been applied to the values. We recommend the pond designer apply the appropriate safety factors to these values.



0 50 200

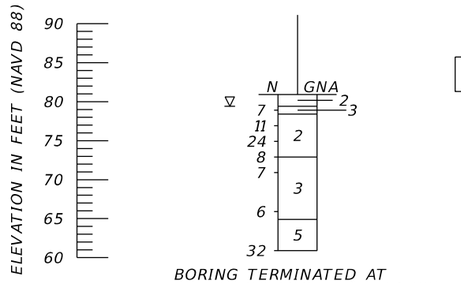
Feet

BORING LOCATION PLAN

LEGEND

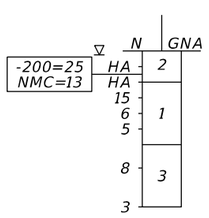
1.	GRAY TO LIGHT GRAY, AND BROWN TO LIGHT BROWN SAND TO SAND WITH SILT (A-3)
2.	BROWN TO ORANGE-BROWN SILTY SAND TO SLIGHTLY CLAYEY SAND, OCCASIONALLY WITH LIMESTONE FRAGMENTS (A-2-4)
3.	GRAY TO GRAY-BROWN CLAYEY SAND TO SANDY CLAY, OCCASIONALLY WITH LIMESTONE FRAGMENTS (A-2-6/A-2-7/A-6/A-7-6)
4.	GRAY SANDY CLAY TO CLAY, OCCASIONALLY WITH LIMESTONE FRAGMENTS (A-7-5/A-7-6)
5.	LIMESTONE
A-3	AASHTO GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▽	ESTIMATED SEASONAL HIGH GROUNDWATER TABLE
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
⟵100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
℄ SR 93	BASELINE SURVEY OF SR 93 (I-75)

BOR # PBS-19
STA. 2476+86
REF. ℄ SR 93
OFF. 417 LT
ELEV. 80.9
DATE 8/24/2018
DRILLER J. SMITH
HAMMER AUTOMATIC
RIG D-25



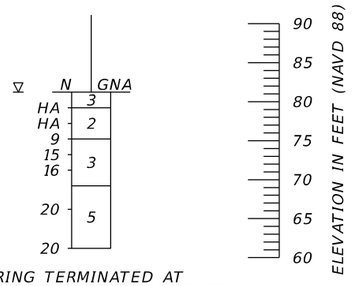
BORING TERMINATED AT ELEVATION 60.9 FT (NAVD 88)

BOR # PBS-20
STA. 2479+41
REF. ℄ SR 93
OFF. 579 LT
ELEV. 86.5
DATE 7/31/2018
DRILLER A.JACKSON
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION 66.5 FT (NAVD 88)

BOR # PBS-21
STA. 2479+06
REF. ℄ SR 93
OFF. 894 LT
ELEV. 81.2
DATE 1/24/2019
DRILLER J.SMITH
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION 61.2 FT (NAVD 88)

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS-RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

FIGURE 11

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

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

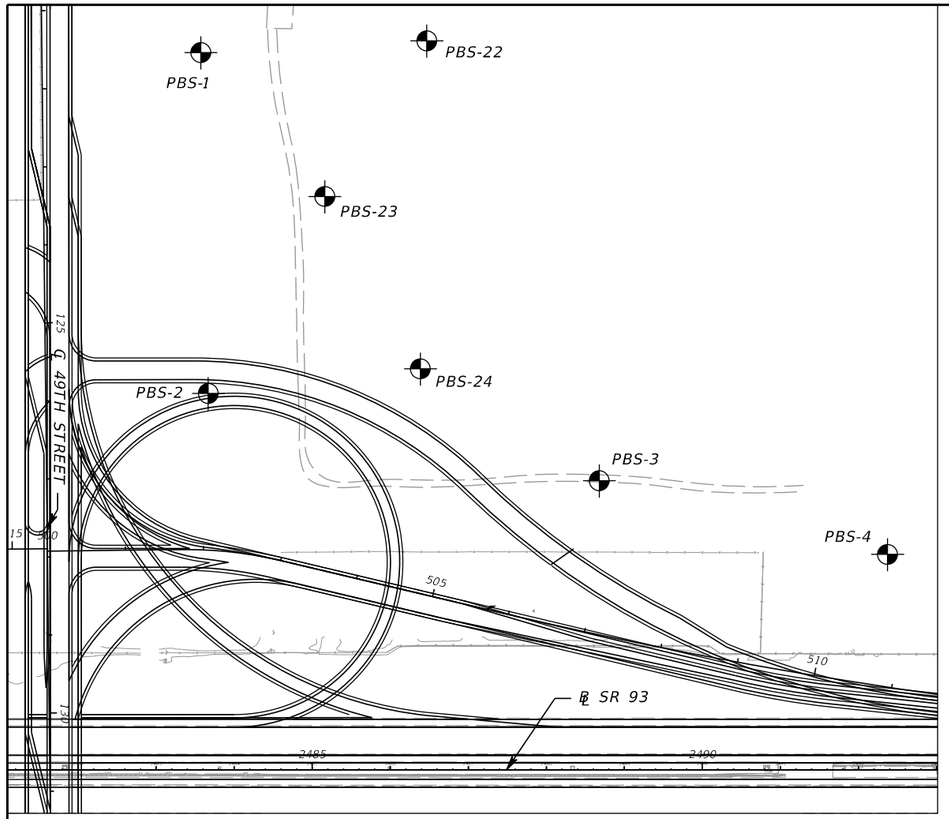
JEREMY A. SEWELL, P.E.
P.E. LICENSE NUMBER 62951
TIERRA, INC.
591 SUSAN B. BRITT COURT
WINTER GARDEN, FLORIDA 34787
CERTIFICATE OF AUTHORIZATION NO. 6486

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

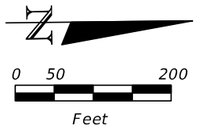
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	MARION	435209-1-22-01

POND SOIL SURVEY (1)

SHEET NO. J-10

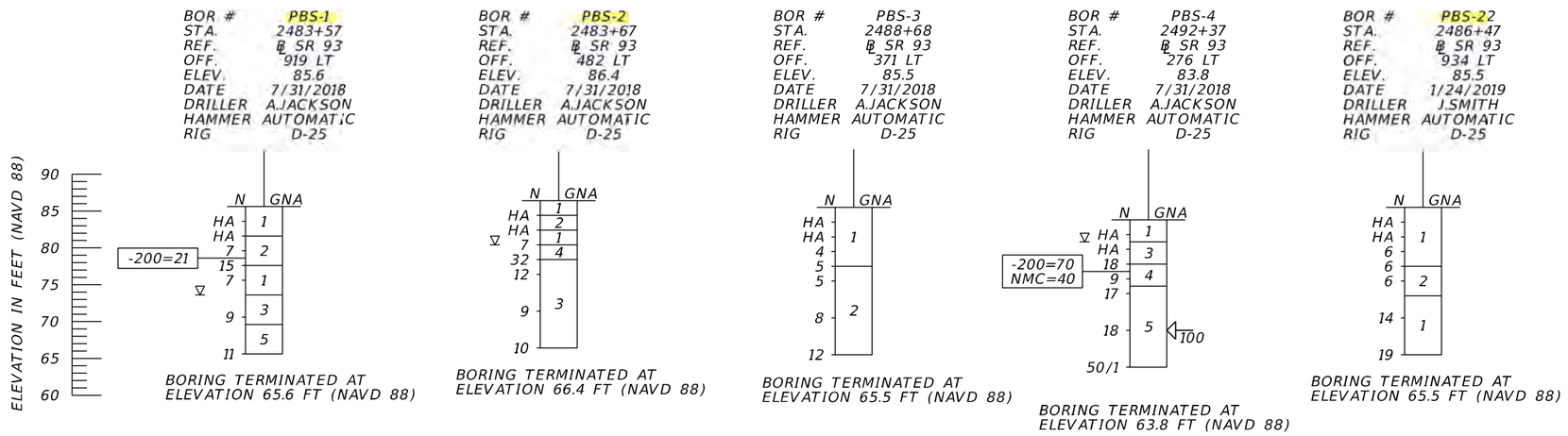


BORING LOCATION PLAN



LEGEND

1.	GRAY TO LIGHT GRAY, AND BROWN TO LIGHT BROWN SAND TO SAND WITH SILT (A-3)
2.	BROWN TO ORANGE-BROWN SILTY SAND TO SLIGHTLY CLAYEY SAND, OCCASIONALLY WITH LIMESTONE FRAGMENTS (A-2-4)
3.	GRAY TO GRAY-BROWN CLAYEY SAND TO SANDY CLAY, OCCASIONALLY WITH LIMESTONE FRAGMENTS (A-2-6/A-2-7/A-6/A-7-6)
4.	GRAY SANDY CLAY TO CLAY, OCCASIONALLY WITH LIMESTONE FRAGMENTS (A-7-5/A-7-6)
5.	LIMESTONE
A-3	AASHTO GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
▽	ESTIMATED SEASONAL HIGH GROUNDWATER TABLE
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
℄ SR 93	BASELINE SURVEY OF SR 93 (I-75)



	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

FIGURE 12

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

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

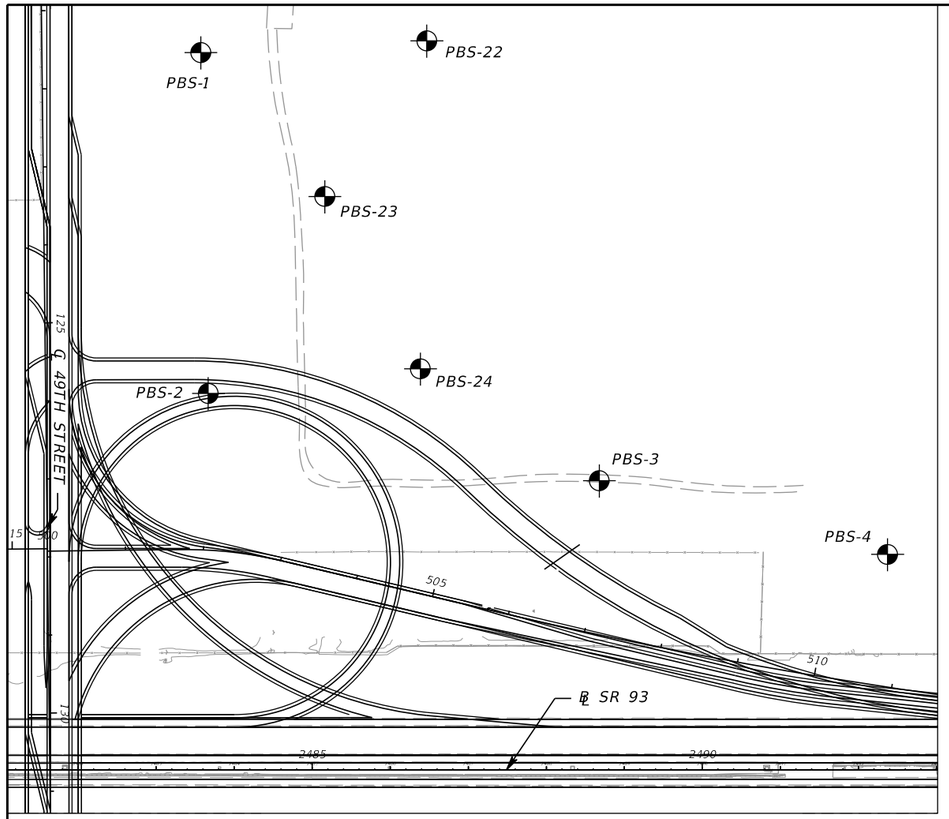
JEREMY A. SEWELL, P.E.
P.E. LICENSE NUMBER 62951
TIERRA, INC.
591 SUSAN B. BRITT COURT
WINTER GARDEN, FLORIDA 34787
CERTIFICATE OF AUTHORIZATION NO. 6486

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

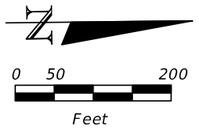
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	MARION	435209-1-22-01

POND SOIL SURVEY (2)

SHEET NO. J-11



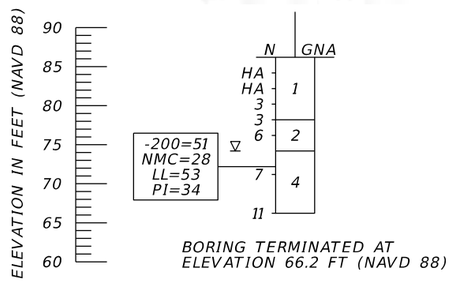
BORING LOCATION PLAN



LEGEND

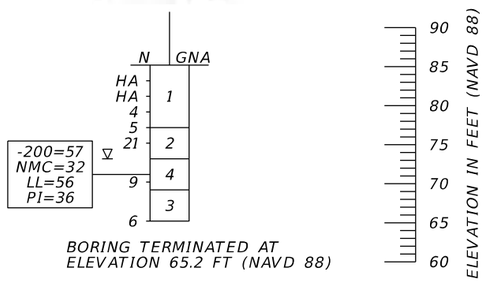
1.	GRAY TO LIGHT GRAY, AND BROWN TO LIGHT BROWN SAND TO SAND WITH SILT (A-3)
2.	BROWN TO ORANGE-BROWN SILTY SAND TO SLIGHTLY CLAYEY SAND, OCCASIONALLY WITH LIMESTONE FRAGMENTS (A-2-4)
3.	GRAY TO GRAY-BROWN CLAYEY SAND TO SANDY CLAY, OCCASIONALLY WITH LIMESTONE FRAGMENTS (A-2-6/A-2-7/A-6/A-7-6)
4.	GRAY SANDY CLAY TO CLAY, OCCASIONALLY WITH LIMESTONE FRAGMENTS (A-7-5/A-7-6)
5.	LIMESTONE
A-3	AASHTO GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
▽	ESTIMATED SEASONAL HIGH GROUNDWATER TABLE
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
℄ SR 93	BASELINE SURVEY OF SR 93 (I-75)

BOR # PBS-23
STA. 2485+16
REF. ℄ SR 93
OFF. 735 LT
ELEV. 86.2
DATE 1/24/2019
DRILLER J.SMITH
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION 66.2 FT (NAVD 88)

BOR # PBS-24
STA. 2486+39
REF. ℄ SR 93
OFF. 514 LT
ELEV. 85.2
DATE 1/24/2019
DRILLER J.SMITH
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION 65.2 FT (NAVD 88)

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS-RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

FIGURE 13

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION

JEREMY A. SEWELL, P.E.
P.E. LICENSE NUMBER 62951
TIERRA, INC.
591 SUSAN B. BRITT COURT
WINTER GARDEN, FLORIDA 34787
CERTIFICATE OF AUTHORIZATION NO. 6486

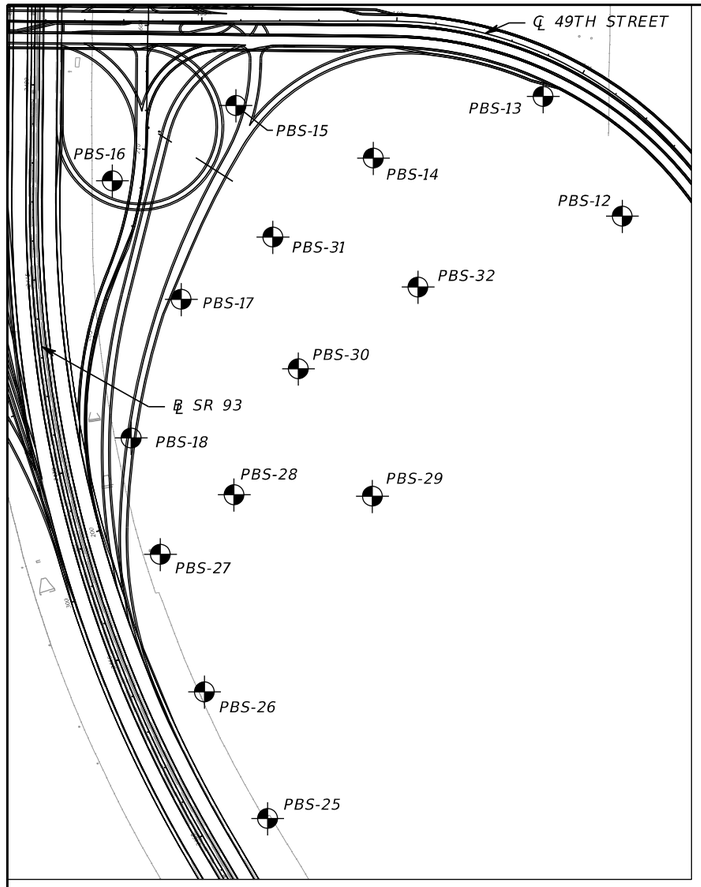
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

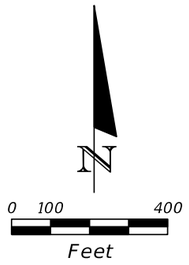
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	MARION	435209-1-22-01

POND SOIL SURVEY (3)

SHEET NO. J-12

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



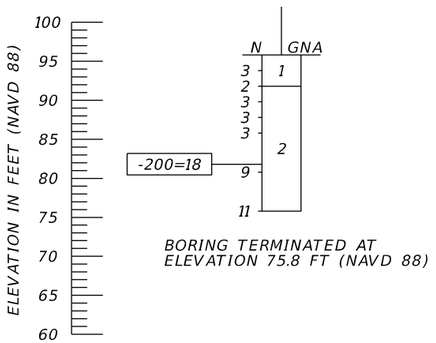


BORING LOCATION PLAN

LEGEND

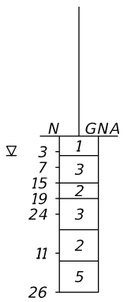
1.	GRAY TO LIGHT GRAY, AND BROWN TO LIGHT BROWN SAND TO SAND WITH SILT (A-3)
2.	BROWN TO ORANGE-BROWN SILTY SAND TO SLIGHTLY CLAYEY SAND, OCCASIONALLY WITH LIMESTONE FRAGMENTS (A-2-4)
3.	GRAY TO GRAY-BROWN CLAYEY SAND TO SANDY CLAY, OCCASIONALLY WITH LIMESTONE FRAGMENTS (A-2-6/A-2-7/A-6/A-7-6)
4.	GRAY SANDY CLAY TO CLAY, OCCASIONALLY WITH LIMESTONE FRAGMENTS (A-7-5/A-7-6)
5.	LIMESTONE
A-3	AASHTO GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
▽	ESTIMATED SEASONAL HIGH GROUNDWATER TABLE
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
℄ SR 93	BASELINE SURVEY OF SR 93 (I-75)

BOR # PBS-12
STA. 2476+28
REF. ℄ SR 93
OFF. 1509 RT
ELEV. 95.8
DATE 8/24/2018
DRILLER J. SMITH
HAMMER AUTOMATIC
RIG D-25



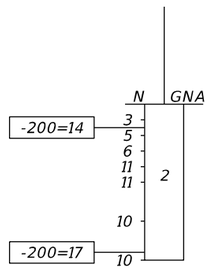
BORING TERMINATED AT ELEVATION 75.8 FT (NAVD 88)

BOR # PBS-13
STA. 2479+85
REF. ℄ SR 93
OFF. 1304 RT
ELEV. 85.4
DATE 8/22/2018
DRILLER J. SMITH
HAMMER AUTOMATIC
RIG D-25



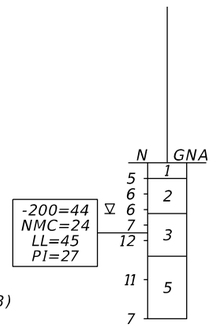
BORING TERMINATED AT ELEVATION 65.4 FT (NAVD 88)

BOR # PBS-14
STA. 2478+22
REF. ℄ SR 93
OFF. 870 RT
ELEV. 89.5
DATE 8/22/2018
DRILLER J. SMITH
HAMMER AUTOMATIC
RIG D-25



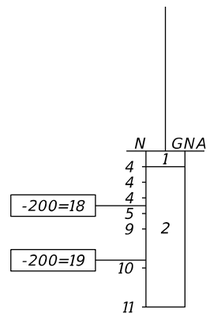
BORING TERMINATED AT ELEVATION 69.5 FT (NAVD 88)

BOR # PBS-15
STA. 2479+53
REF. ℄ SR 93
OFF. 517 RT
ELEV. 82.0
DATE 8/22/2018
DRILLER J. SMITH
HAMMER AUTOMATIC
RIG D-25

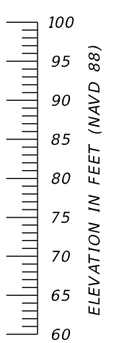


BORING TERMINATED AT ELEVATION 62.0 FT (NAVD 88)

BOR # PBS-16
STA. 2477+56
REF. ℄ SR 93
OFF. 202 RT
ELEV. 83.5
DATE 8/22/2018
DRILLER J. SMITH
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION 63.5 FT (NAVD 88)



	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

FIGURE 14

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

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

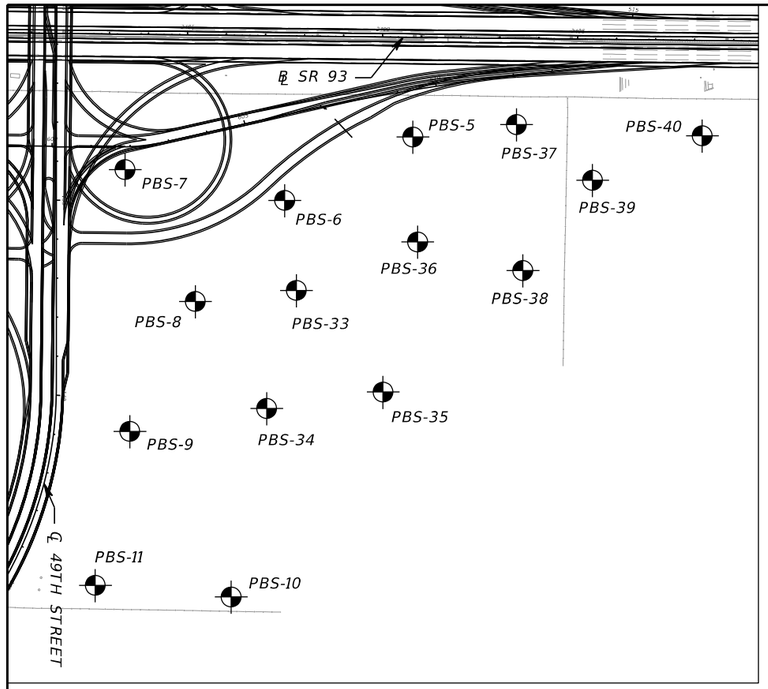
JEREMY A. SEWELL, P.E.
P.E. LICENSE NUMBER 62951
TIERRA, INC.
591 SUSAN B. BRITT COURT
WINTER GARDEN, FLORIDA 34787
CERTIFICATE OF AUTHORIZATION NO. 6486

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

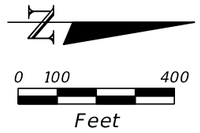
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	MARION	435209-1-22-01

POND SOIL SURVEY (4)

SHEET NO. J-13

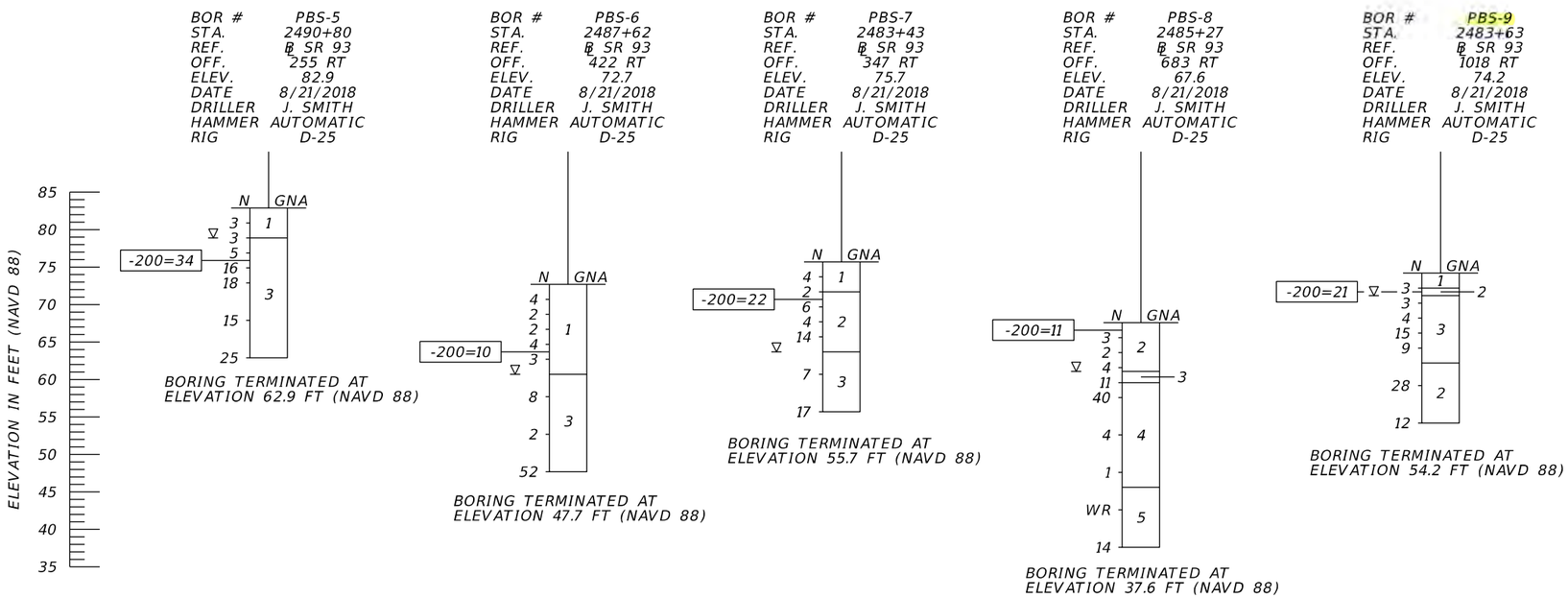


BORING LOCATION PLAN



LEGEND

1.	GRAY TO LIGHT GRAY, AND BROWN TO LIGHT BROWN SAND TO SAND WITH SILT (A-3)
2.	BROWN TO ORANGE-BROWN SILTY SAND TO SLIGHTLY CLAYEY SAND, OCCASIONALLY WITH LIMESTONE FRAGMENTS (A-2-4)
3.	GRAY TO GRAY-BROWN CLAYEY SAND TO SANDY CLAY, OCCASIONALLY WITH LIMESTONE FRAGMENTS (A-2-6/A-2-7/A-6/A-7-6)
4.	GRAY SANDY CLAY TO CLAY, OCCASIONALLY WITH LIMESTONE FRAGMENTS (A-7-5/A-7-6)
5.	LIMESTONE
A-3	AASHTO GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
▽	ESTIMATED SEASONAL HIGH GROUNDWATER TABLE
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
℄ SR 93	BASELINE SURVEY OF SR 93 (I-75)



	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS-RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

FIGURE 17

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

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION

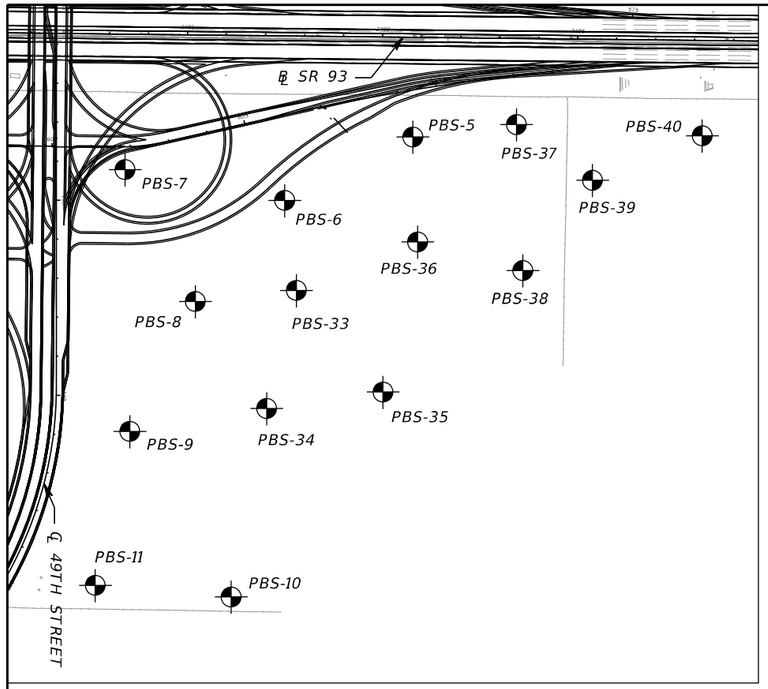
JEREMY A. SEWELL, P.E.
P.E. LICENSE NUMBER 62951
TIERRA, INC.
591 SUSAN B. BRITT COURT
WINTER GARDEN, FLORIDA 34787
CERTIFICATE OF AUTHORIZATION NO. 6486

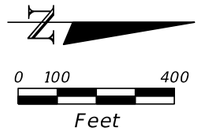
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	MARION	435209-1-22-01

POND SOIL SURVEY (7)

SHEET NO. J-14



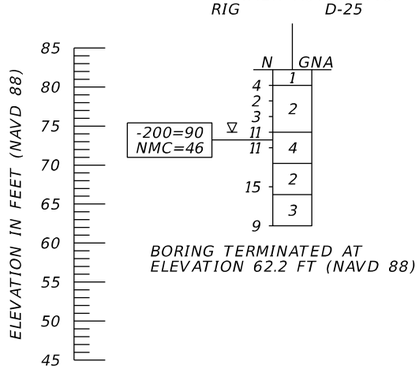


BORING LOCATION PLAN

LEGEND

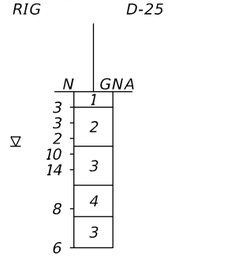
1.	GRAY TO LIGHT GRAY, AND BROWN TO LIGHT BROWN SAND TO SAND WITH SILT (A-3)
2.	BROWN TO ORANGE-BROWN SILTY SAND TO SLIGHTLY CLAYEY SAND, OCCASIONALLY WITH LIMESTONE FRAGMENTS (A-2-4)
3.	GRAY TO GRAY-BROWN CLAYEY SAND TO SANDY CLAY, OCCASIONALLY WITH LIMESTONE FRAGMENTS (A-2-6/A-2-7/A-6/A-7-6)
4.	GRAY SANDY CLAY TO CLAY, OCCASIONALLY WITH LIMESTONE FRAGMENTS (A-7-5/A-7-6)
5.	LIMESTONE
A-3	AASHTO GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200 NMC LL PI	PERCENT PASSING #200 SIEVE NATURAL MOISTURE CONTENT (%) LIQUID LIMIT (%) PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
▽	ESTIMATED SEASONAL HIGH GROUNDWATER TABLE
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
℄ SR 93	BASELINE SURVEY OF SR 93 (I-75)

BOR # PBS-10
STA. 2486+27
REF. ℄ SR 93
OFF. 1439 RT
ELEV. 82.2
DATE 8/22/2018
DRILLER J. SMITH
HAMMER AUTOMATIC
RIG D-25



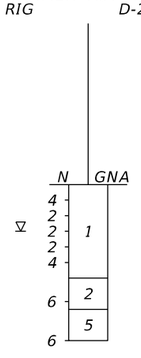
BORING TERMINATED AT ELEVATION 62.2 FT (NAVD 88)

BOR # PBS-11
STA. 2482+79
REF. ℄ SR 93
OFF. 1413 RT
ELEV. 79.4
DATE 8/22/2018
DRILLER J. SMITH
HAMMER AUTOMATIC
RIG D-25



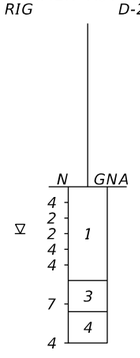
BORING TERMINATED AT ELEVATION 59.4 FT (NAVD 88)

BOR # PBS-33
STA. 2487+86
REF. ℄ SR 93
OFF. 652 RT
ELEV. 67.5
DATE 2/19/2019
DRILLER J.ERICKSON
HAMMER AUTOMATIC
RIG D-25



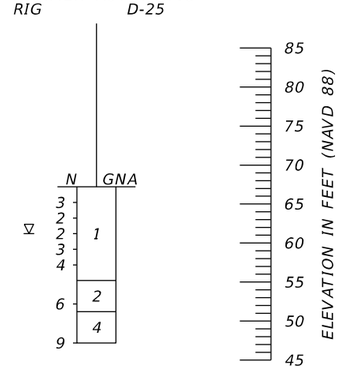
BORING TERMINATED AT ELEVATION 47.5 FT (NAVD 88)

BOR # PBS-34
STA. 2487+13
REF. ℄ SR 93
OFF. 955 RT
ELEV. 67.2
DATE 2/19/2019
DRILLER J.ERICKSON
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION 47.2 FT (NAVD 88)

BOR # PBS-35
STA. 2490+11
REF. ℄ SR 93
OFF. 910 RT
ELEV. 67.2
DATE 2/20/2019
DRILLER J.ERICKSON
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION 47.2 FT (NAVD 88)

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS-RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

FIGURE 18

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

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

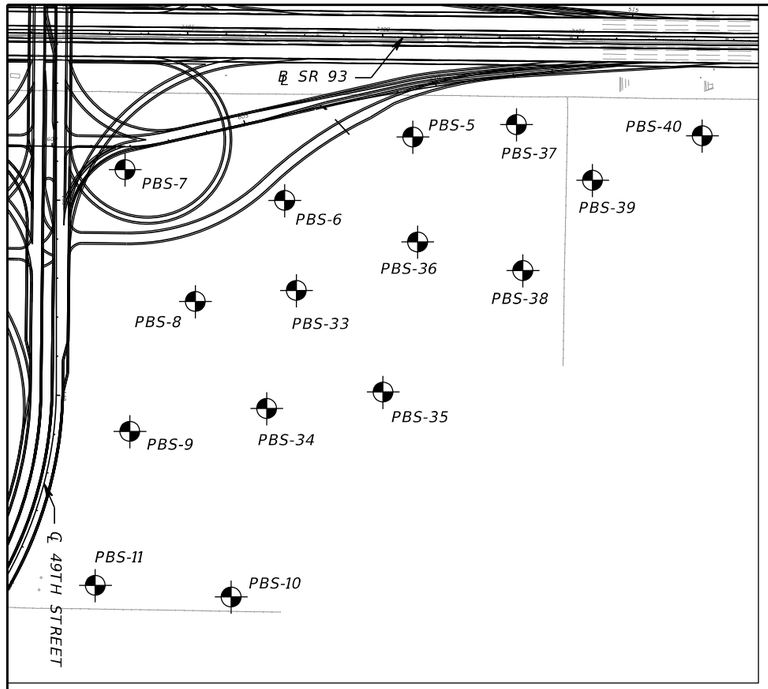
JEREMY A. SEWELL, P.E.
P.E. LICENSE NUMBER 62951
TIERRA, INC.
591 SUSAN B. BRITT COURT
WINTER GARDEN, FLORIDA 34787
CERTIFICATE OF AUTHORIZATION NO. 6486

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

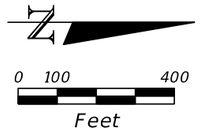
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	MARION	435209-1-22-01

POND SOIL SURVEY (8)

SHEET NO. J-15

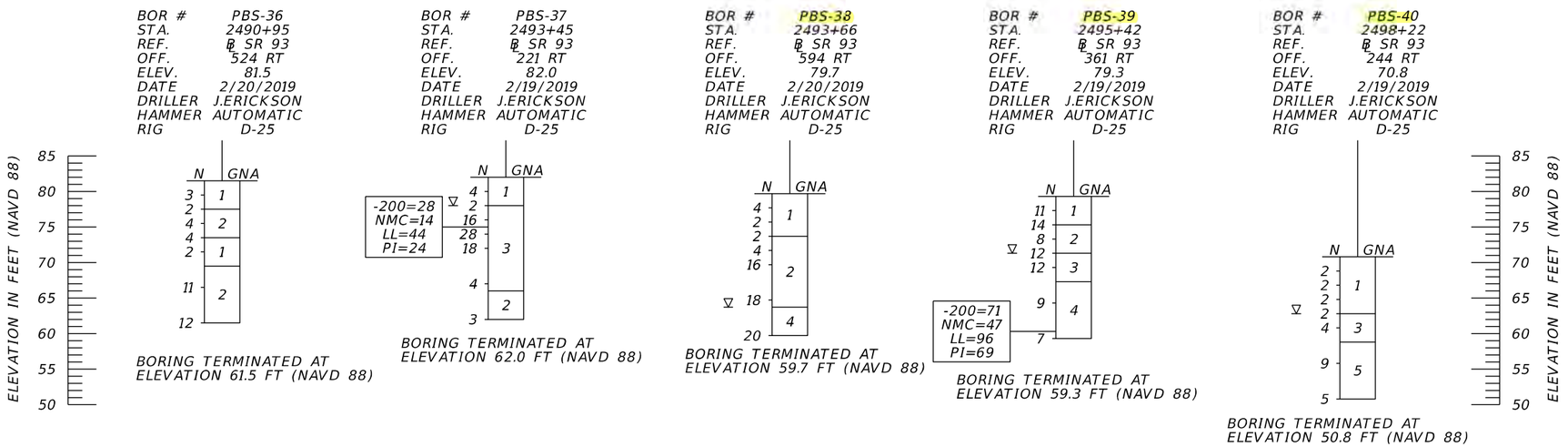


BORING LOCATION PLAN



LEGEND

1.	GRAY TO LIGHT GRAY, AND BROWN TO LIGHT BROWN SAND TO SAND WITH SILT (A-3)
2.	BROWN TO ORANGE-BROWN SILTY SAND TO SLIGHTLY CLAYEY SAND, OCCASIONALLY WITH LIMESTONE FRAGMENTS (A-2-4)
3.	GRAY TO GRAY-BROWN CLAYEY SAND TO SANDY CLAY, OCCASIONALLY WITH LIMESTONE FRAGMENTS (A-2-6/A-2-7/A-6/A-7-6)
4.	GRAY SANDY CLAY TO CLAY, OCCASIONALLY WITH LIMESTONE FRAGMENTS (A-7-5/A-7-6)
5.	LIMESTONE
A-3	AASHTO GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▽	ESTIMATED SEASONAL HIGH GROUNDWATER TABLE
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
◁100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
℄ SR 93	BASELINE SURVEY OF SR 93 (I-75)



	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
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FIGURE 19

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

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

JEREMY A. SEWELL, P.E.
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DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 93	MARION	435209-1-22-01

POND SOIL SURVEY (9)

SHEET NO. J-16

APPENDIX K

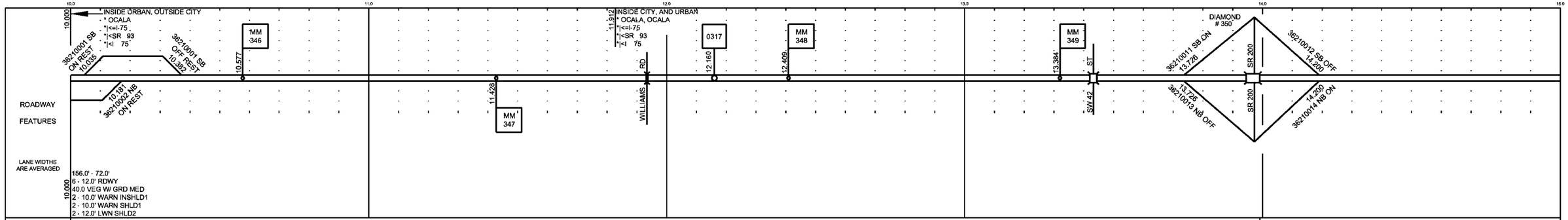
Straight Line Diagram

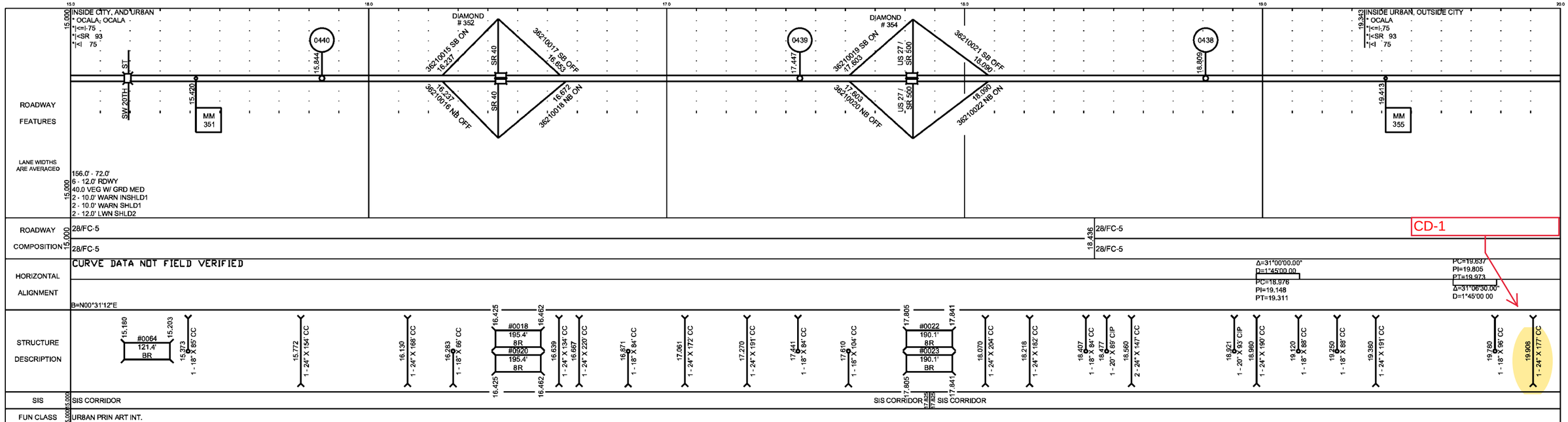
	5 YR INV	SLD REV	BMP	EMP	INV	SLD REV
DATE	05/29/2014	06/25/2014	000.000	038.282		12/09/2014 MR
BY	Jim Manzone	Michael Register				

FLORIDA DEPARTMENT OF TRANSPORTATION

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO:
02	I 75	SR 93	MARION	05	36210000	2 OF 4



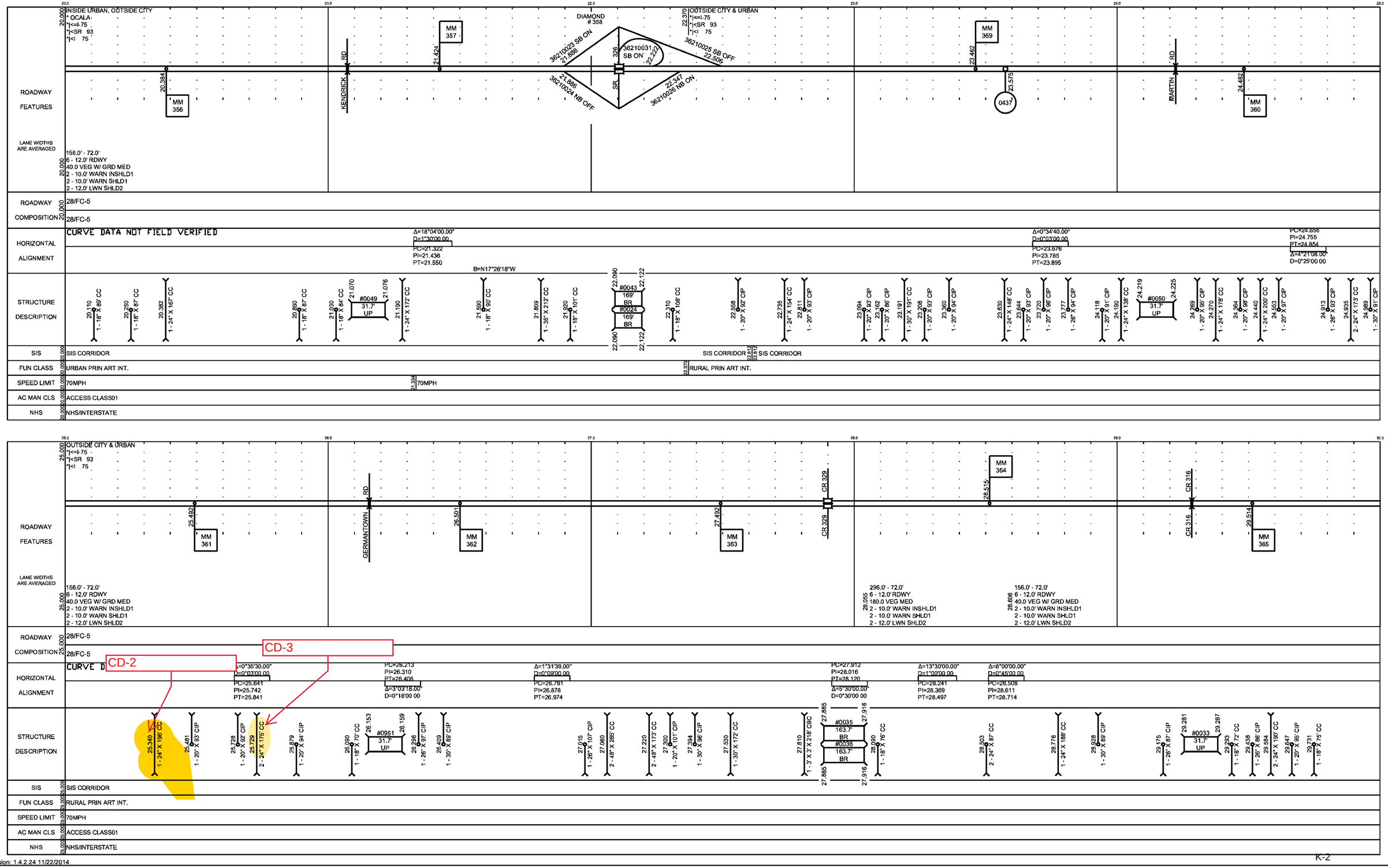


	5 YR INV	SLD REV	BMP	EMP	INV	SLD REV
DATE	05/29/2014	06/25/2014	000.000	038.282		12/09/2014 MR
BY	Jim Manzone	Michael Register				

FLORIDA DEPARTMENT OF TRANSPORTATION

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO:
02	I 75	SR 93	MARION	05	36210000	3 OF 4



APPENDIX L

Meeting Minutes

PD&E Study for the
I-75 & NW 49th Street from end of NW 49th Street to end of NW 35th Street
FPID#: 435209 1 22 01

MINUTES: Environmental Look Around (ELA) Meeting with Marion County

DATE: March 12, 2019 TIME: 8.30 A.M.

LOCATION: Tele-Conference

ATTENDEES:
Chandra Raman, Metric Engineering
Paul Wildman, Guerra Development Corp (GDC)

The purpose of the meeting was to discuss potential regional watershed opportunities. Also, to identify any historic maintenance problems involving drainage or flooding which could affect the viability of the project alternatives and influence the evaluation results.

Marion County was represented by GDC for this ELA Meeting. GDC is the design consultant to Marion County on the N.W. 49th/35th St- Phase 2B project. The proposed FDOT I-75 Interchange project will tie into the Phase 2B project that is currently in design.

The following items were discussed during the teleconference:

1) The county's Phase 2B project is at the 60% stage.
2) The Phase 2B route will go thru the lime rock mine.
3) The Phase 2B project will have a clean break or crest at the north end of the project where the future FDOT project will tie in.
4) All runoff south of the crest will be taken into existing county's dry retention pond. The county already constructed the dry retention pond (DRA B-6) during Phase 2A.
5) County has no other future plans such as regional ponds or join use ponds at the Phase 2C corridor (County regards Phase 2C as future FDOT project).
6) County has an agreement with the mine in regard to the 35th street extension.
7) County has no plan to discharge into the mining pits or use them as stormwater facilities.
8) No stormwater harvesting is being proposed by the county.
9) The county is not aware of any drainage studies in this area.
10) The project is in lime lock area, potential for sink holes.

Project: I-75 at NW 49 Street PD&E Study (FM#435209-1-22-01)
Subject: Progress Meeting
Meeting Date: 8/24/18
Location: FDOT D5

The following table identifies the meeting participants.

Name	Company/Agency	Email
Heather Grubert	FDOT	Heather.Grubert@dot.state.fl.us
David Graeber	FDOT	David.Graeber@dot.state.fl.us
Efren Rivera	FDOT	Efren.Rivera@dot.state.fl.us
Carlos Rodriguez	Metric Engineering	CRodriguez@metriceng.com
Chandra Raman	Metric Engineering	chandra.raman@metriceng.com
Gabriela Garcia	Metric Engineering	ggarcia@metriceng.com

The purpose of this meeting was to discuss status of the project:

- Ms. Grubert introduced Mr. Graeber as the new project manager for the study. The team will copy both Ms. Grubert and Mr. Graeber as they transition.
- Alternatives Public Workshop has been scheduled for February 6, 2019.
- Metric will confirm with Mike Daniels from the TPO if the TPO wants a presentation to the TPO Board prior to or after the Alternatives Public Workshop.
- There is a new review process at the District for the meeting materials. Metric will resubmit all meeting materials.
- The team reviewed the preliminary pond locations as well as potential impacts to the floodplain for each alternative.
- Metric will make sure that the ponds fall outside of the I-75 R/W.
- The ponds should be curvilinear since there is ample R/W to make them more aesthetically pleasing.
- To potentially eliminate ponds on the west side of I-75, Metric will prepare a preliminary technical memorandum to present the feasibility of moving the water from the west side of I-75 to the east side. If ponds are needed west of I-75, locate the ponds on one parcel if possible and as close to I-75 as possible.
- Metric will perform a volumetric analysis. Mr. Rivera stated there is no need for hydraulic calculations.
- Metric will also evaluate the floodplain impacts.
- Mr. Rivera stated that Marion County has been requesting that ponds be constructed shallower than 6 feet. Although these will be FDOT ponds, the team will try to make the ponds as shallow as possible.
- Tierra has already performed structure borings as well as borings for the preliminary ponds. Once selected, they will perform additional borings on the final ponds.

Metric Engineering will rely on these notes as the approved record of matters discussed and conclusions reached during this meeting unless you send the author written notice to the contrary within seven calendar days of receipt date of this meeting record.

Submitted by: Gabriela Garcia, PE
Project Engineer
Metric Engineering, Inc.

CC: All attendees

I-75 & NW 49th Street Interchange

PD&E Coordination

September 3, 2020

Meeting Summary

Attendees:

Kyle Howard – FDOT
Amy Windom – FDOT
Michael Holt – Metric Engineering
Jillian Berbakov – Metric Engineering
Carlos Rodriguez – Metric Engineering
Rob Myers – Metric Engineering
Steven Buck - FDOT
Karen Snyder - FDOT
Casey Lyon - FDOT
Upasana Srivastava - SJRWMD
Gabriela Garcia – Metric Engineering

Meeting began with introductions.

The Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) Study to plan for a future new interchange on I-75 at NW 49th Street in Marion County. The purpose of this meeting was to discuss the permit requirements and drainage criteria.

Michael Holt gave a brief overview of the project:

- The west side of the interstate is the dividing line between St. John's River Water Management district (SJRWMD) and Southwest Florida Water Management district (SWFWMD).
- Original permit for widening to 6 lanes is 19679-1.
- This area is a closed, or landlocked, basin.
- Pre-development offsite areas on the east flow into floodplain depressional areas.
- Runoff from I-75 generally flows from south to north and is captured/treated in roadside swales.
    - There are 2 permitted weirs associated with cross drains which pop-off to offsite the depressional areas east of I-75.
    - Intent is to maintain existing flow patterns.
    - Pond options on the west side of I-75 will be "brought into" the appropriate basin and maintain discharge to the east.

Discussion of jurisdictional authority due to the water management district divide.

- Since the entire project is not within the SJRWMD boundary, an Interagency Agreement with SWFWMD would be required for SJRWMD to permit the entire project.
    - While separate permits are an option on some projects for the portions of the project within each water management district, in this case the Interagency Agreement was recommended, since the proposed drainage is expected to discharge to the east within SJRWMD jurisdiction.

Discussion of design approach and regulatory criteria.

- There are two Basin Management Action Plans (BMAPs) in the project vicinity containing Priory Focus Area (PFA) mappings.
    - The project is completely out of the Rainbow Springs PFA.
    - The roadway improvements are primarily outside of the Silver Springs PFA. Runoff within the project area flows to depressional areas which lie outside the boundaries of the PFA.
    - SJRWMD concurred that no additional criteria would be required based on being located outside of the PFA boundaries.
- Current approach based on available geotechnical data indicates dry ponds for treatment and attenuation.
- SJRWMD environmental staff was not able to attend the meeting, but a preliminary review of the project area indicates that no environmental concerns are expected.
- SJRWMD stated that for a closed basin, the 25-year/96-hour event is to be used for peak volume and the 25-year/24-hour event is to be used for peak flow rate.
    - If pond has surface discharge, then the volume would be the difference in pre and post runoff volume. If no surface discharge the total storm runoff volume would be used.
    - A PD&E Study considers multiple pond alternatives for planning purposes from a worst case scenario and obtain environmental clearances. The conceptual layout for the alternative pond options being considered were shown. Currently the proposed pond options are expected to pop-off into the existing depressional area and be contained there as in existing conditions. In addition to alternative pond sites, Metric is also examining the potential use of “flood rights” with an FDOT easement for the footprint in the depressional area associated with the increased stage as an option to meet closed basin stormwater criteria.
    - SJRWMD noted that if volume could not be fully attenuated, the FDOT could take advantage of the depressional storage provided it is fully contained within a proposed easement.

Design will proceed following completion of the PD&E Study. Permitting is anticipated to occur mid 2021

Marion County is a partner on this project. They have already permitted the road southeast of the project where this project will tie-in.

Action Items:

SJRWMD will send a link to historic files for the I-95 six laning project (SJRWMD Permit No.19679-1).

Kyle Howard with the FDOT Drainage Design Office will provide any historic files he has located in the FDOT archives that are relevant to the project, and not found in the SJRWMD permit online data.