225 North Pearl Street
Jacksonville, FL 32202-
4513

Building Community

August 14, 2026

Nate Senn
Florida Department of Environmental Protection
Office of Siting Coordination
2600 Blair Stone Road, MS 5500
Tallahassee, FL 32399-2400

Re: JEA St. Johns River Power Park Unit 3, PA 81-13A2
Response to First Determination of Incompleteness

Dear Mr. Senn,

Pursuant to Section 403.5066(2)(b), Florida Statutes, JEA hereby submits information responsive to the Florida Department of Environmental Protection's First Determination of Incompleteness issued July 15, 2026.

Electronic copies of these responses are being provided via email to the other reviewing agencies and parties, along with copies to the public library, as indicated on the attached distribution list.

We look forward to continuing to work with you, the Department and other agencies participating in the site certification process. Should you or any other agency representatives have any questions regarding this submittal please do not hesitate to contact me at (904) 537-6948 or via email at holbke@jea.com.

Sincerely,

Kevin Holbrooks

Kevin Holbrooks,
JEA
Sr Director, Environmental Services

Distribution List for
JEA St. Johns River Power Park Unit 3
Completeness Responses – August 14, 2026

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JEA Responses to Completeness Questions from SJRWMD

The following are the JEA SJRPP Unit 3 SCA completeness questions from the St Johns River Water Management District followed by JEA's response.

1. Please provide a list of all existing and proposed wells and surface water pumps that will be utilized by this project to supply water. Include the following information:

a. Well or pump name and associated District Station ID;

b. Status of each station as existing or proposed;

c. Well casing diameter, casing depth, total depth and pump capacity;

d. Pump capacity for surface water pumps;

e. GPS coordinates of each well and pump; and

f. A map showing the location of each well and pump.

[Section 1.4.4.3 of the Applicant's Handbook: Consumptive Uses of Water (December 11, 2025) (A.H.)]

The table below provides the details requested for the existing and proposed ground water wells for the SJRPP Unit 3 Project. Existing wells will be capped and abandoned in place. The locations of the ground water wells are provided on the attached Existing and Proposed Well Map.

Well Name	District Station ID	Status	Casing Diameter (in.)	Casing Depth (ft. bls)	Total Depth (ft. bls)	Pump Capacity (gpm)	GPS Coordinates
Well A	451100	Existing	18	500	750	1,800	30°25'56.10"N, 81°33'15.65"W
Well B	451101	Existing	18	500	750	1,800	30°25'45.91"N, 81°33'06.57"W
Well C	451102	Existing	18	500	750	1,800	30°25'37.13"N, 81°33'11.50"W
Well D	451103	Existing	18	475	1,056	2,500	30°25'51.05"N, 81°33'10.14"W
Well 1	TBD	Proposed	18	475	700	1,350	30°25'42.29"N, 81°32'49.51"W
Well 2	TBD	Proposed	18	475	700	1,350	30°25'52.81"N, 81°32'52.62"W
Well 3	TBD	Proposed	18	475	700	1,350	30°25'46.64"N, 81°33'06.94"W
Well 4 (backup)	TBD	Proposed	18	475	700	1,350	30°25'36.65"N, 81°33'10.33"W

There is no surface water usage proposed for SJRPP Unit 3 at this time.

2. Please provide contact information for the compliance contact who will be responsible for ensuring compliance requirements for the permit are met. [Section 1.4.4.2 A.H.]

Pursuant to sections 403.511(1) and 403.514, Florida Statutes, the certification under the Florida Electrical Power Plant Siting Act (PPSA) is JEA's sole license for construction and operation of SJRPP Unit 3 and the Florida Department of Environmental Protection is responsible for compliance with the conditions of certification.

If the SJRWMD needs a designated representative from JEA, below is the contact information:

Kevin Holbrooks, Senior Director Environmental Operations
225 N. Pearl Street
Jacksonville, FL 32202
(904) 537-6948
holbke@jea.com

3. Please provide a description of the major water uses associated with the power generation process including any of the following areas: boiler feed and make-up water, equipment cooling, heat exchanges, emission control, product content, product mixing and dilution, and cleaning and maintenance. [Section 2.2.3.1 A.H]

As described in Section 3.1.3, 4.5, and summarized in Table 4-4 of the SCA, operation of the proposed SJRPP Unit 3 will require the use of reclaimed wastewater from the District II WRF. Reclaimed water will be used for condenser cooling (i.e., cooling tower makeup water) purposes, which represents the largest volume of water needed for plant operation. Groundwater will be needed as an emergency back-up in the unexpected event of WRF upset conditions resulting in the inability to utilize reclaimed water. Existing on-Site facilities include a reclaimed water line, cooling tower blowdown water line, cooling tower makeup line, potable water main, and force main sanitary sewer. The Project will tie into the existing wastewater, potable water, and sanitary sewer lines. Low volume, higher quality freshwater needs for general services and process water uses in the facility will be provided through groundwater withdrawals from new groundwater wells to be installed on the Site. Service water uses include equipment wash water, emergency fire water for fire protection, HRSG blowdown quench, and pump mechanical seal water.

Process water will go through an additional filtration process to yield high-quality demineralized water and will be used for steam-cycle makeup, NO_x injection water when firing ULSD and closed cycle cooling makeup water. The volume of groundwater needed will be less than the current groundwater allocation in the existing SJRPP Conditions of

Certification. Potable water for drinking, safety showers, eyewash stations, and other sanitary uses will be provided by JEA Major Grid.

4. Please provide calculations showing a demonstration of water demand for the requested allocation of 5.1 million gallons per day (mgd) or revise the requested allocation to reflect the demonstration of water demand. Include in the calculations forecasted energy production over the requested permit duration as it relates to the projected water use. [Section 2.2.3.1 and 1.3.7 A.H.]

As stated in Sections 4.5 and 6.3.2 of the SCA, SJRPP Unit 3 proposed groundwater use is 0.2 MGD annual average under normal conditions, with 4.72 MGD needed as a back-up in the unexpected event of WRF upset conditions resulting in the inability to utilize reclaimed water. The maximum daily use will be 5.3 MGD. Detailed information regarding plant water use is presented in Section 4.5 of the SCA.

The current allocation under the conditions of certification for SJRPP is 7.6 MGD (max daily) and 5.1 MGD annual average (PA 81-13Q, Condition B.III.D). The proposed groundwater use required for the proposed SJRPP Unit 3 Project will be within the existing certified allocation. Certification under the PPSA is for the life of the facility. § 403.511(1), (2)(a), F.S. As such, a re-demonstration of demand for the existing allocation is not required.

5. Provide a water balance that shows the annual average and peak month quantities (in gallons per day) for all water sources, primary uses, losses (evaporative and discharge locations) and recycled water in a schematic diagram that shows all steps in the power generation process.

The total of all sources must equal the total of all uses, and the losses plus recycled water must equal the total of all sources. The water balance must include:

a. All water sources (groundwater, surface water, rainfall, recycled water, reclaimed water, etc.);

b. The amount of water entering and leaving each step in the process; and

c. All water losses (e.g., evaporation, product water content, steam losses, etc.). [Section 1.4.4.2, 2.2.3.1, and 2.3 (a) (b) A.H.]

The quantities of water used in different plant systems will vary with plant operating conditions (i.e., percent capacity or load), as well as with ambient meteorological conditions (i.e., temperature and relative humidity). Figures 4-8 and 4-9 in SCA Section 4.5 present the estimated annual average and peak water use, respectively, under different assumed operating conditions. Table 4-4 provides a summary of the major water

flows for the annual average and peak operating conditions. As shown in Figures 4-8 and 4-9, the annual average and peak daily cooling tower makeup water will be approximately 2,809 and 3,147 gpm, respectively.

As described in Subsection 4.5.3 of the SCA, SJRPP Unit 3 potable water for use by the employees and visitors will be supplied from the JEA Major Grid. As shown in Figure 4-8, the typical potable water needs are estimated to be approximately 6 gpm or 8,640 gpd. The system will supply pressurized potable water to sinks, safety showers, eyewash stations, and sanitary users in the administration and control building and other needed facilities in the plant.

As described in Subsection 4.5.4, process water is required for steam cycle makeup, fire protection, general plant services (e.g. equipment washing), and NO_x combustion injection when firing ULSD fuel oil. As shown in Table 4-4, the SJRPP process water needs will be approximately 137 gpm (0.2 MGD) and 858 gpm (1.2 MGD) on an annual average and peak daily basis, respectively.

General plant uses will include equipment wash water, pump seals, and emergency fire water. As noted previously, groundwater wells will supply water to the service/fire water storage tank. This water will be filtered to remove sedimentation and may undergo additional water softening to improve quality for general equipment and maintenance use. Groundwater will be passed through a new demineralized water treatment system to produce high quality water to be used for steam cycle makeup, CTG ULSD fuel oil combustion injection, CTG compressor washing, makeup to closed loop cooling water, auxiliary boiler steam cycle supply/makeup, pump mechanical seals and miscellaneous applications requiring high purity demineralized water. The demineralized water treatment process will include ultra-filtration (UF), 2-pass reverse osmosis (RO), electro-deionization (EDI), mixed-bed ion exchange and associated chemical treatment for chemistry conditioning. Such treatment is required to remove dissolved and suspended solids, along with undesirable minerals that cause corrosion and lead to damage within major steam cycle equipment. Higher quality wastewater from UF and RO equipment drains are routed to the cooling tower basin as makeup to reduce water demand from reclaim. Alternative technologies may be selected for use but will generally align with the objectives outlined for the demineralized water treatment system.

6. Please provide a dedicated water conservation plan that details efforts that will be made to minimize water use and maximize efficiency within the various systems of the project. As part of the water conservation plan, please refer to section 2.2.3.2 in the Applicant's Handbook.

Address each element in the plan and include the timeframes for initiating activities, the projected frequency, duration and future implementation of these initiatives and programs focusing on water conservation. Additionally, please ensure that the water conservation plan addresses updated water conservation requirements for Industrial Uses outlined in Rule 62-42.200-300 for the Lower Santa Fe and Ichetucknee Rivers and Priority Springs Minimum Flows and Levels. [Section 2.2.3.2 A.H.]

The Water Conservation Report was provided in SCA Appendix 10.10. A copy is provided for your convenience.

7. Please explain how lower quality sources such as reclaimed water and surface water will be utilized to the greatest extent feasible to offset groundwater withdrawals. Include the following information:

a. Describe and explain any areas or processes which use reclaimed water that would otherwise use groundwater if reclaimed water was not available. Include the quantity of groundwater saved in these processes.

b. List any processes that reuse recycled water or steam and provide estimated groundwater quantities saved as a result of recycling water.

[Section 2.2.3.2, A.H.]

As described in Sections 4.5 and Appendix 10.10 of the SCA, SJRPP Unit 3 is designed to minimize the use of water. The condenser cooling system operated at four cycles of concentration, will predominantly operate using reclaimed water from JEA's District II WRF. Surface water use is not proposed to be utilized for SJRPP Unit 3 at this time. Plant water use is described in SCA Section 4.5. Table 4-4 provides a summary of the major water flows for the annual average and peak operating conditions.

a. As shown in Table 4-4, the annual average volume of reclaimed water expected is 2,809 gpm (4.04 MGD) with peak usage expected at 3,147 gpm (4.53 MGD). Cooling tower makeup accounts for ~92% - 96% of total plant water needs when operating on natural gas (~62% - 81% when operating on fuel oil). This is the single largest consumer of water within the plant. The choice to use reclaimed water for this application was intentional and directly offsets (1:1) water consumption that would otherwise be supplied from another reliable source (e.g. groundwater). Thus, the amount of groundwater saved by operating an open-loop cooling system at four cycles of concentration utilizing reclaimed water as makeup versus groundwater as makeup is approximately 2,809 gpm (4.04 MGD). This correlates to approximately 1,624 - 3,147 gpm (2.34 - 4.53 MGD) of groundwater use averted when operating on natural gas and approximately 1,389 - 2,975 gpm (2.00 - 4.28

MGD) when operating on fuel oil. Note that makeup water needs during operation will vary as a function of incoming reclaimed water quality, plant load and ambient conditions.

b. The condenser cooling system will operate at four cycles of concentration. Processes within the plant that recover wastewater include HRSG blowdown, RO reject and UF waste. Waste streams from these processes are directed to the cooling tower basin to reduce the overall plant makeup water needs by approximately 70 – 77 gpm (0.10 - 0.11 MGD) when operating on natural gas and approximately 244 – 312 gpm (0.35 - 0.45 MGD) when operating on fuel oil.

8. Please provide groundwater modeling demonstrating the proposed water use will not:

a. Reduce a flow or level below any minimum flow or level established by the District or the Department of Environmental Protection pursuant to Section 373.042 and 373.0421, F.S.;

b. Cause harmful hydrologic alterations to natural systems, including wetlands or other surface waters;

c. Cause water quality changes or saline water intrusion;

d. Cause interference with existing legal uses of water, as stated in section 6.3.2.1 of the Site Certification Application.

[Section 2.3 and 1.3.7.2 A. H.]

Through the Site Certification Application, the only change sought is the replacement of existing wells with new wells producing from the same hydrostratigraphic unit as the existing wells. As stated in response to SJRWMD Completeness Response No. 4 above, there is sufficient groundwater capacity available under JEA's current SJRPP certification to support the proposed SJRPP Unit 3 operation. Furthermore, JEA is not requesting to add any withdrawal points or change the source of the permitted withdrawal.

As addressed in response to SJRWMD Completeness Response No. 1 above, the existing wells and replacement wells are all located on the SJRPP site, generally within 50 – 2,000 feet of each other. Due to the proximity of the existing and replacement wells, the requested change does not represent a modification that would cause impacts to the water resources of the area or existing offsite land uses beyond those previously evaluated.

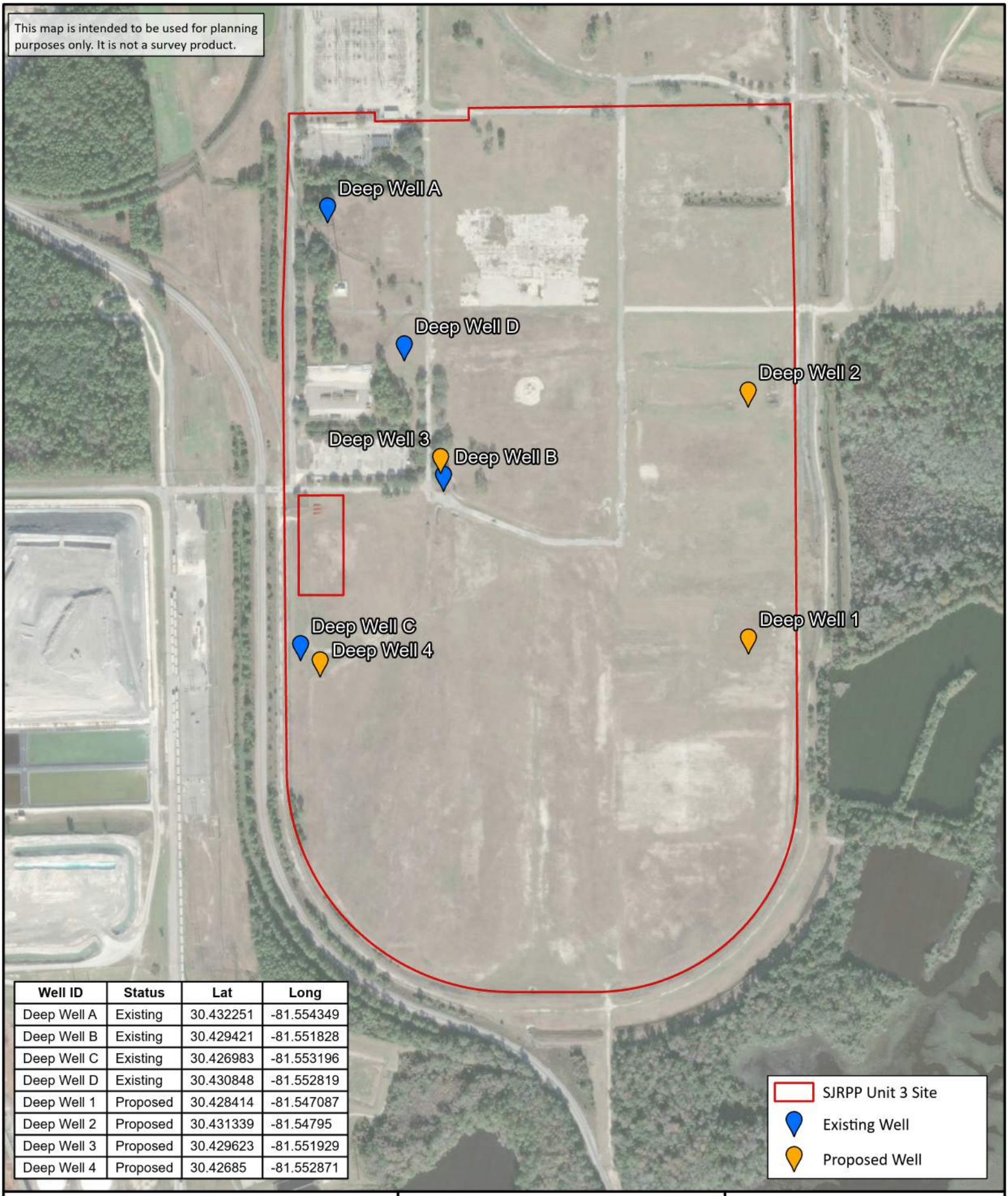
Due to this minimal change, additional groundwater modeling is not required and the requested relocation within SJRPP will not:

- Reduce a flow or level below any minimum flow or level established by the District or the Department of Environmental Protection pursuant to Section 373.042 and 373.0421, F.S.;
- Cause harmful hydrologic alterations to natural systems, including wetlands or other surface waters;
- Cause water quality changes or saline water intrusion; or
- Cause interference with existing legal uses of water.

9. It appears that the proposed future PGS Natural Gas Pipeline Corridor is located immediately adjacent to Recorded Perpetual Conservation Easements (CE; recorded with Duval County Clerk of Courts; Book 13625, Page 1997; Book 15497, Page 20; Book 12295, Page 1764) that are dedicated to the District. If any work or structures are proposed within these CEs, it will require an amendment or partial release of the CE prior to any activity within the CE.

As stated in Section 1.3 of the SCA, the PGS lateral is not proposed as part of the SJRPP Unit 3 Project. The pipeline lateral will be owned, operated, and permitted by PGS.

JEA St Johns River Power Park Unit 3 Wells Map



Well ID	Status	Lat	Long
Deep Well A	Existing	30.432251	-81.554349
Deep Well B	Existing	30.429421	-81.551828
Deep Well C	Existing	30.426983	-81.553196
Deep Well D	Existing	30.430848	-81.552819
Deep Well 1	Proposed	30.428414	-81.547087
Deep Well 2	Proposed	30.431339	-81.54795
Deep Well 3	Proposed	30.429623	-81.551929
Deep Well 4	Proposed	30.42685	-81.552871

EXISTING AND PROPOSED WELLS

NP | 8/12/2026

0 250 500
US Feet
Scale: 1:6,500

PCS: NAD 1983 2011 StatePlane Florida East FIPS 0901 Ft US

Sources: JEA, 2025.

JEA St Johns River Power Park
Water Conservation Report

CUP 140634

St Johns River Power Park Water Conservation Report

JEA is filing a Site Certification Application for the proposed construction and operation of a new electrical generating facility at the existing St. Johns River Power Park (SJRPP). As part of the Consumptive Use Permit portion, JEA submits the following Water Conservation Report. The report is for a 706-megawatt (gross nominal) one-on-one combined cycle electrical generating facility. SJRPP includes the following major associated facilities:

- One combustion turbine generator (CTG)
- One heat recovery steam generator (HRSG) and stack
- One steam turbine generator (STG)
- One auxiliary boiler
- One cooling tower
- Electrical transformers and collector yard
- Electrical substation / switchyard (existing)
- Other on-site associated facilities

SJRPP Water Use

Potable water. Potable water at the site will be supplied by JEA's Major Grid. This water will be used for safety showers / eyewash stations, makeup to CTG water mist fire protection system, drinking, and other domestic sanitary uses. The average potable water use is small at 0.01 MGD.

If groundwater supply is not available (upset condition), potable water will serve as a backup supply to the service water and process water needs during natural gas fuel operating modes only and while reclaimed water is available. The peak demand during this scenario is 0.20 MGD.

Electric generation process water. Four on-site groundwater wells will provide the service water and process water for the site. Service water will be used for general equipment wash-down, emergency fire water for fire protection, HRSG blowdown quench, and pump mechanical seal water. Process water will go through an additional filtration process to yield high-quality demineralized water which is required for steam-cycle makeup, CTG NOx injection water, CTG wash water and closed cycle cooling makeup water. Total average demand is 0.20 MGD.

If reclaimed water supply is not available (upset condition), groundwater will serve as a backup supply to the cooling tower makeup while also supplying process water needs. In this scenario, the facility would require between 4.72 MGD and 5.26 MGD of groundwater when operating on natural gas and fuel oil respectively.

Cooling tower makeup. Cooling water is required for condenser cooling and auxiliary equipment cooling. This will be accomplished using a mechanical draft cooling tower. Makeup water to the cooling tower is required to replace losses associated with drift, evaporation and blowdown. Total makeup water demand would be approximately 4.04 MGD average and 4.53 MGD peak. The primary source of cooling tower makeup will be reclaimed water from JEA's District II water reclamation facility and the back-up source will be groundwater.

SJRPP Water Conservation

Reclaimed water use. SJRPP will receive reclaimed water from JEA's District II Water Reclamation Facility. This water will be used for cooling water and makeup.

Service/process water. Quench water from the service water system is reduced by the implementation of a steam cycle blowdown heat exchanger. This heat exchanger is intended to recuperate or recover waste heat from the blowdown water in order to pre-heat the steam cycle makeup water. During the process, blowdown water temperatures are reduced such that quench water supply is reduced and/or eliminated, depending on plant/ambient operating conditions.

On-Site water recycling. Water is recycled at several locations within the plant. Waste streams from the demineralized water filtration process and blowdown from the steam cycle process are redirected to the cooling tower which reduces makeup water needs from external sources (reclaim water).

Lower quality sources. SJRPP is utilizing reclaimed water as a lower quality source of water at the cooling towers which is the dominant water demand within the plant. Other lower quality sources were evaluated and determined infeasible for use. There are no other available low quality water sources generated at the site that could be utilized.

Stormwater. Stormwater was previously determined to be infeasible for use at SJRPP. The use of stormwater is challenging due to the possibility that withdrawal could impact wetlands in vicinity of the site. In addition, the variability of the quality and quantity available are not suitable for use at this time.

SJRPP conservation design. The Project will be designed to minimize the consumptive use of groundwater and recycle water to the extent feasible. As an industry leader, JEA has long embraced the concept of One Water and the principles of Integrated Water Resources Management. Part of this long-term planning strategy includes JEA's mission of obtaining water supply certainty in meeting current and future water demands, maximizing the use of reclaimed water, targeting cost-effective water conservation programs and enhancing system resiliency all while exceeding industry and environmental regulatory standards. The SJRPP Unit 3 Project upholds this mission by utilizing reclaimed water wherever possible, offsetting aquifer withdrawals and abiding by state and local environmental requirements to manage JEA's fresh groundwater resources properly.

Employee education. Employee awareness is a major component of JEA's water conservation plan. Employee training and awareness is an important part of the conservation ethic at JEA – for all resources. Conservation is included in the annual environmental training sessions required of all JEA electric production employees. The goals of conservation awareness will be to ensure that all personnel are familiar with the uses onsite, and that they learn how to recognize water-related problems and how to bring water conservation suggestions to management.

JEA Responses to Completeness Questions from FDEP NED

The following are the JEA SJRPP Unit 3 SCA completeness questions from the Northeast District of the Florida Department of Environmental Protection followed by JEA's response.

1. **The design proposes 1-ft sand medium to the pond bottom and enter it as an exfiltration trench in BMP Trains separately from dry retention pond input. While soil medium may increase percolation (depending on specification) of the dry retention pond, it is not equivalent to exfiltration trench, which is a subsurface system consisting of perforated pipe surrounded by aggregate. Stormwater passes through the perforated pipe and infiltrates through the trench walls and bottom into the shallow groundwater aquifer. The required treatment volume shall be available within the aggregate layer. In this case if input is correct, the BMP Trains report shows the required treatment volume to be 186.95 ac ft, which is not feasible. Secondly, the 1-ft sand medium is part of the dry retention pond bottom, shall not be separated as two independent types of treatment. If the pond cannot percolate through natural soil within 72 hours, soil improvement can be used and reflected in a weighted percolation rate in the pond calculation. Refer to Section 7.0 of Volume II Applicant's Handbook.**

The sand medium has been removed from the BMP Trains model and is no longer considered an exfiltration trench. Sand medium will remain in the design to help support drawdown.

The current design proposes multiple swales throughout the site. Swales were not originally modeled as a treatment train in the BMP trains model. The proposed swales have been added to the BMP Trains software as a user input. The treatment through the swales was calculated based on the Environmental Resource Permit Applicants Handbook V.1 - Appendix O: Mean Annual Mass Removal Efficiencies for 1.25-inches of Retention for Zone 4 by Percent DCIA Table.

2. **BMP Trains report indicates that each pond has 4 treatment types in series: Series Number 1 Retention 2 Exfiltration 3 Retention 4 Exfiltration. The input does not reflect the design and creates a huge, required treatment volume that the project is not feasible to meet. Please verify the input. In addition, please assure that table 4-4 of the engineering report matches to the BMP Trains report. Refer to Part 1 of ERP form Section E.**

This was a modeling error in our BMP Trains report. The BMP Trains model has since been revised.

3. **Since the project site is located within a HUC 12 subwatershed which contains an impaired water and OFW, and located upstream of that impaired water and OFW, stormwater treatment shall provide a level of treatment sufficient to accomplish 95 percent reduction of average annual loading of TP and TN from the proposed project (Section 8.3.4 (a)1. of Volume I Handbook), in addition to post loading not exceeding pre loading, according to Section 8.3.4 of Volume I Applicant's Handbook. Please update Section 4.1.1 of the engineering report.**

Report language in section 4.1.1 has been updated to highlight section 8.3.4 requirements.

4. **Please demonstrate that each retention pond can recover the required treatment volume via percolation within 72 hours following a storm event. Refer to Section 5.3 of Volume II Applicant's Handbook.**

The recovery times for each pond are taken from the HydroCAD model and are summarized in Table 5-1 of the stormwater report. Attachments with an additional screenshot clarifying how the recovery time was determined from the HydroCAD model have been added.

5. **HydroCAD input indicate that primary discharge from the proposed retention ponds is existing 30" (B-01) and 36" (B-02) culverts at the pond bottom. Since dry retention pond is function of percolation rather than discharging from pond bottom, the pipes shall be removed from the pond bottom and the model. Please update the model. Refer to Section 5.1 of Volume II Applicant's Handbook.**

The HydroCAD culverts are currently routed to only convey flows when the pond stage exceeds the rectangular weir elevation during larger storm events. The required retention volume remains below the weir elevation and is recovered entirely through infiltration, consistent with the dry retention criteria in Section 5.1 of Volume II of the Applicant's Handbook.

6. **Sheet -1103 shows that contact water (from orange area) and water from chemical secondary containment (purple area) will be directed through an oil/water separator prior to discharge to retention pond B-01. Please specify the oil/water separator, create a standard operating procedure (SOP), such as inspection and sampling before release of effluent to the stormwater pond. The release of effluent shall not comprise the pond volume such that reduce treatment volume and storage volume prior to any storm events. Please add the specification and SOP to the Operation and Maintenance Plan. Refer to rule 62-330.301(1), F.A.C.**

The following note has been added to sheet DS-1103 to address this comment:

“5. Oil content metering to be provided on the discharge of each Oil/Water Separator (OWS). The meter shall continuously monitor effluent oil concentration and provide an alarm signal to the Plant DCS when oil concentration approaches 15 ppm. Upon alarm, Plant Operators shall isolate the OWS discharge by closing the discharge isolation valve and evaluate the system for maintenance, cleaning, or other corrective actions necessary to reduce oil concentration to acceptable operating levels prior to restoring discharge.”

Revisions to the Operation and Maintenance Plan have also been added to reflect the installation and maintenance of the OWS.

7. **Table in Sheet -1111 indicates 5 x 5 riser, please clarify if it is the weir width. Section view shows 4’. Please provide a plan view of the discharge structure and connections to the existing 36” and 48’ pipes. Also, please call out the spillways and discharge structures in Sheet -1102 and -1110. Refer to Part 2 of ERP form Section E.**

There is a 4’ rectangular weir outlet within the 5’x5’ concrete riser structure. Pond connection details have been added to Sheet DS-1111. Additional notes on pond connections have also been added to the plan view on Sheet DS-1102.

8. **Channel CH-1 is proposed to have bottom width 6’, top 46’, and depth 5’ with 4:1 side slope, but the design does not show such geometry. Please update the sheets -1102 and -1110. Refer to Part 2 of ERP form Section E.**

CH-1 has a varying depth ranging from 3’ to 5’ which has been modeled in StormCAD. The Convenance Swale Design Summary Table on Sheet DS-1111 has been updated to reflect an average channel depth of 4’. Grading has also been updated accordingly.

9. **In Section A of the ERP form, please provide information of applicant, O and M entity, engineering consultant, and environmental consultant.**

Although this information is not needed under the PPSA, a completed Section A of the ERP form is attached providing the applicant, O&M entity, engineering consultant and environmental consultant.

10. **As discussed and agreed upon, please complete the form 62-330.301(26) Certification of Financial Capability for Perpetual Operation and Maintenance Entities. Refer to rule 62-330.060(1), F.A.C.**

Please find attached the completed form.

JEA St Johns River Power Park Unit 3 Maintenance Plan

JEA ST JOHNS RIVER POWER PARK UNIT 3 MAINTENANCE PLAN

Prepared By: John Barranco

Project No: 424250.0600

FDEP Certification No: TBD

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References

1. St. Johns River Water Management District (SJRWMD). *Environmental Resource Permit Applicant's Handbook, Volume I: General and Environmental*. June 28, 2024.

August 13, 2026

INTRODUCTION AND BACKGROUND

JEA is proposing to construct a new combined cycle natural gas facility providing approximately 706 megawatts (MW) of electric generation. The Site currently occupies approximately 194 acres within the larger SJRPP property, which encompasses approximately 1,600 acres and was previously developed as a coal-fired power generation facility. The Site is located in Duval County, Florida.

The Site includes areas designated for the construction of a combustion turbine, steam turbine, warehouse/maintenance building, administration building, storage tanks, and additional supporting facilities/equipment. Topography across the Site consists of gently rolling terrain, with proposed elevations generally ranging from approximately 6 to 19 feet NAVD88. Slopes across the Site are relatively mild, typically ranging between 1 and 5 percent. The Site will be graded to provide positive drainage, directing stormwater runoff toward a system of catch basins, conveyance channels, and retention facilities. Underlying soils at the Site are predominantly classified within Hydrologic Soil Groups B/D and C, indicating moderate to low infiltration potential with higher runoff characteristics. Refer to Figure 1-1 below for the proposed site location.

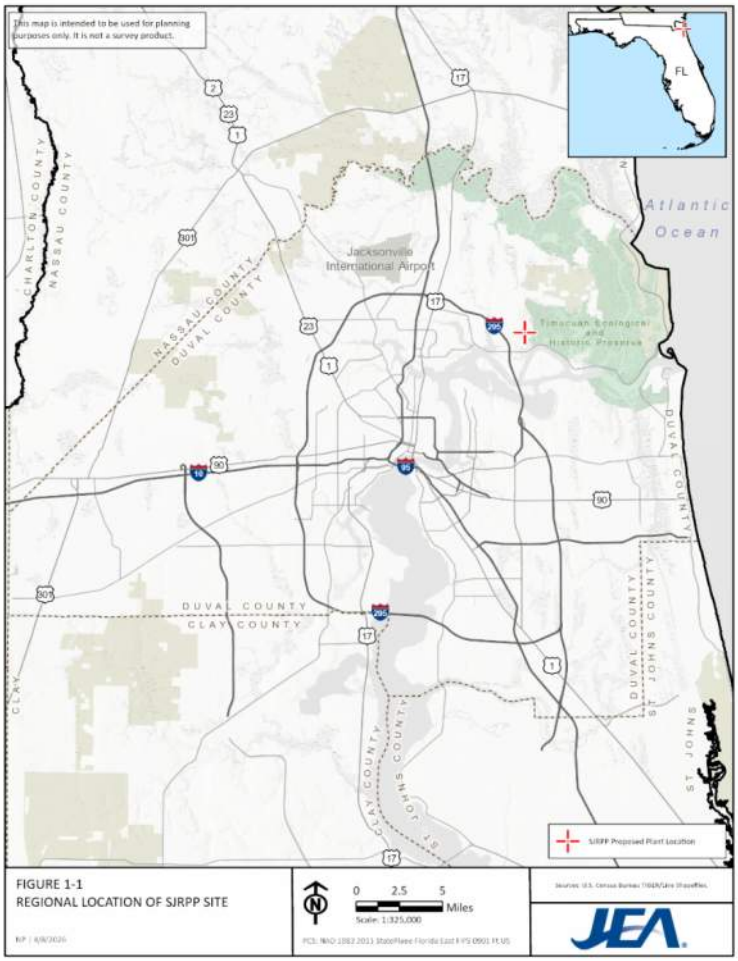


Figure 1-1 JEA SJRPP Project Location Map

RESPONSIBLE PARTIES

- Name: Andrew Sears
- Organization: JEA
- Address: 21 N Pearl St, Jacksonville, FL 32202
- Phone number: (904) 635-0223
- Email address: searar@jea.com
- List of after-hours telephone numbers for key maintenance personnel names and job titles in case of emergencies: JEA Incident Response (904) 620-9921

JEA will be responsible for the inspection, operation, and maintenance of the stormwater management system. Maintenance activities will be conducted at the frequencies described in this document, or more frequently as necessary based on observed site conditions, to ensure that the system continues to operate in accordance with the permitted design.

Maintenance records will be retained and made available to the regulatory agency upon request. Adequate funding and resources will be provided to support long-term operation and maintenance.

This operation and maintenance cost estimate is a planning level estimate prepared in accordance with the ERP Applicant's Handbook requirements and reflects anticipated annual and long-term maintenance needs for the stormwater management system.

STORMWATER FACILITIES/COMPONENTS

The stormwater management system for the proposed facility has been designed in accordance with all applicable St. Johns River Water Management District (SJRWMD), and FDEP Environmental Resource Permit (ERP) requirements. Onsite runoff will be managed through site grading and a network of channels and catch basin inlets that convey flows to two proposed dry retention ponds. These ponds will provide water quality treatment, nutrient reduction, and discharge attenuation while maintaining the existing ultimate discharge point to the offsite wet pond located east of the project boundary.

The offsite wet pond is the currently certified outfall and ultimately discharges to Browns Creek. Additional details regarding this outfall and associated permitting limits are provided in the JEA St. Johns River Power Park Decommissioning and Demolition Plans prepared by Adkinson Engineering, dated November 30, 2017.

The proposed dry retention basins provide adequate treatment volume to meet required reductions for total nitrogen, total phosphorus, and total suspended solids. The basins demonstrate a recovery time of less than 72 hours, incorporating a conservative safety factor of two (36 hours), and are sized to attenuate runoff from the 25-year, 24-hour storm and the mean annual 24-hour storm events. Post development flows routed to the offsite wet pond will be discharged at rates lower than existing conditions.

The drainage plan for the JEA SJRPP site is divided into three basins:

- B-01: Area draining to the south dry retention pond.
- B-02: Area draining to the north dry retention pond.

- B-03: Undisturbed area within the site certification boundary where no drainage improvements are proposed; runoff is primarily captured between two existing water quality treatment areas and discharged to an offsite conveyance channel.

A detailed overview of the drainage system and supporting calculations is provided in *424014-DS-1102 Proposed Stormwater Management Plan – Permanent Redevelopment Area* and *424014.1101.1101 - JEA SJRPP Stormwater Calculation Report*.

The permanent post-development stormwater BMPs proposed at the Project Site are summarized below:

Dry Retention Ponds
Dry retention ponds are proposed to provide stormwater quantity and quality treatment for post-development runoff generated at the Project Site. These ponds are designed to temporarily store stormwater runoff and promote infiltration into the underlying soils, thereby reducing post-development discharge rates and volumes. The ponds provide water quality treatment through retention and filtration, allowing suspended solids and associated pollutants to settle before infiltration or controlled release.

Conveyance Channels
Conveyance channels are proposed to safely route stormwater runoff between on-site drainage features and the dry retention ponds. The channels are designed to convey design storm flows without erosion or overtopping and are graded to maintain stable velocities.

Catch Basin Network
A network of catch basins and underground storm piping is proposed to collect and convey stormwater runoff from developed areas of the Site, including access roads and disturbed ground surfaces. This system minimizes surface ponding and improves drainage efficiency.

Seeding/ Slope Stabilization
Slope stabilization is proposed throughout the Site to prevent erosion and maintain long-term slope integrity. These measures may include grading to stable slopes, vegetative stabilization, and erosion-resistant materials where necessary.

Rock Aprons
Rock aprons are proposed throughout the Site and will consist of loose, durable stone placed at the inlet and/or outlet of culverts, pipes, or channels. Their primary function will be to dissipate the energy of flowing water, reduce erosion and scouring, and stabilize the surrounding soil.

The temporary erosion and sediment control BMPs proposed at the Project Site are summarized below:

Silt Fence
Silt fence will be installed along the perimeter of the Site to act as a temporary sediment barrier. The fabric ponds sediment-laden stormwater runoff, causing sediment to be retained by the settling processes.

Stockpiles
Sediment barriers will be installed on the downgradient perimeter of any stockpiled soil or land debris. Silt fence will be used as the perimeter control surrounding stockpiles.

Stabilized Construction Entrance
Temporary stabilized construction entrances will be installed at locations where the Project is accessed and prior to any earth moving activities such as discing and rolling. The stone reduces sediment transfer onto public roads. Additional stone may be needed as construction progresses.

Catch Basin Inlet Protection
Catch basin inlet protection will be installed on storm drain inlets during construction to prevent sediment-laden runoff from entering the storm drainage system. These measures will temporarily filter runoff and allow sediments to settle prior to discharge into downstream conveyance systems. Inlet protection will remain in place until contributing drainage areas are permanently stabilized, and the potential for sediment transport has been minimized.

Compost Filter Sock
Compost filter sock check dams will be installed and placed in all on-Site drainage channels during construction. The check dams will dissipate stormwater velocity and filter out sediment as the water flows downstream.

Oil/Water Separator
An Oil/Water Separator (OSW) will be installed during construction between contact water drains and the dry retention ponds to filter oily water prior to discharging into ponds.

DESCRIPTION OF MAINTENANCE ACTIVITIES

The following maintenance activities are described at a high level for the operational phase of the project. Prior to conversion of the site to the operation phase, a project-specific operational Stormwater Pollution Prevention Plan (SWPPP) shall be developed by the EPC contractor. All inspection and maintenance activities will be conducted in accordance with the approved operational SWPPP to ensure compliance with applicable regulatory requirements.

Permanent BMP Controls:

Dry Retention Ponds
Maintenance Requirements: Rock aprons will be inspected daily to prevent washout, scouring, and embankment blow-outs. Inspections will focus on embankment stability, looking for riling, settling, or slumping, vegetative stabilization, positive flow to the retention basin, and that discharge structures are not clogged. Routine maintenance will include regrading, stabilizing side slopes, sediment removal, and clearing any trash or debris from discharge structures.

Conveyance Channels
Maintenance Requirements: Conveyance channels will be inspected routinely and after storm events to verify proper function. Accumulated sediment should be removed as soon as practicable, and any erosion of the swale should be repaired immediately. If the vegetation is damaged or sparse, the area should be seeded, and erosion control blankets be added to prevent further erosion.

Rock Aprons
Maintenance Requirements: Rock aprons will be inspected routinely and after storm events to verify their effectiveness and structural stability. Inspections will focus on identifying displaced or missing stones, signs of erosion around the apron, and sediment buildup that may impede flow. Routine maintenance will include repositioning or replacing stones as needed, removing accumulated sediment or debris, and verifying the apron continues to provide adequate energy dissipation and erosion control.

Catch Basin Network
Maintenance Requirements: Catch basins and associated storm piping will be inspected routinely and after storm events to ensure proper operation and unobstructed flow. Inspections will focus on identifying sediment accumulation, debris, structural damage, and evidence of clogging at inlets, grates, or within the basin sump. Sediment, trash, and debris will be removed as necessary to maintain hydraulic capacity and prevent upstream ponding. Damaged grates, frames, or basin structures will be repaired or replaced promptly. Downstream piping will be monitored for blockages or excessive sediment buildup and maintained as needed to ensure proper conveyance to receiving stormwater facilities.

Seeding/ Slope Stabilization
Maintenance Requirements: Prior to full construction activities, the Site will be seeded and mulched to allow for vegetation growth and stabilization. The optimal erosion control practice is to maintain existing vegetation or when the lands are disturbed, establish new vegetation as soon as possible. Vegetation can serve two (2) purposes: capture sediment and minimize erosion. Implementation of stabilization activities must begin within seven (7) calendar days after construction activities have temporarily or permanently ceased. Seeded areas and plantings will be inspected routinely and after rain events for bare spots, washouts, and healthy growth. Reseeding will occur as necessary. Grassed areas shall be mowed periodically, or about once per month during operation.

Oil/Water Separator
Maintenance Requirements: Oil content metering to be provided on the discharge of each Oil/Water Separator (OWS). The meter shall continuously monitor effluent oil concentration and provide an alarm signal to the Plant DCS when oil concentration approaches 15 ppm. Upon alarm, Plant Operators shall isolate the OWS discharge by closing the discharge isolation valve and evaluate the system for maintenance, cleaning, or other corrective actions necessary to reduce oil concentration to acceptable operating levels prior to restoring discharge.

Temporary ESC Controls:

Stockpiles
Maintenance Requirements: Stockpiles on the Project will be inspected routinely and after storm events to verify they are stable and not contributing to erosion. All sediment controls surrounding the stockpile will also be inspected regularly and repaired within 24 hours of any identified issues or deficiencies.

Stabilized Construction Entrance
Maintenance Requirements: Stabilized construction entrances will be inspected routinely and after storm events, for integrity and buildup of sediment. Maintenance will consist of top dressing the entrance with clean aggregate as needed, replacement of rock, sediment removal, and removal of sediment on adjacent public roads. Sediment removal from adjacent public roads will be completed as soon as possible, but at the end of each workday at the latest.

Catch Basin Inlet Protection
Maintenance Requirements: Catch basin inlet protection devices will be inspected routinely and after storm events to ensure they are properly installed and functioning as intended. Inspections will focus on identifying sediment accumulation, clogging, displacement, or damage to filter fabric, gravel barriers, or prefabricated inserts. Accumulated sediment will be removed when it reaches approximately one-half the height of the protection device or when flow is impeded. Damaged or nonfunctional inlet protection will be repaired or replaced promptly to maintain effective sediment control. Inlet protection will be removed once contributing areas are permanently stabilized, and the risk of sediment transport has been minimized.

Silt Fence
Maintenance Requirements: Silt fences will be inspected routinely and after storm events to determine whether maintenance is necessary due to heavy sedimentation or damage resulting from construction equipment. Inspections shall verify material is trenched and staked properly, fabric is securely anchored to the post, fabric is not clogged with sediment, stakes are not on the upstream side, and that fabric is properly trenched/sliced and backfilled. Silt fence will also be inspected for tears in the fabric or wind damage, and to verify water is not undercutting or flowing around the silt fence. Sediment deposits should be removed when they reach one-third (1/3) of the aboveground height of the silt fence. Silt fence shall be replaced or repaired where damaged or torn. Where silt fence occurs outside of the Project security fence, Project personnel shall only access the area between the security fence and silt fence to ensure work remains within the LOD.

Compost Filter Sock
Maintenance Requirements: Compost filter sock will be inspected routinely and after storm events to verify that the material is staked properly, that water is not flowing under, around or over the compost filter sock, that traffic has not “flattened” the structure. Compost filter sock shall also be inspected upon initial installation to verify the correct specifications have been met (the correct compost media has been used, mesh netting is photo- or biodegradable knitted fabric with 1/8-inch to 3/8-inch openings, etc.). Maintenance will consist of repair/replacement of filter sock (if needed) and removal of visible sediment accumulation.

MAINTENANCE SCHEDULES

Table 1 shown below outlines the frequency for maintenance activities.

Table 1: Frequencies for Maintenance Activities

Activity	Frequency	Additional Note
Remove Sediment from Dry Retention Ponds	Need to be evaluated annually	Maintain storage capacity and function.
Remove Trash/Debris from Pond Discharge Structures	Need to be evaluated annually	Prevent clogging and maintain positive flow.
Remove Sediment from Conveyance Channels	Need to be evaluated annually	Prevent loss of conveyance capacity.
Repair Erosion in Conveyance Channels	Need to be evaluated annually	Stabilize swale to prevent further degradation.
Reseed/Vegetate Conveyance Channels	Need to be evaluated annually	Apply when vegetation is sparse or damaged.
Install Erosion Control Blankets in Channels	Frequency to be specified by SWPPP	Use where vegetation alone is insufficient.
Reposition/Replace Rock Apron Stone	Need to be evaluated annually	
Remove Sediment and Debris from Rock Aprons	Need to be evaluated annually	
Repair Erosion Around Rock Aprons	Need to be evaluated annually	
Remove Sediment, Trash, and Debris from Catch Basins	Need to be evaluated annually	
Repair/Replace Catch Basin Structures (grates, frames)	Need to be evaluated annually	
Maintain/Repair Storm Piping (clear blockages, sediment)	Need to be evaluated annually	
Reseed Disturbed or Bare Areas	Frequency to be specified by SWPPP	Required when bare spots or washouts occur.
Stabilize Slopes (mulching, vegetation, etc.)	Within 7 days of disturbance cessation	Required for temporary or permanent stabilization during construction.
Mow Vegetated Areas (ponds, slopes, and swales)	Monthly/ As needed	
Repair Sediment Controls Around Stockpiles	Frequency to be specified by SWPPP	
Top Dress Stabilized Construction Entrance with Aggregate	Frequency to be specified by SWPPP	
Replace Rock in Construction Entrance	Frequency to be specified by SWPPP	
Remove Sediment from Construction Entrance	Frequency to be specified by SWPPP	
Activity	**Frequency**	**Additional Note**

Remove Sediment from Adjacent Public Roads	Frequency to be specified by SWPPP	
Clean Catch Basin Inlet Protection	Frequency to be specified by SWPPP	When sediment reaches ~50% of device height or impedes flow.
Repair/Replace Inlet Protection Devices	Frequency to be specified by SWPPP	
Remove Inlet Protection	Once site stabilized	After sediment transport risk is minimized
Remove Sediment from Silt Fence	Frequency to be specified by SWPPP	When sediment reaches ~1/3 of fence height.
Repair/Replace Damaged Silt Fence	Frequency to be specified by SWPPP	Includes any tears, undermining, or installation failure.
Repair/Replace Compost Filter Sock	Frequency to be specified by SWPPP	Address damage, tears, or deformation.
Remove Sediment from Compost Filter Sock	Frequency to be specified by SWPPP	
Evaluate the OWS for Maintenance, Cleaning, or Other Corrective Actions	Upon alarm of OWS monitor	Reduce oil concentration to acceptable operating levels prior to restoring discharge.

INSPECTION REQUIREMENTS

The operation and maintenance entity shall conduct periodic inspections to ensure the stormwater management system continues to function as designed and permitted. If deficiencies are identified, they shall be corrected in a timely manner to restore the system to permitted conditions.

At a minimum, inspections shall verify the following:

- Erosion is controlled and soils are stabilized.
- The system is free of debris, trash, oils, grease, and other refuse.
- Oil and grease control devices are functioning properly.
- System components are not clogged or obstructed by sediment or vegetation.
- Sediment and debris are removed to maintain design capacity and dimensions.
- Water quality treatment components are functioning properly and maintained per the O&M plan.

All inspections shall be documented using Form 62-330.311(3), “Inspection Checklists,” included in Appendix A. Unless otherwise specified in the permit, the operation and maintenance entity must maintain a record of each inspection, including the date of inspection, the name and contact information of the inspector, whether the system was functioning as designed and permitted, and make such record available upon request of the Agency (1).

FREQUENCY OF INSPECTIONS

This section identifies the inspection frequencies for the stormwater management system components. Inspection frequencies have been established in accordance with the Environmental Resource Permit (ERP) Applicant's Handbook Volume I (Reference 1).

Table 2 shown below summarizes the accepted inspection frequencies for the proposed systems as provided in the ERP Applicant's Handbook Volume I.

Table 2: Inspection Frequencies for common BMPs

TYPE OF SYSTEM	INSPECTION FREQUENCY
Dry Retention basins	Once every 3 years
Underdrain System	Once every 2 Years
All other	Once every Year

EASEMENTS OR COVENANTS FOR MAINTENANCE

Not applicable.

FUTURE CAPITAL AND MAINTENANCE EXPENDITURES

This cost estimate requirement applies only to maintenance during the operational phase of the facility on an annual basis. The operation and maintenance cost estimate has been developed in accordance with Section 12.3.5 of the Applicant's Handbook Volume I. The estimate includes routine maintenance activities expressed in current dollars.

Costs were approximated using the Florida Department of Transportation (FDOT) 2025 Maintenance Contract Cost Summary by Pay Item Number (OOM_20260403), supplemented with project-specific assumptions to reflect the characteristics of the stormwater management system. A breakdown of costs for each maintenance category is provided below:

Total Estimated Annual Maintenance Cost by Category:

Sediment Removal and Debris Management: $3,328.89

Mowing and Vegetation Management: $31,078.25

Storm Sewer and Structure Maintenance: $52,516.46

Ditch and Conveyance System Maintenance: $27,600.00

Erosion Repair and Stabilization: $4,689.67

Pretreatment Device Maintenance: $10,000.00

Administrative and Compliance Activities: $5,000.00

Total: $134,213.26

The total estimated annual operation and maintenance cost for the stormwater management system is $134,213.26. This value represents a planning-level estimate based on current dollars and reflects routine maintenance associated with the system.

APPENDIX A: Form 62-330.311(3) - Inspection Checklists

Stormwater Facility
Inspection Checklist

Instructions

Prior to the inspection, the Inspector should review the permit for the facility and the design or as-built drawing for the facility.

This inspection checklist is required for the documentation of the annual inspection of all permitted stormwater systems. Complete all parts of the general data section for the project site. Attach any additional required documentation, if necessary. In the "All Technologies" category, mark all items as "satisfactory" or "unsatisfactory." For all other categories, either select "N/A" and minimize the category or mark all inspection items as "satisfactory" or "unsatisfactory." If the system described does not contain a component that is listed for inspection mark that item as "N/A"

For any item marked unsatisfactory, provide a comment below the BMP technology describing maintenance action needed to bring the system back into compliance. Within 30 days of any failure of a stormwater management system or if any components of the constructed system are found to be not in substantial conformance with the permitted system, a report shall be submitted by the permittee or their authorized representative to the Agency using Form 62-330.311(1), "Operation and Maintenance Inspection Certification," ({effective date}), as per 62-330.331(2) F.A.C., describing the remedial actions taken to resolve the failure or deviation.

Inspection reports will be submitted by the permittee or their authorized representative to the applicable permitting agency. Each inspection report must be signed by a certified inspector or a registered professional to certify its authenticity.

Inspection Checklist

General Data

Inspection Date Project Name
Location Permit Number

Time since last storm event ☐<24 hours ☐24-48 hours ☐48-72 hours ☐>72 hours
Permit Holder Permit Effective Date
Inspector Name
Inspector Contact Information

Multiple BMP types in the system No ☐Yes ☐ List All: _____
_____
_____

Permit drawings have been reviewed No ☐Yes☐
Additional Photos Attached ☐ N/A ☐
Compliance Activity Record Attached ☐ N/A ☐

All (or other unlisted) Technologies

Items for inspection	Satisfactory	Unsatisfactory
General		
BMPs and treatment facilities are in good repair and operational	☐	☐
BMPs and treatment facilities are free from debris buildup that may impair function	☐	☐
Berms, embankments, curbing, or other methods used to impound, divert, and direct discharges are adequate and in good condition	☐	☐
The discharge (if any) is free of floating materials, visible oil sheen, discoloration, turbidity, odor, foam, or any other signs of contamination	☐	☐
Vegetation		
Mowing done when needed	☐	☐
Grass clippings removed	☐	☐
No evidence of erosion	☐	☐
Inlets		
Good condition, no need for repair	☐	☐
No evidence of erosion*	☐	☐
Outlets/overflow spillway		
Good condition, no need for repair	☐	☐
No evidence of erosion*	☐	☐

Comments: _____

Traditional BMPS

Swales N/A ☐

Items for inspection	Satisfactory	Unsatisfactory
Debris Cleanout		
Swales and contributing areas clear of debris*	☐	☐
Vegetation		
No evidence of erosion*	☐	☐
No weeds or invasive plants present	☐	☐
No evidence of nutrient deficiency	☐	☐
No evidence of disease	☐	☐
Grasses/sod are not in need of replanting/resodding	☐	☐
No signs of drought stress	☐	☐
No signs of plant overgrowth	☐	☐
Recovery		
Swale recovers between storms within permitted timeframe	☐	☐
Swale clean of sediments		
Good condition, no need for repair	☐	☐
No areas of sediment buildup*	☐	☐
No evidence of erosion*	☐	☐
Inlet Structure / Pretreatment:		
Good condition, no need for repair	☐	☐
No trash/debris/sediment in or around inlet structures*	☐	☐
No evidence that runoff is short-circuiting the inlet	☐	☐

Emergency Overflow / Outlet Structure		
Good condition, no need for repair	☐	☐
No evidence of accumulation of trash, debris, or sediment in or around outlet structure(s)*	☐	☐
No evidence of erosion, or flooding around structures*	☐	☐
Swale Blocks N/A ☐		
If swale blocks or other structures are present, there is no evidence of erosion at downstream toe of structure*	☐	☐

Comments: _____

Wet Pond N/A ☐

Type of wet pond _____

Items for inspection	Satisfactory	Unsatisfactory
Vegetation		
No signs of damage from animal activity	☐	☐
No signs of stress or disease	☐	☐
No emergent invasive plant life	☐	☐
No areas need replanting	☐	☐
Dead plant material is removed, if necessary	☐	☐
Upland banks are maintained		
Structural		
Embankment condition	☐	☐
Side slopes are stable	☐	☐
Fences/access repairs		
Fence(s) condition	☐	☐
Lock(s) and gate(s) function are adequate	☐	☐
Inlets		
Inlet(s) condition	☐	☐
Runoff is not short-circuiting the inlet	☐	☐
No evidence of trash/debris/sediment in or around inlet *	☐	☐
No evidence of erosion, gullies, rills, or flooding around inlet *	☐	☐
Outlets/overflow spillway/ drain gate		
Outlet(s) condition	☐	☐
No evidence of trash/debris/sediment in or around outlet *	☐	☐
No evidence of erosion, gullies, rills, or flooding around outlet *	☐	☐
Weir System: drawdown and overflow weir		
Weir system condition	☐	☐
No evidence of clogging *	☐	☐
Clear of debris*	☐	☐

Comments: _____

Dry Pond N/A ☐

Type of dry pond _____

Items for inspection	Satisfactory	Unsatisfactory
Debris Cleanout		
Basin bottom clear of debris*	☐	☐
Emergency spillway clear of debris*	☐	☐
Recovery		
Pond recovers between storms	☐	☐
Vegetation		
No signs of damage from animal activity	☐	☐
No signs of stress or disease	☐	☐
No emergent invasive plant life	☐	☐
Does not need replanting	☐	☐
Not overgrown	☐	☐
Sediment cleanout of pond		
No evidence of sedimentation in pond	☐	☐
No evidence of erosion at downstream toe	☐	☐
Structural		
Embankment condition	☐	☐
Side slopes are stable	☐	☐
Fences/access repairs		
Fence(s) condition	☐	☐
Lock(s) and gate(s) function adequate	☐	☐
Underdrain/side bank Filters		
Cleanout caps present and in good condition	☐	☐
No evidence of clogging	☐	☐
No evidence of erosion over or adjacent to filter*	☐	☐
Inlets		
Inlet(s) condition	☐	☐
No evidence of erosion, gullies, rills, or flooding around inlet*	☐	☐
Outlets/overflow spillway		
Outlet(s) condition	☐	☐
No evidence of erosion, gullies, rills, or flooding around outlet*	☐	☐

Comments: _____

Exfiltration Trench N/A ☐

Items for inspection	Satisfactory	Unsatisfactory
Debris Cleanout		
Trench surface clear of debris*	☐	☐
Inlet areas clear of debris*	☐	☐
Inflow pipes clear of debris*	☐	☐
Overflow spillway clear of debris*	☐	☐
Sediment traps or forebays		
Sufficiently trapping sediment	☐	☐
Has additional storage capacity available until next maintenance action	☐	☐
Sediment buildup has been removed	☐	☐
Vegetation		

Water does not stand on vegetative surface	☐	☐
Good vegetative cover exists	☐	☐
Recovery		
Trench recovers between storms	☐	☐
Sediment cleanout of trench		
No evidence of sedimentation in trench*	☐	☐
Inlets		
Inlet intake(s) functioning adequately	☐	☐
Inlet(s) condition	☐	☐
No evidence of flooding around inlet	☐	☐
Outlets/overflow spillway		
Outlet(s) condition	☐	☐
No evidence of flooding around outlet	☐	☐
Structural		
Embankment condition	☐	☐
Side slopes are stable	☐	☐
Aggregate repairs		
Surface of aggregate clean	☐	☐
Top layer of stone does not need replacement	☐	☐
Trench does not need rehabilitation	☐	☐

Comments: _____

Pervious Pavers/Pavement N/A ☐

Items for inspection	Satisfactory	Unsatisfactory
Debris Cleanout		
Paving area clean of debris*	☐	☐
Site Area		
Drainage area contains stable soil that will not clog pavers	☐	☐
Vegetation on site healthy and glass clippings removed	☐	☐
Runoff is not short-circuiting the pavers	☐	☐
No evidence of erosion, gullies, or rills around site	☐	☐
Infiltration		
Infiltrometer Test meets requirements	☐	☐
Recovery		
Pervious paving recovers between storms	☐	☐
No evidence of clogging or standing water	☐	☐
Sediments		
Pavement area clean of sediments	☐	☐
Area vacuum swept on a periodic basis	☐	☐
Structural Integrity		
No evidence of surface deterioration	☐	☐
No evidence of rutting or spalling	☐	☐
No evidence of pavement settling	☐	☐
No evidence of missing aggregate between pavers	☐	☐

Outlets		
Outlet(s) condition	☐	☐
No evidence of clogging	☐	☐
Clean out caps present if included	☐	☐
Vegetation cells N/A ☐		
Vegetation healthy	☐	☐
Vegetation not overgrown	☐	☐
No grass clippings present *	☐	☐

Comments: _____

Stormwater Vaults or Tanks N/A ☐

Items for inspection	Satisfactory	Unsatisfactory
Debris Cleanout		
Paving area clean of debris*	☐	☐
Recovery		
Recovers between storms	☐	☐
No evidence of standing water	☐	☐
No nuisance flooding evident	☐	☐
Sediments		
Clear of sediments*	☐	☐
Structural Integrity		
No evidence of surface deterioration	☐	☐
No evidence of cracking	☐	☐
No evidence of rutting or spalling	☐	☐
Safety		
Ladders functioning and in good repair	☐	☐
Adequate venting for access	☐	☐
Contains primary and secondary access	☐	☐
Inlets		
Inlet(s) condition	☐	☐
No evidence of scouring	☐	☐
Outlets		
Outlet(s) condition	☐	☐
No evidence of erosion *	☐	☐
No evidence of clogging	☐	☐

Comments: _____

Constructed Marsh System N/A ☐

Items for inspection	Satisfactory	Unsatisfactory
Debris Cleanout		
Marsh System clear of debris*	☐	☐
Vegetation		
Appears healthy	☐	☐

No emergent invasive plant life	☐	☐
No signs of damage from animal activity	☐	☐
No signs of stress or disease	☐	☐
No areas need replanting	☐	☐
Dead plant material removed, as necessary	☐	☐
Upland banks are maintained	☐	☐
Flow		
No signs of channeling or erosion *	☐	☐
Maintains minimum permitted water elevation	☐	☐
No signs of drought or short-circuiting	☐	☐
Inlets		
Inlet(s) condition	☐	☐
Runoff is not short-circuiting the inlet	☐	☐
No evidence of trash/debris/sediment in or around inlet *	☐	☐
No evidence of erosion, gullies, rills, or flooding around inlet *	☐	☐
Vegetation around inlet in good condition	☐	☐
Outlets/emergency outflow N/A ☐		
Outlet(s) condition	☐	☐
No evidence of trash/debris/sediment in or around outlet *	☐	☐
No evidence of erosion, gullies, rills, or flooding around outlet *	☐	☐
Weir System or Level Spreader N/A ☐		
Weir system condition	☐	☐
No evidence of clogging	☐	☐
Clear of debris*	☐	☐

Comments: _____

Vegetative Natural Buffers N/A ☐

Items for inspection	Satisfactory	Unsatisfactory
Debris Cleanout		
Buffer clear of debris*	☐	☐
Vegetation		
Vegetation healthy	☐	☐
No emergent invasive plant life	☐	☐
No signs of damage from animal activity	☐	☐
No signs of stress or disease	☐	☐
No areas need replanting	☐	☐
Dead plant material removed, as necessary	☐	☐
Upland banks are maintained	☐	☐
Flow		
No signs of channeling or erosion *	☐	☐
Maintain minimum permitted water elevation	☐	☐
No signs of drought or prolonged ponding	☐	☐
Inlets		
Inlet(s) condition	☐	☐
Runoff is not short Circuiting the inlet	☐	☐

No evidence of trash/debris/sediment in or around inlet *	☐	☐
No evidence of erosion, gullies, rills, or flooding around inlet *	☐	☐
Vegetation around inlet in good condition	☐	☐
Outlets/emergency outflow N/A ☐		
Outlet(s) condition	☐	☐
No evidence of trash/debris/sediment in or around outlet *	☐	☐
No evidence of erosion, gullies, rills, or flooding around outlet *	☐	☐

Comments: _____

Green Roof N/A ☐

Items for inspection	Satisfactory	Unsatisfactory
Debris Cleanout		
Vegetated area clear of debris*	☐	☐
Dewatering		
Recovers between storms	☐	☐
No evidence of ponding or inundation	☐	☐
Structural		
Constructed elements condition	☐	☐
No evidence of roof leaks	☐	☐
No evidence of exposed or actively eroding areas	☐	☐
Dispersal system/sprinkler N/A ☐		
Dispersal system/sprinkler functioning as intended	☐	☐
Piping in good repair	☐	☐
Pumps functioning as intended	☐	☐
Cistern tank functioning as intended	☐	☐
Overflow functioning as intended	☐	☐
Vegetation		
Vegetation healthy	☐	☐
No emergent invasive plant life	☐	☐
No signs of nutrient deficiency/disease	☐	☐
No areas need replanting	☐	☐
Inlets/Catchments		
Inlet(s) condition	☐	☐
No evidence of erosion*	☐	☐
No evidence of clogging	☐	☐
Outlets		
Outlet(s) condition	☐	☐
No evidence of trash/debris/sediment in or around outlet*	☐	☐
No evidence of erosion or flooding *	☐	☐
No evidence of bypassing	☐	☐

Comments: _____

Cistern N/A ☐

Items for inspection	Satisfactory	Unsatisfactory
Site area		

No evidence of clogging flow paths or pipes *	☐	☐
Structural		
Constructed elements condition	☐	☐
Condition of foundation if above ground	☐	☐
No evidence of leaks	☐	☐
No evidence of algal growth in cistern	☐	☐
No evidence of prolonged storage	☐	☐
Vegetation		
Trees appear healthy	☐	☐
Trees do not need replacing or pruning	☐	☐
No emergent invasive plant life	☐	☐
Inlets		
Inlet(s) condition	☐	☐
Runoff is not bypassing the inlet(s)	☐	☐
No evidence of trash/debris/sediment in or around inlet *	☐	☐
No evidence of erosion, gullies, rills, or flooding around inlet *	☐	☐
Screen and/or trap is secured and functioning properly	☐	☐
Screen and/or trap is clear of debris build up *	☐	☐
First flush collector (if present) clear of debris and properly functioning	☐	☐
Outlets/emergency overflow		
Outlet(s) condition	☐	☐
No evidence of trash/debris/sediment in or around outlet*	☐	☐
No evidence of erosion or flooding *	☐	☐
Pump N/A ☐		
Float switch functional	☐	☐
Pump functional	☐	☐
Healthy vegetation, if used for irrigation	☐	☐

Comments: _____

Tree Box or Tree Well N/A ☐

Items for inspection	Satisfactory	Unsatisfactory
Site area		
Area clear of excess debris*	☐	☐
No evidence of erosion*	☐	☐
Structural		
Constructed elements condition	☐	☐
Device dewaters between storms	☐	☐
No evidence of inundation	☐	☐
No evidence of sediment build up *	☐	☐
Vegetation		
Tree(s) appears healthy	☐	☐
Tree(s) do not need replacing or pruning	☐	☐
No emergent invasive plant life	☐	☐

Inlets		
Inlet(s) condition	☐	☐
Runoff is not bypassing the inlet	☐	☐
No evidence of trash/debris/sediment in or around inlet *	☐	☐
No evidence of erosion, gullies, rills, or flooding around inlet *	☐	☐
Outlets/emergency overflow		
Outlet(s) condition	☐	☐
No evidence of trash/debris/sediment in or around outlet*	☐	☐
No evidence of erosion or flooding *	☐	☐
Underdrain, if installed		
All cleanouts clear from clogging or blockages *	☐	☐
Cleanouts in good condition	☐	☐

Comments: _____

Bioswale or Raingarden N/A ☐

Type of LID(s) _____

Items for inspection	Satisfactory	Unsatisfactory
Site area		
Area clear of excess debris*	☐	☐
No evidence of erosion or sedimentation *	☐	☐
Dewatering		
Ponding dewaters between storms	☐	☐
No evidence of inundation	☐	☐
Sediment cleanout		
No evidence of sedimentation	☐	☐
Structural		
Constructed elements condition	☐	☐
Mulch depth at least 2 inches	☐	☐
No evidence of damage from wildlife	☐	☐
No evidence of erosion*	☐	☐
No sediment build-up*	☐	☐
Vegetation		
Vegetation healthy	☐	☐
No emergent invasive plant life	☐	☐
No areas need replanting	☐	☐
Not overgrown	☐	☐
Inlets		
Inlet(s) condition	☐	☐
Runoff is not short-circuiting the inlet area	☐	☐
No evidence of trash/debris/sediment in or around inlet area*	☐	☐
No evidence of erosion, gullies, rills, or flooding around inlet area*	☐	☐
Plant life around inlets condition	☐	☐
Outlets/overflow spillway		
Outlet(s) condition	☐	☐
No evidence of trash/debris/sediment in or around outlet*	☐	☐

No evidence of erosion or flooding *	☐	☐
Underdrain N/A ☐		
All cleanouts clear form clogging or blockages	☐	☐
Cleanouts in good condition	☐	☐

Comments: _____

Non-Traditional BMPS

Other Manufactured BMPs N/A ☐

Type of System _____

Items for inspection	Satisfactory	Unsatisfactory
Functioning based on permit and manufacturer specifications	☐	☐
No evidence of damage or clogging	☐	☐

Comments: _____

Monitoring Devices and Adaptive Controls N/A ☐

Type of Monitoring Device(s) _____

Items for inspection	Satisfactory	Unsatisfactory
Computer components		
Functioning as intended	☐	☐
Recording data at permitted intervals	☐	☐
No signs of rusting, corrosion, or other weather damage	☐	☐

Comments: _____

* That May Impair Function

Signature

Inspector Name:
Signature of Inspector:
Florida Registration Number:

Form 62-330.060(1) Section A

Section A:
General Information for All Activities

Part 1: Name, Application Type, Location, and Description of Activity

A. Name of project, including phase if applicable: JEA St. Johns River Power Park Unit 3

B. This is for (check all that apply):

- ☒ Construction and operation of **new** works, activities, and/ or a stormwater management system
- ☐ **Conceptual Approval** of proposed works, activities and/ or a stormwater management system
- ☐ Modification or alteration of **existing** works, activities, and/or a stormwater management system. Provide the existing DEP or WMD permit #, if known:

  Note: Minor modifications do not require completion of this form, and may instead be requested by letter in accordance with section 6.2 of Applicant's Handbook Volume I.
- ☐ **Maintenance or repair** of works, activities, and/ or a stormwater management system previously permitted by the DEP or WMD. Provide existing permit #, if known:
- ☐ Abandonment or removal of works, activities, and/ or a stormwater management system.

  Provide existing DEP or WMD permit #, if known:
- ☐ Operation of an **existing unpermitted** work, activity, and/or stormwater management system.
- ☐ Construction of additional phases of a permitted work, activity, or system.

  Provide the existing DEP or WMD permit #, if known: ☐
- ☐ A State 404 Program authorization:

  ☐ Exemption ☐ General Permit ☐ Individual Permit

  If requesting an Exemption or General Permit provide Rule #, if known:

☐ **By checking this box**, I hereby voluntarily waive, in accordance with Rule 62-330.090(8), F.A.C., the agency action deadlines in section 5.5.3 of Volume I in the event my project also requires a State 404 Program authorization (other than an exemption) under Chapter 62-331, F.A.C., and request that the agency actions for the ERP and State 404 Program authorizations be issued at the same time. (This is strongly recommended to ensure consistency, and to reduce the potential need for project modifications to resolve inconsistencies that may occur when the agency actions are issued at different times.) If this box is checked and the Agency(ies) determines that no State 404 Program authorization is required, the Agency will continue to abide by section 5.5.3 of Volume I.

C. **List the type of activities proposed. Check all that apply**, **and provide the supplemental information requested in each of the referenced application sections.** Please also reference Applicant's Handbook Volumes I and II for the type of information that may be needed.

☐ Activities associated with one single-family residence, duplex, triplex, or quadruplex that do not qualify for an exemption or a General Permit: **Provide the information requested in Section B. Do not complete Section C.**

☒ Activities within wetlands or surface waters, or within 25 feet of a wetland or surface water, (not including the activities associated with an individual single-family residence). Examples include dredging, filling, outfall structures, docks, piers, over-water structures, shoreline stabilization, mitigation, reclamation, and restoration/enhancement. **Provide the information requested in Section C.**

☐ Activities within navigable or flowing surface waters such as a multi-slip dock or marina, dry storage facility, dredging, bridge, breakwaters, reefs, or other offshore structures: **In addition to Section C, also provide the information requested in Section D.**

☐ Activities that are (or may be) located within, on, or over state-owned submerged lands (See Chapter 18-21, F.A.C. https://www.flrules.org/gateway/ChapterHome.asp?Chapter=18-21): **In addition to Section B or C, also provide the information requested in Section F.**

☒ Construction or alteration of a stormwater management system serving residential, commercial, transportation, industrial, agricultural, or other land uses, or a solid waste facility (excluding mines that are regulated by DEP). **Provide the information requested in Section E.**

☐ Creation or modification of a Mitigation Bank (refer to Chapter 62-342, F.A.C. https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62-342): **Provide the information requested in Section G.**

☐ Mines (as defined in Section 2.0 of Applicant's Handbook Volume I) that are regulated by the DEP: **Provide the information requested in Section H.**

☐ Other, describe: ____

Please contact the Agency to determine which additional sections of the application are needed. See Attachment 2 for Agency contacts.

D. Describe in general terms the proposed project, system, works, or other activities. For permit modifications, please briefly describe the changes requested to the permit:

Construction of a new electrical generating facility at the existing St. Johns River Power Park (SJRPP) property in Jacksonville, Florida. JEA proposes to construct a 706-megawatt (MW) (gross nominal) one-on-one (1x1) combined cycle electrical generating unit to be known as St. Johns River Power Park Unit 3 (SJRPP Unit 3). The Site will include areas designated for the construction of a combustion turbine, steam turbine, warehouse/maintenance building, administration building, storage tanks, and additional supporting facilities/equipment. The Project will be located on a 194-acre Site that is part of the larger approximately 1,600-acre parcel upon which JEA owned and operated St. Johns River Power Park Units 1 and 2 (SJRPP Units 1 and 2), 612 MW coal-fired steam electric generating units certified under the PPSA in 1982. Units 1 and 2 were retired in 2018 and subsequently demolished. No wetland impacts are proposed. Surface water impacts are limited to approximately 1.27 acres of man-made upland cut ditches/stormwater ponds.

E. Project/Activity Street/Road Address or other location (if applicable): 11201 New Berlin Road

City: Jacksonville County(ies): Duval Zip: 32226

Note: For utility, road, or ditch/canal activities, provide a starting and ending point using street names and nearest house numbers or provide length of project in miles along named streets or highways.

F. Project location map and Section, Township, and Range information (use additional sheets if needed):

Please attach a location map showing the location and boundaries of the proposed activity in relation to major intersections or other landmarks. The map should also contain a north arrow and a graphic scale; show Section(s), Township(s), and Range(s); and must be of sufficient detail to allow a person unfamiliar with the site to find it.

Section(s): 12, 13, 43 Township: 1 S Range: 27 E Land Grant name, if applicable:
Section(s): Township: Range:

1. Section(s): Township: Range:

G. Latitude (DMS) 30 º 25 ' 36.98" Longitude (DMS) 81 º 32 ' 59.78" (Taken from central location of the activity). Explain source for obtaining latitude and longitude (i.e. U.S.G.S. Quadrangle Map, GPS, online resource):

Latitude and Longitude obtained from a central point using GIS mapping based on USGS maps (NAD 1983 Stateplane Florida North FIPS 0903 Feet)

H. Tax Parcel Identification Number(s): 108705-0010

[Number may be obtained from property tax bill or from the county property appraiser's office; if on multiple parcels, provide multiple Tax Parcel Identification Numbers]

I. Directions to Site (from major roads; include distances and landmarks as applicable):

From Highway 295, heading North, exit at SR 105, then head north onto New Berlin Road for approximately 1 mile, and then turn right onto William Ostner Rd. which heads directly to the site.

J. Project area or phase area: 194 acres

K. Name of waterbody(ies) (if known) in which activities will occur or into which the system will discharge:

The Project Site currently discharges to an existing offsite wet detention pond that serves as the current permitted SCA outfall location and ultimately discharges to Browns Creek. This existing outfall will remain unchanged as part of the proposed development, and no modifications to the ultimate discharge location are proposed.

The following questions (M-O) are not applicable to activities related to an individual single-family residence, including a dock, pier, and/or seawall associated with that residence.

L. Is it part of a larger plan of development or sale? ☐ yes ■ no

M. Impervious or semi-impervious area excluding wetlands and other surface waters (if applicable):

126.1 acres or ____ square feet

N. Volume of water the system is capable of impounding (if applicable): N/A

Normal Pool: ____ acre-feet. Depth ____ ft.
Maximum Pool: ____ acre-feet. Depth ____ ft.

Part 2: Supplemental Information, and Permit History

A. Is this an application to modify an existing Environmental Resource Permit or to construct or implement part of a multi-phase project, such as a project with a Conceptual Approval permit? ☐ Yes ■ No (If you answered "yes", please provide permit numbers below*):*

Agency	Date	Permit/Application No.	Project Name

B. Indicate if there have been any **pre-application meeting(s)** with the DEP, WMD, or delegated local government, or other discussions, meetings, or coordination with other stakeholders or agencies about the proposed project, system or activity. If so, please provide the date(s), location(s) of the meeting, and the name(s) of Agency staff that attended the meeting(s):

Agency	Date	Location	Meeting Attendees
FDEP Siting Office	4/21/2026	Virtual	Nate Senn, Cindy Mulkey, Kelly Corbari, Rachel Earlywine, Robert Robertson
FDEP Air Division	4/27/2026	Virtual	Hastings Read, David Read, Elizabeth Rogers, Preston McLane, Josh Doane
FDEP Waste Management	04/29/2026	Virtual	Lauren Gottfreid, Tien-Shuenn Wu, Frank Wall
FDEP NED - Stormwater	5/11/2026	Virtual	

C. **Attach a depiction (plan and section views), which clearly shows the works or other activities proposed to be constructed.** Use multiple sheets, if necessary, a scale sufficient to show the location and type of works, and include a north arrow and a key to any symbols used. **Specific information to be included in the plans is based on the activities proposed and is further described in Sections B-H**. However, supplemental information may be required based on the specific circumstances or location of the proposed works or other activies.

See plans in Attachment C.

D. Processing Fee: **Please submit the application processing fee along with this application form and supplemental information.** Processing fees vary based on the size of the activity, the type of permit applied for, and the reviewing Agency. Please reference Appendix D of Applicant's Handbook Volume I to determine the appropriate fee.

N/A for PPSA.

Part 3: Applicant and Associated Parties Information

Instructions: Please complete the following sections. For corporations, list a person who is a registered agent or officer of the corporation who has the legal authority to bind the corporation.

A. Applicant (Entity Must Have Sufficient Real Property Interest)

☒ **This is a Contact Person for Additional Information**

Last Name: Sears First Name: Andrew Middle Initial:
Title: Sr. Environmental Scientist Company: JEA
Address: 21 W Church Street
City: Jacksonville State: FL Zip: 32202
Home Telephone: Work Telephone: 904-665-7719
Cell Phone: 510-258-2707 E-mail Address: searar@jea.com

Correspondence will be sent via email, unless you check here to receive it via US Mail: ☐

B. Land Owner(S) (If Different or in Addition to Applicant)

☐ **Check here if land owner is also a co-applicant**

Last Name: First Name: Middle Initial:
Title: Company:
Address:
City: State: Zip:
Home Telephone: Work Telephone:
Cell Phone: E-mail Address:

Correspondence will be sent via email, unless you check here to receive it via US Mail: ☐

C. Operation and Maintenance Entity(see Applicant's Handbook I, Section 12.3)

Last Name: First Name: Middle Initial:
Title: Company:
Address:
City: State: Zip:
Home Telephone: Work Telephone:
Cell Phone: E-mail Address:

Correspondence will be sent via email, unless you check here to receive it via US Mail: ☐

D. Co-Applicant (If Different or In Addition to Applicant and Owner)

Last Name: First Name: Middle Initial:
Title: Company:
Address:
City: State: Zip:
Home Telephone: Work Telephone:
Cell Phone: E-mail Address:

Correspondence will be sent via email, unless you check here to receive it via US Mail: ☐

E. Registered Professional Consultant

■ **This is a contact person for additional information**

Last Name: Barranco First Name: John Middle Initial:
Title: Engineering Manager Company: Black & Veatch
Address: 12740 Gran Bay Pkwy, Suite 250
City: Jacksonville State: FL Zip: 32258
Home Telephone: Work Telephone: 904-288-4257
Cell Phone: E-mail Address: barrancojc@bv.com

Correspondence will be sent via email, unless you check here to receive it via US Mail: ☐

Environmental Consultant
☒ **This is a contact person for additional information**

Last Name: Mier | First Name: Jena | Middle Initial: S
Title: Senior Environmental Project Manager | Company: Black & Veatch
Address: 12740 Gran Bay Pkwy, Suite 250
City: Jacksonville | State: FL | Zip: 32258
Home Telephone: | Work Telephone: 913-458-2509
Cell Phone: | E-mail Address: Mierjs@bv.com

Correspondence will be sent via email, unless you check here to receive it via US Mail: ☐

F. Agent Authorized to Secure Permit (If Different from Consultant)

Last Name: | First Name: | Middle Initial:
Title: | Company:
Address:
City: | State: | Zip:
Home Telephone: | Work Telephone:
Cell Phone: | E-mail Address:

Correspondence will be sent via email, unless you check here to receive it via US Mail: ☐

If necessary, please add additional pages for other contacts and property owners related to this project.

G. Real Property Interest

a. Permits are only issued to entities having sufficient real property interest as described in Section 4.2.3(d) of Applicant's Handbook Volume I**. Please attach evidence of the applicant's real property interest over the land upon which the activities subject to the application will be conducted, including mitigation areas (if applicable).** Refer to Sections 4.2.3(d)-(e) for sufficient real property interest documentation.

See attached in Attachment H.

b. For activities that require a recorded notice in accordance with rule 62-330.090(7), F.A.C., please provide either the complete legal description of the property or a copy of the pages of the document recorded in the public records that contains the complete legal description. If the land upon which the proposed activities are to occur is not owned by the applicant, the applicant must also provide copies of any right-of-way, leases, easements, or other legal agreement which authorizes the applicant to perform the activities on those lands.

See attached in Attachment H.

Part 4: Signatures and Authorization to Access Property

Instructions: For multiple applicants please provide a separate Part 4 for each applicant. For corporations, the application must be signed by a person authorized to bind the corporation. A person who has sufficient real property interest (see Section 4.2.3(d) of Applicant's Handbook Volume I) is required in (B) to authorize access to the property, except when the applicant has the power of eminent domain.

A. By signing this application form, I am applying for the permit and any proprietary authorizations identified above, according to the supporting data and other incidental information filed with this application. I am familiar with the information contained in this application and represent that such information is true, complete and accurate. I understand this is an application and not a permit, and that work prior to approval is a violation. I understand that this application and any permit issued or proprietary authorization issued pursuant thereto does not relieve me of any obligation for obtaining any other required federal, state, water management district, or local permit prior to commencement of construction. I agree to operate and maintain the permitted system unless the permitting agency authorizes transfer of the permit to a different responsible operation and maintenance entity. I understand that knowingly making any false statement or representation in this application is a violation of Section 373.430, F.S. and 18 U.S.C. Section 1001.

Typed/Printed Name of Applicant or Applicant's Authorized Agent	Signature of Applicant or Applicant's Authorized Agent	Date

(Corporate Title if applicable)

B. Certification of Sufficient Real Property Interest And Authorization For Staff To Access The Property:

I certify that:

☐ **I possess sufficient real property interest in or control, as defined in Section 4.2.3 (d) of Applicant's Handbook Volume I,** over the land upon which the activities described in this application are proposed and I have legal authority to grant permission to access those lands. I hereby grant permission, evidenced by my signature below, for staff of the Agency to access, inspect, and sample the lands and waters of the property as necessary for the review of the proposed works and other activities specified in this application, upon advance notice. I authorize these agents or personnel to enter the property as many times as may be necessary to make such review, inspection, and/ or sampling. Further, if a permit is granted, upon advance notice, I agree to provide entry to the project site for such agents or personnel with proper identification to determine compliance with permit conditions and permitted plans and specifications.

OR

☐ I represent an entity having **the power of eminent domain and condemnation authority**, and I/we shall make appropriate arrangements to enable staff of the Agency to legally access, inspect, and sample the property as described above.

Typed/Printed Name	Signature	Date

(Corporate Title if applicable)

C. Designation of Authorized Agent (If Applicable):

I hereby designate and authorize to act on my behalf, or on behalf of my corporation, as the agent in the processing of this application for the permit and/or proprietary authorization indicated above and to furnish, on request, supplemental information in support of the application. In addition, I authorize the above-listed agent to bind me, or my corporation, to perform any requirements which may be necessary to procure the permit or authorization indicated above. I understand that knowingly making any false statement or representation in this application is a violation of Section 373.430, F.S., and 18 U.S.C. Section 1001.

	_____	
Typed/Printed Name of Applicant	Signature of Applicant	Date

(Corporate Title if applicable)

JEA St Johns River Power Park Unit 3 Certification of Financial Capability

Certification Of Financial Capability For Perpetual Operations And Maintenance Entities

Permit No.: _____ Application No.: PA81-13A2.____ Date Issued (if modification):_____

Identification or Name of Stormwater Management System: **SJRPP CC Dry Retention System**

Phase of Stormwater Management System (if applicable): _____. Name of Operation and Maintenance Entity:**JEA**

Address of Operation and Maintenance Entity: **225 North Pearl Street**
Jacksonville, FL 32202

☒ Cost estimate attached

Total annual operating expenses, including maintenance costs, for the estimated remaining useful life of the system accounting for annualized capital or replacement costs or deferred maintenance expenses for the system, including those components where maintenance or replacement frequencies are less frequent that once per year, for each BMP in the stormwater management system and any associated infrastructure, in current year dollars.
$134,213.26

Operation and Maintenance Entity (Select All That Apply):

☐ Local, state, or federal government agencies; municipal service other special taxing units, water control or drainage districts; community development, special assessment, or water management districts

☒ Communication, water, sewer, stormwater, electrical, or other public utility

☐ Construction permittee (see Section 12, Volume I)

☐ Non-profit corporations, including homeowners' associations, property owners' associations, condominium owners' or master associations

☐ Other (Describe the Other Operation and Maintenance Entity below)

_____

Certification by Operation and Maintenance Entity:

Certification Provisions for the Operation and Maintenance Entity (Select All That Apply):

☐ Municipal Separate Storm Sewer System (MS4) permittee subject to Chapter 62-624, F.A.C. (Identify the applicable Florida Department of Environmental MS4 permit below:)

_____

☐ Non-profit corporation subject to the Homeowners' Association Act under Chapter 720, Florida Statutes

_____

Certification Of Financial Capability For Perpetual Operations And Maintenance Entities

☐ Construction permittee that will not be the Operation and Maintenance Entity. (Identify the intended Operation and Maintenance Entity below:)

_____

☒ Other: Operation and Maintenance Entity not otherwise selected for this section. Describe the Other Operation and Maintenance Entity below, such as State or federal agency, Property Owners' Association, etc.:
Water, sewer, and electrical utility company

The below Permittee or Operation and Maintenance Entity certifies that this form is true, accurate, and complete; and that it has the financial capability to operate and maintain the system in perpetuity including costs of inspections, operation, repair, and replacement of the system once the system meets its expected life. The signee below will be responsible for all maintenance, operation, and repair costs for the stormwater system of the above permit in perpetuity, until such time the system is properly abandoned, or the permit is transferred to a new operation and maintenance entity.

Name of Permittee or Operation and Maintenance Entity: **JEA**

Name: **Andrew Sears** Title: **Environmental Program Manager**

Signature: Andrew Sears Digitally signed

Digitally signed by Andrew Sears
Date: 2026.07.10 09:41:22 -04'00'

Estimated Maintenance Costs

FUTURE CAPITAL AND MAINTENANCE EXPENDITURES

This cost estimate requirement applies only to maintenance during the operational phase of the facility on an annual basis. The operation and maintenance cost estimate has been developed in accordance with Section 12.3.5 of the Applicant's Handbook Volume I. The estimate includes routine maintenance activities expressed in current dollars.

Costs were approximated using the Florida Department of Transportation (FDOT) 2025 Maintenance Contract Cost Summary by Pay Item Number (OOM_20260403), supplemented with project-specific assumptions to reflect the characteristics of the stormwater management system. A breakdown of costs for each maintenance category is provided below:

Total Estimated Annual Maintenance Cost by Category:

Sediment Removal and Debris Management: $3,328.89
Mowing and Vegetation Management: $31,078.25
Storm Sewer and Structure Maintenance: $52,516.46
Ditch and Conveyance System Maintenance: $27,600.00
Erosion Repair and Stabilization: $4,689.67
Pretreatment Device Maintenance: $10,000.00
Administrative and Compliance Activities: $5,000.00
Total: $134,213.26

The total estimated annual operation and maintenance cost for the stormwater management system is $134,213.26. This value represents a planning-level estimate based on current dollars and reflects routine maintenance associated with the system.

JEA St Johns River Power Park Unit 3 Stormwater Management Calculations

Client Name JEA

Project Name St. John's River Power Park Unit 3 Project No. 424014

Calculation Title Stormwater Management Calculation

Calculation No./File No. 58.1101.1101

Verification Method: ☒ Check and Review ☐ Alternate Calculations

Objective: The purpose of this stormwater management system calculation is to support the Site Certification Application for the proposed new combined cycle natural gas facility to be constructed at the St. Johns River Power Park.

Software-Generated Calculations Information	
BV Standard Application Program Name/Version	Bentley StormCAD, Civil 3D, 2025 Edition, HydroCAD 10.20-5c

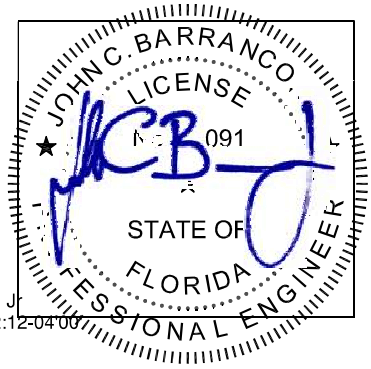
Review and Approval

***Full name and signature required*

Rev	Prepared By**	Date	Verified By**	Date	Approved By**	Date
0	Allison Kovarik	05/28/2026	Orinta Camacho	6/2/2026	John Barranco	6/2/2026
1	Allison Kovarik	08/06/2026	Orinta Camacho	08/07/2026	John Barranco	08/07/2026
2	Allison Kovarik	08/11/2026	Orinta Camacho	08/12/2026	John Barranco	08/12/2026

Contents of this calculation are to be considered confidential and proprietary business information of Black & Veatch

*Professional seal is only needed where project jurisdiction or client requirements dictate that calculations be signed/sealed.



John C Barranco, Jr
2026.08.14 11:02:12-04'00'

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY JOHN C. BARRANCO, JR., PE, ON THE TIME & DATE STAMP SHOWN USING A DIGITAL SIGNATURE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

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Stormwater Calculation Report

BLACK & VEATCH PROJECT NO. 424014
BLACK & VEATCH FILE NO. 58.1101.1101

PREPARED FOR

11 AUGUST 2026

BLACK & VEATCH

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2.0 Overall Project Description

JEA is proposing to construct a new combined cycle natural gas facility providing approximately 706 megawatts (MW) of electric generation. The Site is located in Duval County, Florida.

The purpose of this stormwater management system calculation is to support the Site Certification Application for the proposed new combined cycle natural gas facility to be located at St. Johns River Power Park (SJRPP). This calculation is provided to document stormwater design assumptions, system capacity, and compliance considerations consistent with applicable regulatory requirements. The Project Site is located within portions of Sections 12 and 13, Township 1 South, Range 27 East, and is currently subject to the Florida Department of Environmental Protection Site Certification Conditions of Certification PA 81-13Q, as modified on October 31, 2023.

The proposed Project will add 194 acres to the existing certified area. The existing certified areas outside of the proposed modification limits will continue to operate in accordance with the existing Conditions of Certification. All major existing offsite drainage parameters and outfall locations will remain intact, such as drainage ponds, outfall culverts, and all permanent stormwater ponds. The proposed stormwater management systems and best management practices described herein are limited to the proposed Project area and are designed to discharge to the existing certified conveyance and outfall locations. Within this report, stormwater management systems located outside the Project boundary are described as 'offsite' to differentiate them from systems located within the Project area.

The current drainage analysis and design encompass 195.73 acres. This area is a subset of the overall post-demolition boundary of 524.5 acres and the total property boundary of approximately 1,600 acres. Although the drainage analysis accounts for 195.73 acres, the Site Certification area is limited to 194 acres and excludes the metering and regulation (M&R) yard. The M&R yard could not be excluded from the drainage analysis because it is centrally located within a larger contributing drainage area and hydraulically influences downstream stormwater flows. The construction laydown areas are included in the overall stormwater system analysis and are modeled as impervious areas.

The surface water management system for the Project will be designed to meet the requirements of the applicable local, regional, state, and federal requirements, which include the rules and regulations of the Client, SJRWMD, Duval County, The City of Jacksonville, Florida Department of Environmental Protection (FDEP) and Environmental Protection Agency (EPA). The design philosophy for this Project is to provide water quality treatment for the volume of stormwater runoff from the Project via a dry retention pond and attenuate the post vs. pre- development stormwater runoff from a 25-year 24-hour design storm via outfall structures as required by the FDEP Rule 62-330 of the Florida Administrative Code. Refer to Appendix A for the proposed Site location.

3.0 Site Conditions

3.1 Land Cover and Land Use

3.1.1 Pre-Development Site Conditions

The existing stormwater management system for the proposed Project consists of multiple drainage areas that discharge to perimeter channels located outside the property boundary. These perimeter channels ultimately convey flow to a shared discharge point, an offsite stormwater pond situated east of the Project boundary which has ultimate discharge to the St. John's River. The existing land cover on the Site consists of mostly bare earth with sparse vegetation along with some impervious areas.

Curve numbers previously established in the JEA St. Johns River Power Park Decommissioning and Restoration Drainage Analysis Report prepared by Adkinson Engineering in November 2017 were used as the basis to

establish existing pre-development conditions for each drainage basin. These values were approved under prior stormwater permitting and were utilized to support the proposed stormwater management system for this application. Refer to Appendix H for more information.

Pre-Development drainage areas for this study were delineated from the larger existing basins identified in the Adkinson Engineering report to align with the proposed Project boundary. This approach allows for a direct comparison of the total pre- vs. post-development runoff directed toward the Site perimeter from our proposed development. For each sub-basin, the existing-condition curve number of the corresponding larger basin, as documented in the Adkinson Engineering report, was used as the basis. These curve numbers were then applied to develop the existing-condition hydrologic parameters for the sub-basins. Refer to Table 3-1 and Appendix H for a summary of pre-development peak runoff results and calculations for the 25-year, 24-hour storm.

Table 3-1: Pre-Development Time-of-Concentration Calculations

PRE-DEVELOPMENT TIME OF CONCENTRATION (Tc) CALCULATIONS										
DRAINAGE AREA	TOTAL TIME OF CONC. TC (MIN)	SHEET FLOW					SHALLOW CONCENTRATED FLOW			
		tsheet = 0.007 (n*L)0.8 /(P20.5*S0.4)/ 60					tshallow_unpaved = L / (16.10*S0.5) / 60			
		Manning's n	Flow L (ft)	P2 (in)	Slope (ft/ft)	tsheet (min)	Paved/ Unpaved	Flow L (ft)	Slope (ft/ft)	tshallow (min)
PR-2 MODIFIED	17.59	0.01	100.00	4.73	0.01	1.42	P	1561.46	0.010	16.16
PR-3 MODIFIED	13.02	0.01	100.00	4.73	0.01	1.22	P	1140.45	0.010	11.81
PR-4 MODIFIED	9.42	0.01	100.00	4.73	0.04	0.70	P	842.50	0.010	8.72
PR-6**	70.20	0.01	-	-	-	-	-	-	-	-
POND OVERFLOW MODIFIED	5.00	-	-	-	-	-	-	-	-	-
**Basin EX-6 parameters were not modified from the Adkinson Engineering decommissioning report. The original Tc values were retained.										

Table 3-2: Pre-Development Peak Flow Summary

PRE-DEVELOPMENT DRAINAGE AREA SUMMARY						
SUB-BASIN ID	TOTAL DRAINAGE AREA (AC)	CN**	Tc	25-YR, 24-HR PEAK FLOW (CFS)	MEAN ANNUAL 24-HR PEAK FLOW (CFS)	TIME OF PEAK (HOURS)
PR-2 MODIFIED	47.98	77	17.59	135.13	57.58	12.5
PR-3 MODIFIED	34.87	70	13.02	93.44	35.03	12.5
PR-4 MODIFIED	20.79	77.00	9.42	70.31	30.00	12.25
PR-6	91.37	67.00	70.20	105.10	36.06	13.25
POND OVERFLOW MODIFIED	0.73	97	5.00	3.48	1.92	12.25
TOTAL	**195.7**	**-**	**-**	**342.57***	**135.19***	**12.5**

* Total peak flow represents the combined basin hydrograph routed through HydroCAD at 12.50 hours.
**CN is assumed as the CN from the greater drainage area of the decommissioning report.

3.1.2 Post-Development Site Conditions

A plant loop road will surround the main equipment areas (power block) and will be asphalt surfaced. Maintenance access roads will also be asphalt surfaced. The area inside the plant loop road around the equipment foundations will be aggregate surfaced, along with the switchyard, plant equipment, and maintenance/laydown areas outside of the plant loop road. Areas outside the equipment areas and loop roads will be grass vegetated. The pond slopes and swales will be vegetated with seed or sodded. Major components of the existing drainage infrastructure will remain in place, including the exterior perimeter drainage ditches, the offsite stormwater pond, and most of the existing underground piping network. Refer to Appendix F for the proposed Site layout and stormwater management system.

Of the 195.7 total acres within the Project boundary, approximately 167.7 acres will be considered in the proposed dry retention pond calculations. The remaining acreage is outside the limits of disturbance. The remaining 28.0 acres are included in the certification boundary but will not include any stormwater improvements as this section of the Site will remain undisturbed and will continue to discharge to the existing stormwater management system located outside the Project boundary.

The stormwater management system for the proposed facility has been designed in accordance with applicable requirements of the St. Johns River Water Management District (SJRWMD). Onsite surface flows will be modified through grading and a network of swales and catch basin inlets to direct runoff to the proposed dry retention ponds located on the Site. This system will provide water quality treatment, nutrient reduction, and discharge attenuation while maintaining the same ultimate downstream discharge point at the existing offsite wet pond located east of the Project boundary.

Flows routed to the offsite wet pond will be discharged at a rate lower than the existing condition. As a result, no adverse impacts to offsite surface water are anticipated from the construction or operation of the proposed facility. Refer to Table 3-3, Table 3-4, Table 4-3, and Appendix H for a summary of post-development peak results and calculations for the 25-year, 24-hour storm prior to pond routing.

Table 3-3: Post-Development Drainage Area Summary

POST-DEVELOPMENT DRAINAGE AREA SUMMARY										
BASIN ID	TOTAL DRAINAGE AREA (AC)	HSG A		HSG D		Impervious		Basin Area (Impervious Area)		Weighted CN
		GRASS (Poor)		GRASS (Poor)						
		Area (ac)	CN	Area (ac)	CN	Area (ac)	CN	Area (ac)	CN	
B-01	111.2	9.16	68	15.98	89	75.62	98	10.49	98	95
B-02	56.4	7.06	68	1.61	89	42.77	98	5.01	98	94
B-03*	28.0	-								77
*Entire basin falls within the PR-2 basin. Permitted CN from the decommissioning report is applied as the basis for the post-development condition since this area will not be modified.										

Table 3-4: Post-Development Peak Flow Summary

POST-DEVELOPMENT PEAK FLOW SUMMARY						
SUB-BASIN ID	TOTAL DRAINAGE AREA (AC)	CN	Tc	25-YR, 24-HR PEAK FLOW (CFS)	MEAN ANNUAL 24-HR PEAK FLOW (CFS)	TIME OF PEAK (HOURS)
B-01	111.2	95	28.02**	328.85	178.89	12.25
B-02	56.4	94	19.81**	189.74	102.34	12.25
B-03	28.0	77	8.02	98.27	41.92	12.25
TOTAL	**195.7**	**-**	**-**	**598.11***	**315.88***	12.25
* Total peak flow represents the combined basin hydrograph routed through HydroCAD at 12.25 hours.						
**Time of concentration represents the longest system flow time per basin from the StormCAD model.						

3.2 Contact Stormwater Management Plan

All potential oil-contaminated plant drains, including bell ups and floor drains will be conveyed to an oil/water separator for treatment. Following separation, the treated wastewater will be discharged to the existing blowdown system, which ultimately conveys flows to the Northside Generating Station (NGS).
Secondary containment areas that are fully bermed (bunded) and subject to oil contact will also be routed through the oil/water separator prior to discharge to the onsite detention pond. See Black & Veatch Drawing 424014-DS-1103 for a layout of the contact stormwater management plan (5.0Appendix F).

Non-contact stormwater from the power block and switchyard areas will be conveyed to the pond via a stormwater sewer system, ditches and culverts. Non-Contact stormwater from the areas outside of the power block including the Construction Laydown/Maintenance areas will be conveyed to the ponds via the combination of overland flow, the storm sewer system, and swales.

3.3 Water Table and Infiltration Data

A geotechnical report was prepared by Terracon (Reference 15). According to the preliminary report, the groundwater elevation at the proposed pond location was observed at 3.017 feet and 8.837 feet for basins 1 and 2 respectively.

Infiltration testing was performed at all proposed pond locations. During review of the B-02 infiltration test results, an outlier was identified at location DRI-5. This value was not consistent with the remaining dataset and was therefore excluded from the calculation of the average infiltration rate for pond B-02. The average measured infiltration rates were found to be the following:

- B-01 Basin: 0.5 in/hr
- B-02 Basin: 1.6 in/hr

For design purposes, Black & Veatch applied a factor of safety of 2 to each pond's average infiltration rate to comply with SJRWMD design recommendations (Reference 2). The resulting design infiltration rates used in the stormwater calculations after applying this safety factor are as follows:

- B-01 Basin with Safety Factor of 2: 0.25 in/hr
- B-02 Basin with Safety Factor of 2: 0.8 in/hr

The basins were also checked with a Safety Factor of 4 to ensure City of Jacksonville requirements were met (Reference 14). The resulting design infiltration rates used in the stormwater calculations after applying this safety factor are as follows:

- B-01 Basin with Safety Factor of 4: 0.125 in/hr
- B-02 Basin with Safety Factor of 4: 0.4 in/hr

These adjusted infiltration rates were incorporated into the HydroCAD model for the pond analysis.

3.4 Precipitation Data

NOAA Atlas 14 precipitation frequency estimates (Reference 5) were used to determine the cumulative rainfall depths for the 24-hour design storms. The mean annual 24-hour storm depth was obtained from SJRWMD ERP Volume II, Figure 2.7.1-1 (Reference 2). Refer to Appendix C for cumulative rainfall depths obtained from NOAA Atlas 14, and to Table 3-5 below for a summary of rainfall depths.

Table 3-5: NOAA Atlas 14 Cumulative Rainfall Depths

NOAA Atlas 14 Cumulative Rainfall Depths			
Design Storm	Design Purpose	Cumulative Rainfall Depth (inches)	Source
Mean Annual 24-Hour Storm	Stormwater Quantity – Design Storm (Limit pre-vs-post discharge)	5.0	SJRWMD ERP Vol. II Figure 2.7.1-1 (Reference 2)
25-Year, 24-Hour	Stormwater Quantity – Design Storm (Limit pre-vs-post discharge)	8.95	NOAA Atlas 14 (Reference 5)
100-Year, 24-Hour	Flood Control – Ensure Emergency Weir can Manage Storm Event	12.30	NOAA Atlas 14 (Reference 5)

3.5 FEMA Floodplains

The Project is located within FEMA Flood Insurance Rate Map (FIRM) 12031C0216J (effective November 2, 2018) and lies entirely within Flood Zone X (unshaded). Flood Zone AE is present adjacent to the outfall locations, where the highest established 1-percent-annual-chance (100-year) flood elevation is 6.0 feet NAVD88.

The lowest proposed nominal grade is 17.0 feet NAVD88, and the lowest onsite elevation will be the bottom of the proposed retention pond at 6.6 feet NAVD88. All proposed grading and placement of fill are located outside of Flood Zone A; therefore, impacts to the 100-year floodplain will not occur and a flood compensatory storage analysis is not required.

Flood Zone X (shaded) and Flood Zone A areas are located offsite to the east and south and will not be affected by Project construction. The Project will comply with St. Johns River Water Management District (SJRWMD) flood regulations and will not adversely impact offsite flood zones or base flood elevations. Refer to Appendix E for more information.

3.6 Soil Properties

Soil data was obtained from the USDA National Resources Conservation Service (NRCS) Web Soil Survey (Reference 6). Much of the Site is made up of sandy soils that are classified as hydrologic soil group (HSG) A and HSG D. Refer to the USDA soils map provided in Appendix D and the Terracon Technical Memorandum Report of Geotechnical Field Exploration Services (Reference 15) for more information.

3.7 Topography

3.7.1 Existing Topography

Client-provided survey data, referenced to the NAD83 State Plane Florida East coordinate system (US Survey Foot), was used for this report and its associated calculations. The existing Site topography consists of low relief terrain with elevations ranging from approximately 6 to 19 feet. Slopes within the proposed Site boundary generally average between 1 and 5 percent. Refer to Appendix B for the client provided survey.

3.7.2 Proposed Topography

The Site will be graded to direct stormwater runoff toward the proposed catch basin inlets, swales, and retention ponds while maintaining positive drainage across all developed areas. The Project Site will be elevated with

equipment elevations/finished floor elevations of 19 to 20 ft (NAVD88). Pond interior embankments and swale side slopes will be graded at a 4:1 minimum slope, and slopes within the power block and laydown areas will average at 0.25%. The grading plan for the Project is provided in Appendix **F**.

3.8 Wetlands

Refer to the SJRPP Site Certification Application (SCA) Sections 5.4.1.2 and 5.4.1.3 (Reference 13) for information regarding wetland impacts and wetland mitigation practices.

3.9 Proximity to Outstanding Florida Waters

The Project Site lies within the Clapboard Creek–St. Johns River HUC-12 subwatershed (HUC ID 030801031602, Reference 9), which encompasses approximately **26,637 acres**. Based on the Florida Department of Environmental Protection's Outstanding Florida Waters (OFW) designation map, this subwatershed includes the Timucuan Ecological and Historic Preserve, which is recognized as an OFW.

Because the Project boundary falls within the same HUC-12 watershed as this designated OFW, the stormwater system must comply with the additional water quality standards outlined in Sections 8.3.3 and 8.3.4 of the SJRWMD Volume II handbook (Reference 2).

3.10 Tailwater Conditions

Tailwater conditions for the 25-year design storm are consistent with the basis established under the previously approved JEA permit, with a tailwater elevation of 2.3 feet NGVD, which corresponds to 1.08 feet NAVD88. For the 100-year design storm, a tailwater elevation of 6.0 feet NAVD88, equivalent to the FEMA Base Flood Elevation (BFE) was used as the basis. Refer to Table 3-6 for a summary of tailwater conditions used for the design.

Table 3-6: Tailwater Elevations

Tailwater Elevations		
Design Storm Frequency	NAVD88 Tailwater Elevation	Source
25-Year	1.08 ft	JEA SJRPP Decommissioning Report
100-Year	6.00 ft	FEMA Flood Insurance Rate Map (FIRM) 12031C0216J

4.0 Post-Development Stormwater Calculation

4.1 Retention Basin Design

Dry retention basins are proposed to allow the required treatment volume to infiltrate into the ground, thereby reducing discharge of total nitrogen (TN), phosphorus (TP) and sediment (TSS) from the proposed development. A dry retention basin allows the required treatment volume to infiltrate into the ground through permeable soils. Two dry retention basins will be used to reduce the total nitrogen (TN), phosphorous (TP), and sediment (TSS) from the proposed development.

The proposed dry retention basins will be the primary BMP used to meet the water quality and quantity requirements as outlined in Volume I and II of the St. John's River Water Management District's ERP manuals (Reference 1, 2) as well as the City of Jacksonville Land Development Procedures Manual (Reference 14). The proposed dry retention basins were designed according to the criteria outlined in Section 5.1 of the SJRWMD ERP Volume II manual (Reference 2) and Section 5.0 of the FDEP ERP Stormwater Quality Applicant's Handbook

(Reference 3). The ponds provide a treatment volume adequate to reduce the TN, TP, and TSS to the required rates, demonstrate a recovery time of less than 72 hours with a safety factor of two (36 hours), and are sized to attenuate runoff from the 25-year, 24-hour and the mean annual 24-hour storm events. The City of Jacksonville requires use of an infiltration rate safety factor of 4 and the pond to fully recover in 72 hours. The ponds were also evaluated for compliance with all applicable City of Jacksonville design criteria (Reference 14).

The ponds include a concrete box riser with a rectangular weir used to control the 25-year, 24-hour storm peak which will discharge to the existing culverts on the Site and an emergency spillway weir sized for the 100-year storm to prevent overtopping. Infiltration rates and groundwater elevation of the existing soil were based on the client-provided geotechnical report (Reference 15, Section 3.3) and a sand infiltration medium is proposed on the bottom of the pond to recovery time. A void percentage of 20% was used for the sand medium based on HydroCAD guidance (Reference 12). A hydrograph peaking factor of 256 was used to match the basis of the previous conditions as shown in Appendix G. Interior slopes of the pond embankments are 4:1.

The dry retention ponds were designed using HydroCAD software (Reference 12). The retention pond HydroCAD report is provided in Appendix I and a summary table of modeling results is shown below in Table 4-2.

The retention volumes were determined using the methodology provided in Appendix D of the FDEP Stormwater Quality Handbook (Reference 3) based on the non-directly connected impervious area (DCIA) curve number and the percentage of DCIA within the drainage basin. As described in Table 4-1 below, the FDEP manual specifies a minimum dry retention depth of 1.76-inches for B-01 and 1.70-inches for B-02 applied uniformly over the total pond catchment areas. When this depth is multiplied by the contributing drainage area, it equates to a minimum dry retention volume of 16.32 and 8.00 acre-feet for B-01 and B-02 respectively. Per Section 5.4 of the FDEP Stormwater Quality Handbook, the retention basin must have the capacity to retain the required treatment volume without considering soil storage and therefore the provided storage in the sand medium was not considered when calculating the total provided retention depths in the ponds. This calculated volume represents the baseline storage requirement necessary to ensure that the proposed basin meets the stormwater treatment criteria for nutrient and solids reduction as described in Section 4.1.1. The provided retention depths were checked in the BMP Trains analysis software (Reference 10) and revised as needed in the detailed design to meet the specified treatment criteria for this Project Site.

Table 4-1: Required Dry-Retention Volume Calculation

Minimum Dry Retention Depth Calculation				
REQUIREMENTS/ METRICS	VALUE		UNIT	REFERENCE/ EXPLANATION
	B-01	B-02		
Post-Dev Directly Connected Impervious Area (DCIA)	68	76	%	
Post-Dev CN of Non DCIA Areas	87	81	-	Composite curve number of all areas contributing to the pond and outside of the DCIA
Min. Dry Retention Depth	1.76	1.70	IN	FDEP Stormwater Quality Handbook Appendix D
Min. Dry Retention Volume	16.32	8.00	AC-FT	Min retention depth * entire treatment area

Table 4-2: Dry Retention Basin Summary Tables

Dry Retention Basin Calculation - B-01						
Total Area Draining to Pond (ac)	=	111.2				
Rainfall Depth (25-yr, 24-hr) in	=	8.95				
Rainfall Depth (Mean Annual 24-hr) in	=	5				
Min. Dry Retention Depth (in)	=	1.76				
Min. Dry Retention Volume (ac-ft)	=	16.32				
Dry Retention Basin Summary Table						
Basin Side Slopes:	=	4				
	Elevation (ft)	Cumulative Volume (cf)*				
Bottom of Sand Medium (ft)	5.6	0				
Top of Sand Medium (ft)	6.6	0				
Bottom of Basin Elevation	6.60	0				
Elevation at Minimum Required Dry Retention Storage (ft)	8.40	709045				
Rectangular Weir Elevation	9.00	952913				
25-Year, 24-Hr Duration Storm Peak	11.35	2020449				
Riser Crest Elevation (riser grate) (ft)	11.50	2010233				
Emergency Overflow Weir	12.50	2452010				
100-Year, 24-Hr Duration Storm Peak (BV Check)	13.01	2757484				
Top of Embankment	13.50	2904364				
Dry Retention Basin Conclusions						
Freeboard for 25-Year Design High Water and Top of Embankment (ft)	=	2.15	PASS	Min.	1	ft
Check to Ensure 100-Year Design High Water does not Overtop Embankment (ft)	=	13.01	PASS	Max.	13.50	ft
Freeboard for Top of Riser and Spillway Crest (ft)	=	1.00	PASS	Min.	1	ft
25-Year Design Highwater Check (ft)	=	11.35	PASS	Max.	12.50	ft
Dry Retention Volume (ac-ft)	=	21.88	PASS	Min.	16.32	ac-ft
Recovery Time to Recover Specified Dry Retention Volume (hrs)**	=	31.00	PASS	Max.	36	hrs
25-Year, 24-Hour Peak Flow (cfs)	=	53.88				
Mean Annual 24-Hour Peak Flow (cfs)	=	9.50				

***Volumes reported on the table do not account for any soil storage provided by the sand infiltration medium.**
****Recovery time was determined based on HydroCAD outputs using the slug load method.**

Dry Retention Basin Calculation - B-02							
Total Area Draining to Pond (ac)	=	56.4					
Rainfall Depth (25-yr, 24-hr) in	=	8.95					
Rainfall Depth (Mean Annual 24-hr) in	=	5					
Min. Dry Retention Depth (in)	=	1.70					
Min. Dry Retention Volume (ac-ft)	=	8.00					
Dry Retention Basin Summary Table							
Basin Side Slopes:	=	4					
	Elevation (ft)	Cumulative Volume (cf)*					
Bottom of Sand Medium (ft)	11	0					
Top of Sand Medium (ft)	12	0					
Bottom of Basin Elevation	12.00	0					
Elevation at Minimum Required Dry Retention Storage (ft)	14.20	350024					
Rectangular Weir Elevation	14.50	402,176					
25-Year, 24-Hr Duration Storm Peak	16.44	765,358					
Riser Crest Elevation (riser grate) (ft)	16.00	679,056					
Emergency Overflow Weir	17.00	878,674					
100-Year, 24-Hr Duration Storm Peak (BV Check)	17.40	961,530					
Top of Embankment	18.00	1,090,434					
Dry Retention Basin Conclusions							
Freeboard for 25-Year Design High Water and Top of Embankment (ft)	=	1.56	PASS	Min.	1	ft	
Check to Ensure 100-Year Design High Water does not Overtop Embankment (ft)	=	17.40	PASS	Max.	18.00	ft	
Freeboard for Top of Riser and Spillway Crest (ft)	=	1.00	PASS	Min.	1	ft	
25-Year Design Highwater Check (ft)	=	16.44	PASS	Max.	17.00	ft	
Dry Retention Volume (ac-ft)	=	9.23	PASS	Min.	8.00	ac-ft	
Recovery Time to Recover Specified Dry Retention Volume (hrs)**	=	10.75	PASS	Max.	36	hrs	
25-Year, 24-Hour Peak Flow (cfs)	=	51.02					
Mean Annual 24-Hour Peak Flow (cfs)	=	1.12					

***Volumes reported on the table do not account for any soil storage provided by the sand infiltration medium.**
****Recovery time was determined based on HydroCAD outputs using the slug load method.**

Table 4-3: Water Quality Attenuation Summary

Water Quality Attenuation Summary		
	25-Year, 24-Hour Water Quality Attenuation Check (cfs)	Mean Annual 24-Hour Stormwater Quality Attenuation Check (cfs)
Pre-Development - Combined Basins	342.57	135.19
Post-Development - Combined Basins - No Pond	598.11	315.88
Post-Development - Combined Basins - With Ponds	203.17	52.54

4.1.1 Water Quality Calculations

Per Florida SJRWMD Volume I (Reference 1), the proposed retention basin is designed to comply with the following stormwater quality requirements:

Section 8.3.1 Stormwater treatment systems shall be designed to achieve at least an 80 percent reduction of the average annual post-development total suspended solids (TSS) load, or 95 percent of the average annual post-development TSS load for those proposed Projects located within a HUC 12 sub-watershed containing an Outstanding Florida Water (OFW) and located upstream of that OFW. There is a rebuttable presumption that this standard is met when structural stormwater best management practices (BMPs) are designed to meet the applicable design standards in Sections 8.3.2 through 8.3.5 below.

Section 8.3.4: Stormwater treatment systems located within a HUC 12 subwatershed which contains an impaired water, and is located upstream of that impaired water, shall provide a level of treatment sufficient to accomplish:

1. 95 percent reduction of average annual loading of TP and TN from the proposed project when located within such a HUC 12 subwatershed containing an OFW and located upstream of that OFW; and
2. A reduction such that the post-development condition average annual loading of nutrients does not exceed the predevelopment condition nutrient loading; and
3. The post-development condition average annual loading of those pollutants not meeting water quality standards, that is less than that of the predevelopment condition.

Per Florida SJRWMD Volume I (Reference 1), the proposed retention basin is designed to comply with the stormwater quality requirements outlined in Sections 8.3.1 and 8.3.4.

Nutrient removal efficiency was evaluated using BMP Trains water quality modeling software and manual (Reference 10, 7). The “Light Industrial” land use condition was applied to both the pre-development and post-development scenarios because the Site had already been developed and subsequently decommissioned and therefore could not reasonably be considered an undeveloped condition. Directly connected impervious areas (DCIA) were incorporated into the post-development model to reflect the impervious areas discharging directly to swales or the catch basin network in the proposed Site layout. The post-development catchment areas were routed in series via the proposed swales and through dry retention ponds to estimate nutrient load reductions after BMP routing. Treatment through the swales was calculated based on the Environmental Resource Permit Applicants Handbook V.1 - Appendix O: Mean Annual Mass Removal Efficiencies for 1.25-inches of Retention for Zone 4 by Percent DCIA Table (Reference 1).

Refer to Table 4-4 below for a summary of the modeling results and Appendix K for the detailed calculation.

For Section 8.3.1, the Project is located within a HUC 12 sub-watershed containing an OFW. Structural BMPs have been designed in accordance with the applicable standards in Sections 8.3.2 through 8.3.5 of the SJRWMD Volume I manual, which establishes a presumption of compliance with the TSS reduction requirement. By

meeting these design standards, the proposed retention basin is assumed to achieve the required ≥95% reduction in average annual post-development TSS load.

For Section 8.3.4, the Project is located within a HUC 12 sub-watershed containing a water body impaired for metals, include copper and iron. The proposed power plant development will not result in an increase in metals loading to stormwater discharges to receiving waters, including impaired water bodies, in accordance with the FDEP ERP Applicant's Handbook Volume I and Chapter 62-330, Florida Administrative Code (FAC). The project does not include any wastewater discharges to the stormwater management system. All runoff entering the system will consist solely of non-contact stormwater from precipitation events, and therefore no additional sources of metals associated with industrial, or process activities are introduced. As a result, the project will not contribute to exceedances of applicable water quality criteria for metals in downstream receiving waters.

Table 4-4: BMP Trains Nutrient Reduction Summary Table

Water Quality Summary Table - TN and TP																	
Catchment ID	Area (ac)	Rainfall Zone	Mean Annual Rainfall (in)	Pre-Development				Post Development - Prior to BMPs				BMP Applied	Provided Retention Depth (in)	Required Removal Efficiency – Fixed (TP ≥95%, TN ≥95%)	Required Removal Efficiency – Calculated (Post ≤ Pre)	Actual TP Removal (%)	Actual TN Removal (%)	Compliance Check
				Pre-Dev Non-DCIA CN	Pre-Dev DCIA (%)	Pre-Dev TP Load (kg/yr)	Pre-Dev TN Load (kg/yr)	Post-Dev Non-DCIA CN	Post-Dev DCIA (%)	Post-Dev TP Load (kg/yr)	Post-Dev TN Load (kg/yr)							
B-01	111.2	Zone 4	53.4	71	0	12.37	57.091	87	68%	87.831	405.374	Dry Retention Pond + Treatment Swales	2.05	TP ≥95%, TN ≥95%	TP = 88%, TN = 88%	95	95	Meets greater of both removal efficiency criteria
B-02	56.4	Zone 4	53.4	71	0	5.539	25.565	81	76%	28.789	132.783	Dry Retention Pond + Treatment Swales	1.96	TP ≥95%, TN ≥95%	TP = 88%, TN = 88%	95	95	Meets greater of both removal efficiency criteria
B-03 (UNDISTURBED)	28.0	Zone 4	53.4	77	0	4.276	19.737	77	0%	4.276	19.737	None (no disturbance)	-	-	-	-	-	Area is not draining to pond and is undisturbed.
Total*	195.7	–	–	–	–	17.91	82.66	–	–	116.62	538.16	–	–	TP ≥95%, TN ≥95%	TP ≥88%, TN ≥88%	95	95	Meets greater of both removal efficiency criteria

*Undisturbed basin B-03 not included in overall nutrient loading totals. No disturbance is proposed in this basin.

4.1.2 Water Quantity Calculations

Per Florida SJRWMD Volume II (Reference 2), the proposed retention basin is designed to follow the following stormwater quantity requirements:

Section 3.2.1: The post-development peak discharge rate must not exceed the pre-development peak rate of discharge for the mean annual 24-hour storm.

Section 3.2.1: The post-development peak rate of discharge must not exceed the pre-development peak rate of discharge for the 25-year frequency, 24-hour duration storm for all areas of the district.

The proposed retention basin meets SJRWMD Volume II stormwater quantity requirements. Modeled post-development peak discharge rates do not exceed pre-development rates for both the mean annual 24-hour storm and the 25-year, 24-hour storm. The basin provides adequate attenuation and ensures no adverse impacts to downstream features. Refer to Table 4-5 for a summary of pre- and post-development peak discharges.

4.2 Dewatering Operations

During installation of deep foundations and deep underground utilities, wellpoint and sock systems will be used to dewater excavations to facilitate installation and backfill operations. Dewatering effluent will be discharged to the stormwater retention ponds, where it will infiltrate without discharge through the pond emergency overflow weirs. Dewatering activities shall be managed to maintain pond water levels at least 1 foot below the riser weir elevation, and dewatering will not occur immediately before or after forecasted major storm events. Surface water entering excavations will be collected in turbidity-filtered sumps and conveyed to the stormwater retention ponds for additional treatment. Specific dewatering means and methods will be determined by the construction contractor. Offsite discharge generated during dewatering activities will be monitored to ensure turbidity does not exceed 29 NTU above background levels. If turbidity approaches 29 NTU, best management practices will be modified to provide additional turbidity control.

Following construction, the ponds shall be fully cleared of accumulated sediment and verified to ensure infiltration rates meet or exceed the design infiltration rates.

4.3 Overall Conveyance System Design

A series of storm drain inlets, culverts, and swales will be utilized to route onsite runoff to the proposed dry retention pond. Each component of the system has been designed for the 25-year, 24-hour storm event, with freeboard accounted for as described in Sections 4.3.1 and 4.3.2. Peak flows were estimated using the Rational Method in accordance with the FDOT Drainage Manual (Reference 4). An adjustment factor of 1.1 was applied to the 25-year design storm for peak flow calculations.

Runoff coefficients were selected based on land use classifications provided in Table B-4 of the FDOT Drainage Manual (Reference 4). A coefficient of 0.95 was applied to impervious areas, consistent with the “Commercial and Industrial” land use category, while a coefficient of 0.15 was applied to pervious areas, consistent with “Pasture, Grass, and Farmland – Sandy Soils” category. A minimum time-of-concentration value of 10-minutes was utilized for all calculations per FDOT guidance (Reference 4). Refer to Table 4-5, Table 4-7, and Table 4-7 below for detailed rational method calculations.

The conveyance system evaluated herein is intended to establish an initial design basis for stormwater routing and capacity. The final conveyance layout, sizing, and configuration may be refined during detailed design of the power plant to accommodate final grading, equipment layouts, and discipline coordination.

Table 4-5: Catch Basin and Conveyance Swale Drainage Area Summary

CATCH BASIN AND CONVEYANCE SWALE DRAINAGE AREA SUMMARY						
ID	Area	Impervious Area (ac)	Commercial and Industrial Land Use C Value	Grassed Area (ac)	Grassed Area C Value	Composite C
CH-10	23.0	23.03	0.95		0.15	0.95
CH-2	7.4	5.96	0.95	1.45	0.15	0.79
CH-3	14.9	12.80	0.95	2.08	0.15	0.84
CH-4	5.1	0.16	0.95	4.96	0.15	0.17
CH-5	21.5	19.72	0.95	1.76	0.15	0.88
CB-1	1.2	1.25	0.95		0.15	0.95
CB-2	1.3	1.29	0.95		0.15	0.95
CB-3	1.3	1.29	0.95		0.15	0.95
CB-4	1.2	1.24	0.95		0.15	0.95
CB-9	0.9	0.93	0.95		0.15	0.95
CH-7	8.55	8.55	0.95		0.15	0.95
CH-9	13.2	12.62	0.95		0.15	0.91
CB-5	0.9	0.88	0.95		0.15	0.95
CB-6	1.4	1.40	0.95		0.15	0.95
CB-7	0.9	0.88	0.95		0.15	0.95
CB-8	1.4	1.40	0.95		0.15	0.95
CH-8	9.7	6.82	0.95		0.15	0.67
CH-1	13.4	2.79	0.95	10.65	0.15	0.32
CB-10	1.5	1.52	0.95		0.15	0.95
CB-18	2.6	2.56	0.95		0.15	0.95
CB-13	1.3	1.30	0.95		0.15	0.95
CB-14	0.9	0.72	0.95		0.15	0.73
CB-15	0.9	0.89	0.95		0.15	0.95
CB-16	0.9	0.90	0.95		0.15	0.95
CB-17	1.2	1.21	0.95		0.15	0.95
CB-11	1.1	1.06	0.95		0.15	0.95
CB-12	1.4	1.39	0.95		0.15	0.95
CB-19	1.9	1.90	0.95		0.15	0.95

Table 4-6: Catch Basin and Conveyance Swale Time-of-Concentration Summary

CATCH BASIN AND CONVEYANCE SWALE TIME OF CONCENTRATION CALCULATIONS										
ID	TOTAL TIME OF CONC. T_C (HRS)	TOTAL TIME OF CONC. T_C (MIN)	SHEET FLOW					SHALLOW CONCENTRATED FLOW		
			tsheet = 0.007 (nL)0.8 / P20.5 S0.4 / 60					t_{PAVED} = L / (20.3*$S^{0.5}$) / 60 tUNPAVED = L / (20.3*S0.5) / 60		
			Manning's n	Flow L (ft)	P_2 (in)	Slope (ft/ft)	t_{sheet} (min)	Flow L (ft)	Slope (ft/ft)	$t_{shallow}$ (min)
CH-10	0.222	13.35	0.011	100.00	4.73	0.003	2.29	1346.905	0.0100	11.06
CH-2	0.167	10.00	0.011	100.00	4.73	0.010	1.32	937.596	0.0100	7.70
CH-3	0.170	10.18	0.011	100.00	4.73	0.010	1.32	1079.766	0.0100	8.87
CH-4	0.251	15.08	0.150	100.00	4.73	0.010	10.63	429.307	0.0100	4.44
CH-5	0.167	10.00	0.011	100.00	4.73	0.003	2.29	449.461	0.0100	3.69
CB-1	0.167	10.00	-	-	-	-	-	-	-	-
CB-2	0.167	10.00	-	-	-	-	-	-	-	-
CB-3	0.167	10.00	-	-	-	-	-	-	-	-
CB-4	0.167	10.00	-	-	-	-	-	-	-	-
CB-9	0.167	10.00	-	-	-	-	-	-	-	-
CH-7	0.167	10.00	0.011	100.00	4.73	0.003	2.29	648.7109	0.0100	5.33
CH-9	0.167	10.00	0.011	100.00	4.73	0.003	2.29	894.452	0.0100	7.34
CB-5	0.167	10.00	-	-	-	-	-	-	-	-
CB-6	0.167	10.00	-	-	-	-	-	-	-	-
CB-7	0.167	10.00	-	-	-	-	-	-	-	-
CB-8	0.167	10.00	-	-	-	-	-	-	-	-
CH-8	0.167	10.00	-	-	-	-	-	-	-	-
CH-1	0.264	15.85	0.150	100.00	4.73	0.010	10.63	503.7478	0.0100	5.21
CB-10	0.167	10.00	-	-	-	-	-	-	-	-
CB-13	0.167	10.00	-	-	-	-	-	-	-	-
CB-14	0.167	10.00	-	-	-	-	-	-	-	-
CB-15	0.167	10.00	-	-	-	-	-	-	-	-
CB-16	0.167	10.00	-	-	-	-	-	-	-	-
CB-17	0.167	10.00	-	-	-	-	-	-	-	-
CB-11	0.167	10.00	-	-	-	-	-	-	-	-
CB-12	0.167	10.00	-	-	-	-	-	-	-	-
*AVERAGE SLOPE OF 0.25% USED ACROSS ALL GRADED AREAS										

Table 4-7: Catch Basin and Conveyance Swale Peak Flow Summary

CATCH BASIN AND CONVEYANCE SWALE RATIONAL METHOD PEAK RUNOFF CALCULATIONS						
ID	Tc (MIN)	A (ACRES)	C	I25 (IN/HR)	25-YEAR ADJUSTMENT FACTOR X(t)	Q25 (CFS) Q = CIAX(t)
CH-10	13.35	23.03	0.95	8.94	1.1	215.19
CH-2	10.00	7.41	0.79	8.94	1.1	57.81
CH-3	10.18	14.88	0.84	8.88	1.1	121.80
CH-4	15.08	5.11	0.17	7.23	1.1	7.09
CH-5	10.00	21.48	0.88	8.94	1.1	186.84
CB-1	10.00	1.25	0.95	8.94	1.1	11.65
CB-2	10.00	1.29	0.95	8.94	1.1	12.09
CB-3	10.00	1.29	0.95	8.94	1.1	12.07
CB-4	10.00	1.24	0.95	8.94	1.1	11.58
CB-9	10.00	0.93	0.95	8.94	1.1	6.87
CH-7	10.00	8.55	0.95	8.94	1.1	79.86
CH-9	10.00	13.21	0.91	8.94	1.1	117.88
CB-5	10.00	0.88	0.95	8.94	1.1	8.22
CB-6	10.00	1.40	0.95	8.94	1.1	13.11
CB-7	10.00	0.88	0.95	8.94	1.1	8.21
CB-8	10.00	1.40	0.95	7.14	1.1	10.46
CH-8	10.00	9.69	0.67	8.94	1.1	63.76
CH-1	15.85	13.44	0.32	7.12	1.1	33.25
CB-10	10.00	1.52	0.95	8.94	1.1	14.18
CB-18	10.00	2.56	0.95	8.94	1.1	23.88
CB-13	10.00	1.30	0.95	8.94	1.1	12.14
CB-14	10.00	0.94	0.73	8.94	1.1	6.74
CB-15	10.00	0.89	0.95	8.94	1.1	8.35
CB-16	10.00	0.90	0.95	8.94	1.1	8.45
CB-17	10.00	1.21	0.95	8.94	1.1	11.29
CB-11	10.00	1.06	0.95	8.94	1.1	9.88
CB-12	10.00	1.39	0.95	8.94	1.1	13.03
CB-19	10.00	1.90	0.95	8.94	1.1	17.78

4.3.1 Internal Storm Sewer Design

A storm sewer network will be used on the proposed development to convey runoff from the equipment areas to the proposed stormwater pond. Major equipment areas within the power plant such as the power block will have an internal storm sewer system to capture stormwater runoff and convey it to the stormwater pond for treatment.

The system was designed in accordance with the FDOT Drainage Manual (Reference 4). The system will utilize storm grate inlets located at low points to capture runoff. The system was designed to convey the runoff for the 25-year, 24-hour storm and peak flows were estimated using the Rational Method as described in Section 4.3. The system was modeled in StormCAD (Reference 11). Corrugated HDPE pipe was selected, with a minimum slope of 0.25% to maintain positive drainage. A minimum of one foot of freeboard was maintained between the hydraulic grade line and the top of concrete elevations of the equipment foundations. Refer to Appendix J for detailed calculations.

4.3.2 Swale Design

Swales will be constructed within each basin to capture flow draining off the equipment blocks and route it to the pond for treatment. In addition, the onsite swales will be used as pre-treatment BMPs to provide nutrient reduction for the site before the water enters the retention ponds. Refer to Section 4.1.1 for detailed water quality calculations.

The swales were designed in accordance with FDOT Drainage Manual (Reference 4). Sod lining was selected as the stabilization method, and the minimum side slopes are 4:1. The system was designed to convey the 25-year, 24-hour storm and peak flows were estimated using the Rational Method as described in Section 4.3. A Manning's roughness coefficient of 0.03 was used for swale calculations, consistent with a grassed, rough channel assumption listed in StormCAD (Reference 11). A minimum slope of 0.25% was utilized in the design and the swales were modeled to ensure at least one foot of freeboard was maintained between the hydraulic grade line and the top of the swale bank.

Based on Table 2.5 of the FDOT Drainage Manual, the maximum allowable velocity for sod lining is 4 ft/s. The maximum calculated velocity in the swales is 3.73 ft/sec therefore sod lining has been selected as the appropriate surfacing. To better ensure the system is free from erosion, additional rock check dams and rip rap outlets will be installed within the swales that will further help reduce the proposed velocities. Refer to Appendix J for detailed swale calculations.

5.0 Conclusion

Stormwater management for the JEA SJRPP Unit 3 combined-cycle natural gas facility was designed in accordance with SJRWMD, FDEP, FDOT, and local requirements. The design includes a dry retention basin, storm sewer network, culverts, and swales used to route stormwater, prevent flooding, and provide water quality treatment and quantity control. The retention basins and upstream swales achieve the required reductions in TN, TP, and TSS, maintain recovery times within regulatory limits, attenuate runoff from the 25-yr, 24-hr storm, and pass the 100-yr storm through the emergency spillway. The storm sewer and swale network is designed to maintain a minimum of one foot of freeboard between the HGL and the finished grade, stable velocities, and positive drainage. Post-development discharges do not exceed pre-development rates, and overall flows routed to the offsite wet pond are reduced compared to existing conditions. The Project meets the defined applicable regulatory criteria as shown in Table 5-1 and, based on the analyses performed and the proposed design, is not anticipated to result in adverse impacts to downstream waters, FEMA floodplains, or OFWs.

Table 5-1: SJRWMD Water Quality and Quantity Requirements Summary

St. Johns River Water Management District Dry Retention Requirements Summary								
Standard		Pre-Condition	Post-Condition	Required	Actual	Source	Notes	Report Location
Water Quantity: Post-Dev 25-year, 24-hour peak flow < Pre-Dev 25-year, 24-hour peak flow (SJRWMD Tier I Manual)		342.57	203.17	-	-	SJRWMD Vol II	-	Section 4.1 and Section 4.1.2
Water Quantity: Post-Dev Mean Annual 24-hour peak flow < Pre-Dev Mean Annual 24-hour peak flow (SJRWMD Tier I Manual) Post-Dev 25-year, 24-hour peak flow < 25-year, 24-hour peak flow (SJRWMD Tier I Manual)		135.19 (Mean Annual 24-hour peak flow) 342.57 (25-year, 24-hour peak flow)	52.54 (Dev Mean Annual 24-hour peak flow) 203.17 (25-year, 24-hour peak flow)	-	-	SJRWMD Vol II	-	Section 4.1 and Section 4.1.2
Water Quality: 1. 95 percent of the average annual post-development TSS load for those proposed projects located within a HUC 12 sub-watershed containing an Outstanding Florida Water (OFW). 2. Reduce TP by ≥90% and TN by ≥80%, or Ensure post-development nutrient loading is less than pre-development.	TSS:	(see notes)	(see notes)	95% reduction	95% reduction	SJRWMD Vol I	Compliance with SJRWMD Vol. I Sections 8.3.2–8.3.5 provides presumption that the proposed retention basin achieves the required ≥95% TSS reduction.	Section 4.1.1
	TN:	82.66 kg/yr	15.71 kg/yr	95% reduction	95% reduction			Section 4.1.1
	TP:	17.91 kg/yr	3.41 kg/yr	95% reduction	95% reduction			Section 4.1.1
Retention Volume: The first portion of runoff should be routed to the retention basin and percolated into the ground to meet the treatment criteria in sections 8.3 and 9.0 of Volume I.	B-01	-	-	15.30	21.88	FDEP Stormwater Quality Handbook - Appendix D	FDEP Appendix D was used to determine and initial minimum retention depth to reach an 85% nutrient reduction which was used as a starting point for retention depth calculations. Retention depth was increased as needed.	Section 4.1
	B-02	-	-	8.00	9.23			
Recovery Time: Demonstrates a recovery time of less than 72 hours with a safety factor of two (36 hours) for the treatment volume.	B-01	-	-	Max. 36 Hours	31.00	SJRWMD Vol II	-	Section 4.1
	B-02	-	-		10.75			

St. Johns River Water Management District Dry Retention Requirements Summary								
Standard	Pre-Condition		Post-Condition	Required	Actual	Source	Notes	Report Location
Outlet Structures: Pond includes a rectangular concrete riser structure with a rectangular weir outlet and a broad crested weir emergency spillway outlet. The Required Treatment Volume must be fully stored below the weir crest elevation. The 25-year, 24-hour storm highwater elevation must not overtop the outlet structure. 1-foot of freeboard must be maintained between the emergency spillway and the top of the embankment.	-		-	-	-	FDEP Stormwater Quality Handbook SJRWMD Vol II	-	Section 4.1
Side Slopes: No steeper than 3:1 (SJRWMD Tier I Manual) and 4:1 per FDEP Manual.	-		-	4:1	4:1	FDEP Stormwater Quality Handbook SJRWMD Vol I	-	Section 4.1
Pond Depth: Max pond depth of 12 feet. Mean depth should be at least 6' unless calcs show alternate depth is appropriate for the Site-specific conditions.	B-01	-	-	Max: 12' Mean: at least 6'	Max: 6.9' Mean: 6.9'	FDEP Stormwater Quality Handbook	-	-
	B-02	-	-	Max: 12' Mean: at least 6'	Max: 6' Mean: 6'			-
Pond Configuration: Basin L:W = 2:1 or greater	B-01	-	-	2:1 or greater	2:1	SJRWMD Vol I	-	-
	B-02				13:1			-

Appendix A. Site Location Map

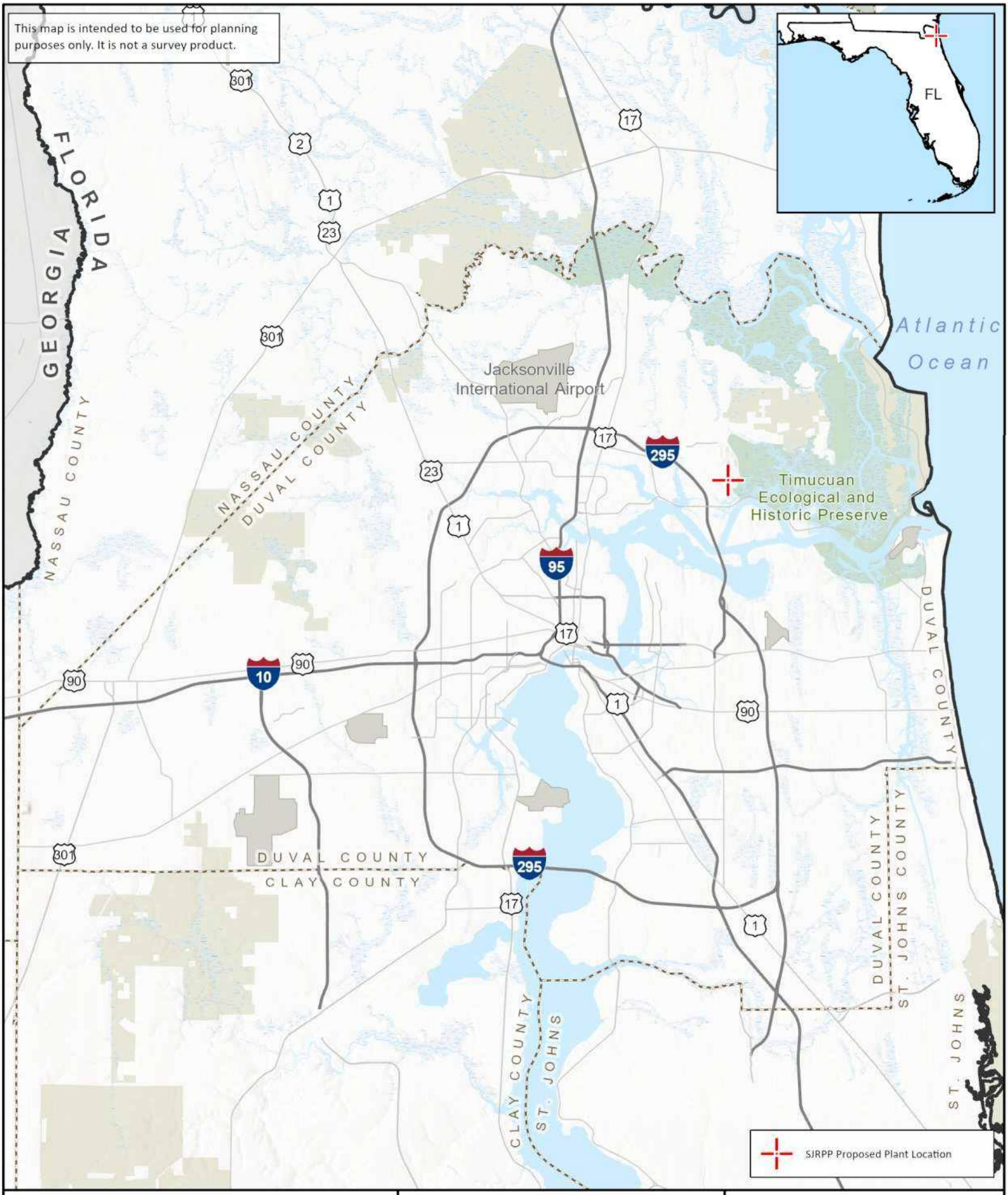


FIGURE 1-1
REGIONAL LOCATION OF SJRPP SITE

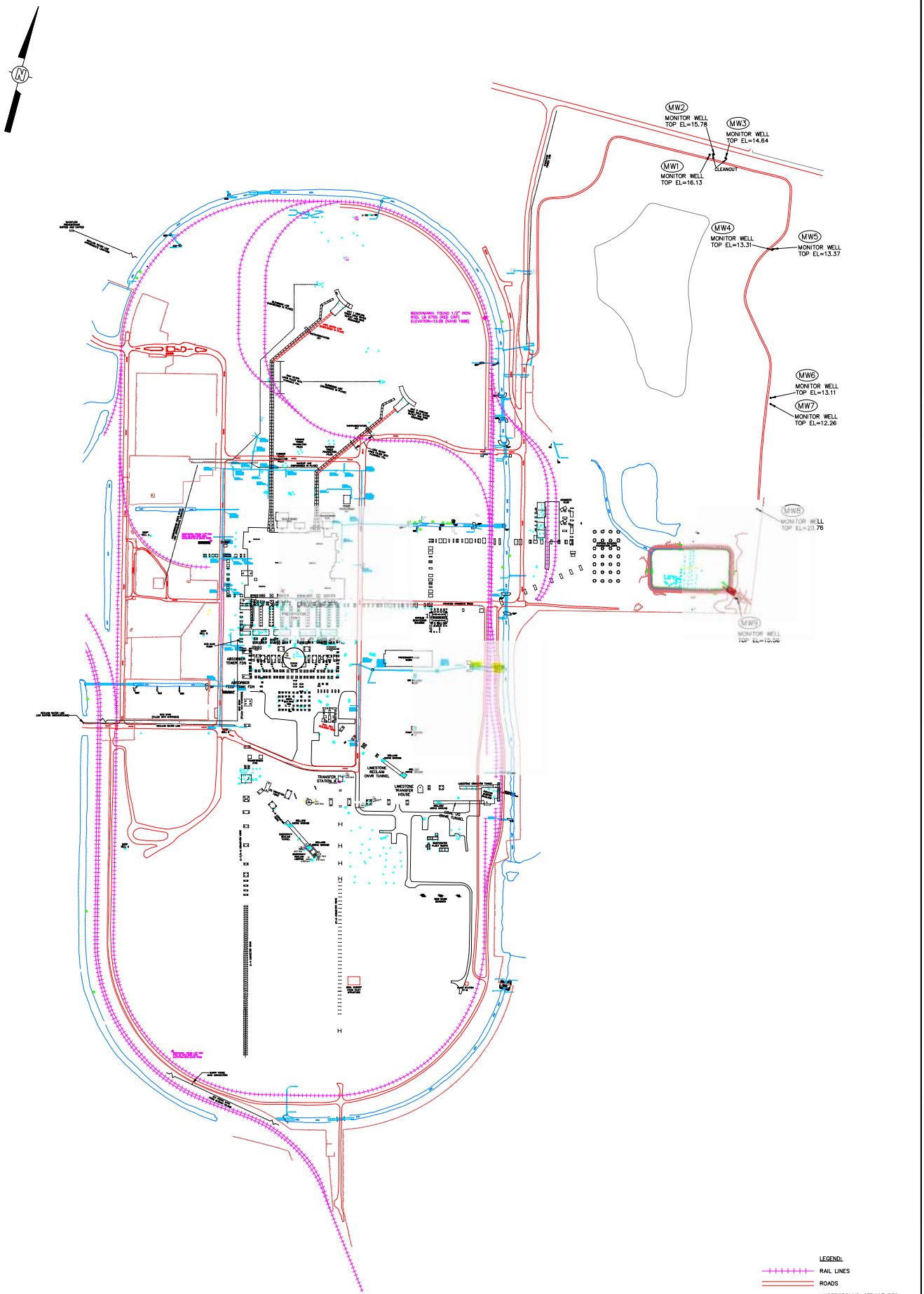
NP | 4/14/2026

0 2.5 5 Miles
Scale: 1:325,000

PCS: NAD 1983 2011 StatePlane Florida East FIPS 0901 Ft US

Sources: U.S. Census Bureau TIGER/Line Shapefiles.

Appendix B. JEA SJRPP Post-Demolition Underground Structures As-Build Survey – Dated 8/5/22



SCALE (FEET)

0 500' 1,000'

LEGEND:

- RAIL LINES
- ROADS
- UNDERGROUND STRUCTURES
- ABOVEGROUND STRUCTURES

NOTES:

1. THIS DRAWING WAS PREPARED FROM A COMBINATION OF THE BOATWRIGHT SURVEYING SITE TOPOGRAPHIC SURVEY AND HISTORIC SJRPP PLANT DRAWINGS (DBASCO). THE EXISTING SURFACE FEATURES ARE INCLUDED ON THIS DRAWING FOR REFERENCE.
2. BELOW GRADE STRUCTURES AND FOUNDATIONS WERE DEMOLISHED TO A NOMINAL DEPTH OF 3 FEET BELOW FINAL GRADE. THIS DRAWING SHOWS THE ROUGH OUTLINE OF THE REMAINING FOUNDATIONS, SUMPS AND PITS. SUMP AND PIT FLOORS WERE BREACHED AND LEFT IN PLACE. STRUCTURAL FOUNDATION PILES WERE LEFT IN PLACE.
3. THE SITE BASINS WERE BACKFILLED USING CLEAN ON-SITE FILL. THE COAL YARD RUNOFF POND, THE LIMESTONE YARD RUNOFF POND, CRUSHED CONCRETE WERE USED TO FILL THE SOUTH COAL RUNOFF POND, THE EQUALIZATION BASINS, AND THE OILY WATER BASINS. CRUSHED CONCRETE WAS NOT USED IN THE UPPER 3 FEET BELOW FINAL GRADE.
4. THE FOLLOWING DEEP FOUNDATIONS ARE MARKED IN THE FIELD WITH BOLLARDS. THE BOTTOMS OF THESE STRUCTURES WERE NOT BREACHED.
   - LIMESTONE RECLAIM SHAFT
   - LIMESTONE RECLAIM CONVEYOR TUNNEL EXIT
   - COAL YARD EMERGENCY RECLAIM SHAFT
   - COAL YARD RECLAIM CONVEYOR TUNNEL EXIT
   - COAL DUMPER BUILDING CONVEYOR TUNNEL EXIT
5. THE COAL DUMPER SHAFT, LIMESTONE DUMPER SHAFT, AND LIMESTONE CONVEYOR TUNNEL EXIT ARE NOT MARKED WITH BOLLARDS. THE LIMESTONE CONVEYOR TUNNEL EXIT WAS SEALED BELOW GRADE WITH A CAST-IN-PLACE REINFORCED CONCRETE WALL.
6. SECONDARY STORM MANHOLES, SANITARY SEWER MANHOLES, SANITARY LIFT STATIONS, AND ELECTRICAL MANHOLES WERE COMPLETELY REMOVED.
7. EXCEPT WHERE PIPING WAS IN CONFLICT WITH UNDERGROUND STRUCTURE REMOVAL, THE FOLLOWING WERE ABANDONED IN PLACE WITHOUT FILLING.
   - PROCESS PIPING
   - CONDUITS
   - FIRE PROTECTION
   - POTABLE WATER
   - SANITARY SEWER AND FORCE MAIN
   - SECONDARY STORM SEWER
   - BLOWDOWN LINE
   - MAKEUP WATER LINE
8. THE CIRCULATING WATER PIPING WAS DEMOLISHED IN PLACE BY BREAKING THE UPPER HALF OF HE PIPING INTO PIECES. THE BROKEN CONCRETE WAS LEFT IN PLACE AND THE REMAINING VOID BACKFILLED WITH CLEAN FILL. THE CIRCULATION WATER PIPING UNDER THE RAIL LINES REMAINS INTACT AND WAS BACKFILLED WITH FLOWABLE FILL.
9. ELECTRICAL DUCTBANKS WITHIN 3 FEET OF FINAL GRADE WERE REMOVED. THE DOT BANK REMINDERS WERE ABANDONED IN PLACE.
10. THE FIRE PROTECTION PIPING LOOP AROUND THE COAL YARD WAS COMPLETELY REMOVED.

OFFICE: JACKSONVILLE	DATE: 8-5-22	ACAD FILE: 9337B4	

SJRPP POST-DEMOLITION UNDERGROUND STRUCTURES

CLIENT: JEA		PM: GS	
LOCATION: SJRPP 11201 NEW BERLIN ROAD JACKSONVILLE, DUVAL COUNTY, FLORIDA			
DESIGNED: GD	DRAWN: SDJF	PROJECT NO.: 631229337	FIGURE: 1

Appendix C. NOAA Rainfall Precipitation Data

NOAA Atlas 14, Volume 9, Version 2
Location name: Jacksonville, Florida, USA*
Latitude: 30.4291°, Longitude: -81.5488°
Elevation: 17 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Deborah Martin, Sandra Pavlovic, Ishani Roy, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Michael Yekta, Geoffery Bonnin

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.544 (0.456-0.649)	0.627 (0.525-0.749)	0.761 (0.634-0.911)	0.869 (0.720-1.05)	1.02 (0.806-1.26)	1.12 (0.871-1.42)	1.23 (0.917-1.61)	1.34 (0.950-1.80)	1.48 (1.00-2.06)	1.58 (1.04-2.25)
10-min	0.796 (0.667-0.950)	0.918 (0.768-1.10)	1.11 (0.928-1.34)	1.27 (1.05-1.53)	1.49 (1.18-1.85)	1.65 (1.28-2.09)	1.80 (1.34-2.35)	1.96 (1.39-2.64)	2.16 (1.47-3.01)	2.31 (1.53-3.29)
15-min	0.971 (0.814-1.16)	1.12 (0.937-1.34)	1.36 (1.13-1.63)	1.55 (1.28-1.87)	1.81 (1.44-2.25)	2.01 (1.56-2.54)	2.20 (1.64-2.87)	2.39 (1.70-3.22)	2.64 (1.79-3.67)	2.82 (1.86-4.02)
30-min	1.44 (1.20-1.71)	1.66 (1.39-1.99)	2.03 (1.69-2.43)	2.33 (1.93-2.81)	2.73 (2.17-3.39)	3.03 (2.35-3.84)	3.33 (2.48-4.34)	3.62 (2.57-4.88)	3.99 (2.71-5.56)	4.27 (2.82-6.08)
60-min	1.89 (1.58-2.25)	2.17 (1.81-2.59)	2.64 (2.20-3.16)	3.04 (2.52-3.66)	3.61 (2.88-4.53)	4.06 (3.16-5.18)	4.53 (3.38-5.95)	5.02 (3.57-6.80)	5.68 (3.87-7.96)	6.20 (4.10-8.83)
2-hr	2.34 (1.97-2.77)	2.67 (2.25-3.16)	3.24 (2.72-3.86)	3.75 (3.12-4.48)	4.49 (3.62-5.62)	5.10 (4.00-6.48)	5.74 (4.32-7.51)	6.42 (4.61-8.68)	7.37 (5.06-10.3)	8.12 (5.40-11.5)
3-hr	2.59 (2.20-3.06)	2.94 (2.49-3.47)	3.56 (3.00-4.22)	4.14 (3.47-4.94)	5.02 (4.09-6.31)	5.77 (4.56-7.35)	6.58 (4.99-8.63)	7.46 (5.39-10.1)	8.72 (6.03-12.2)	9.75 (6.51-13.8)
6-hr	3.04 (2.60-3.57)	3.44 (2.93-4.04)	4.20 (3.56-4.94)	4.93 (4.16-5.84)	6.10 (5.02-7.67)	7.11 (5.67-9.06)	8.24 (6.31-10.8)	9.49 (6.92-12.8)	11.3 (7.88-15.7)	12.8 (8.61-18.0)
12-hr	3.53 (3.03-4.10)	4.03 (3.46-4.70)	5.00 (4.27-5.84)	5.94 (5.04-6.98)	7.43 (6.17-9.30)	8.74 (7.02-11.1)	10.2 (7.85-13.3)	11.8 (8.66-15.8)	14.1 (9.92-19.6)	16.1 (10.9-22.4)
24-hr	4.09 (3.54-4.72)	4.73 (4.09-5.48)	5.95 (5.12-6.91)	7.12 (6.09-8.30)	8.95 (7.47-11.1)	10.5 (8.52-13.2)	12.3 (9.53-15.9)	14.2 (10.5-19.0)	17.0 (12.0-23.4)	19.3 (13.2-26.7)
2-day	4.74 (4.14-5.44)	5.54 (4.82-6.36)	7.00 (6.07-8.07)	8.37 (7.21-9.70)	10.5 (8.81-12.9)	12.3 (10.0-15.3)	14.3 (11.2-18.3)	16.5 (12.3-21.8)	19.6 (13.9-26.7)	22.2 (15.2-30.5)
3-day	5.16 (4.52-5.90)	6.03 (5.27-6.90)	7.60 (6.62-8.73)	9.07 (7.85-10.5)	11.3 (9.52-13.8)	13.2 (10.8-16.4)	15.3 (12.0-19.5)	17.6 (13.1-23.1)	20.8 (14.8-28.2)	23.4 (16.1-32.1)
4-day	5.52 (4.85-6.29)	6.42 (5.63-7.32)	8.05 (7.03-9.21)	9.56 (8.29-11.0)	11.9 (10.0-14.4)	13.8 (11.3-17.0)	15.9 (12.5-20.2)	18.2 (13.6-23.9)	21.5 (15.4-29.1)	24.2 (16.7-33.1)
7-day	6.49 (5.74-7.36)	7.42 (6.54-8.41)	9.09 (7.99-10.3)	10.6 (9.29-12.2)	13.0 (11.0-15.7)	15.0 (12.3-18.4)	17.1 (13.5-21.6)	19.5 (14.6-25.4)	22.8 (16.4-30.7)	25.6 (17.7-34.7)
10-day	7.39 (6.56-8.34)	8.34 (7.39-9.42)	10.0 (8.86-11.4)	11.6 (10.2-13.2)	14.0 (11.9-16.8)	16.0 (13.2-19.4)	18.1 (14.3-22.7)	20.4 (15.4-26.4)	23.7 (17.1-31.7)	26.4 (18.4-35.7)
20-day	10.0 (8.95-11.2)	11.1 (9.94-12.5)	13.1 (11.6-14.7)	14.7 (13.0-16.7)	17.1 (14.6-20.2)	19.1 (15.8-22.9)	21.1 (16.8-26.1)	23.3 (17.6-29.8)	26.2 (19.0-34.7)	28.6 (20.0-38.4)
30-day	12.2 (10.9-13.6)	13.6 (12.2-15.1)	15.8 (14.1-17.7)	17.7 (15.7-19.9)	20.3 (17.3-23.7)	22.3 (18.5-26.6)	24.4 (19.4-29.9)	26.4 (20.1-33.5)	29.2 (21.2-38.3)	31.3 (22.0-41.9)
45-day	14.9 (13.4-16.5)	16.7 (15.0-18.6)	19.5 (17.5-21.8)	21.8 (19.5-24.5)	24.9 (21.2-28.8)	27.1 (22.6-32.0)	29.3 (23.4-35.6)	31.4 (23.9-39.5)	34.1 (24.8-44.4)	36.0 (25.5-48.0)
60-day	17.2 (15.5-19.0)	19.4 (17.5-21.5)	22.9 (20.6-25.4)	25.6 (22.9-28.6)	29.2 (24.9-33.5)	31.7 (26.4-37.2)	34.1 (27.3-41.2)	36.4 (27.7-45.4)	39.1 (28.4-50.6)	41.0 (29.0-54.5)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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PF graphical

Appendix D. NRCS Soil Map And Data

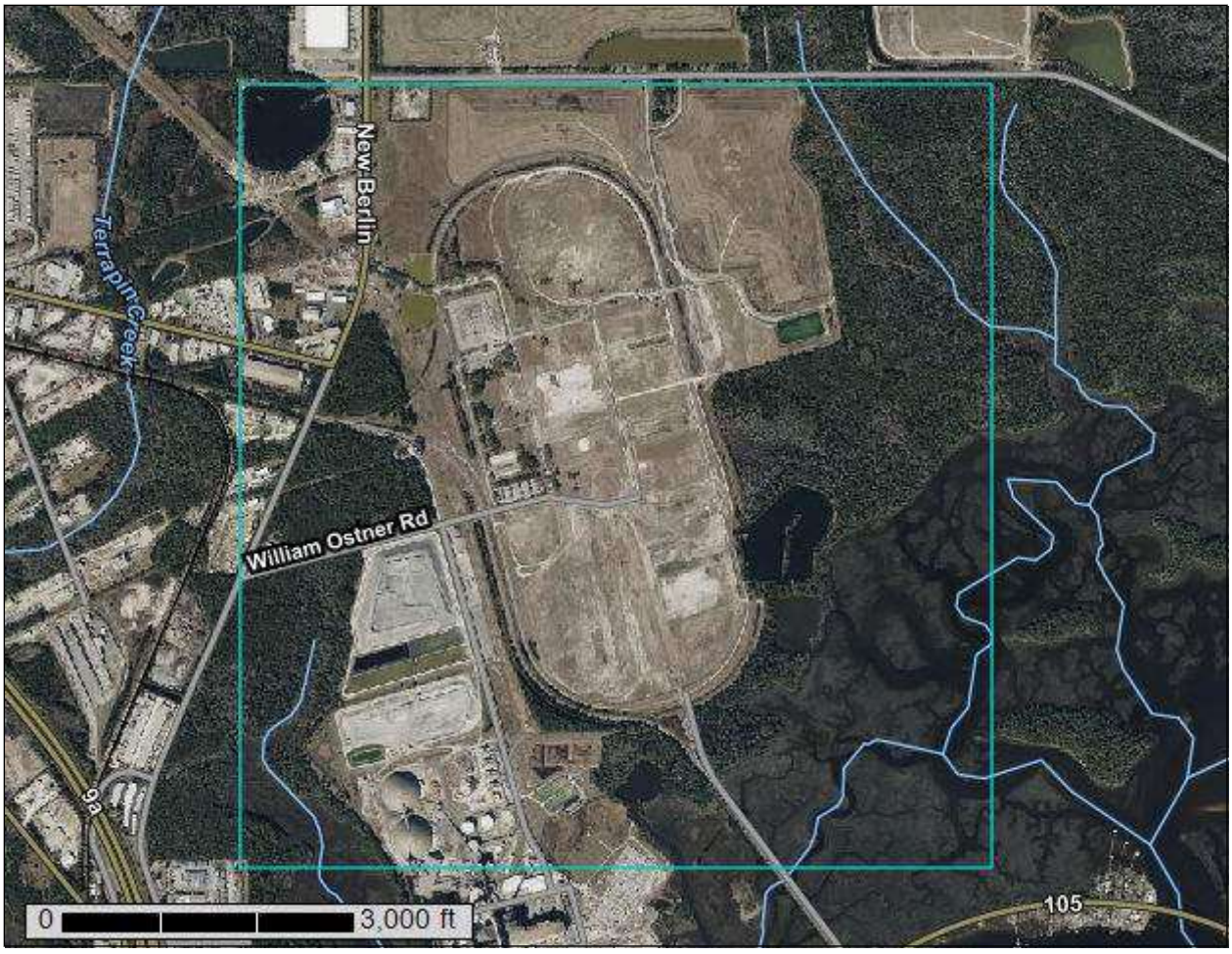
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

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

Custom Soil Resource Report for Duval County, Florida



October 31, 2025

Preface

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

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

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

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

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

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

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How Soil Surveys Are Made

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

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

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

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

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

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

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

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

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

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

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

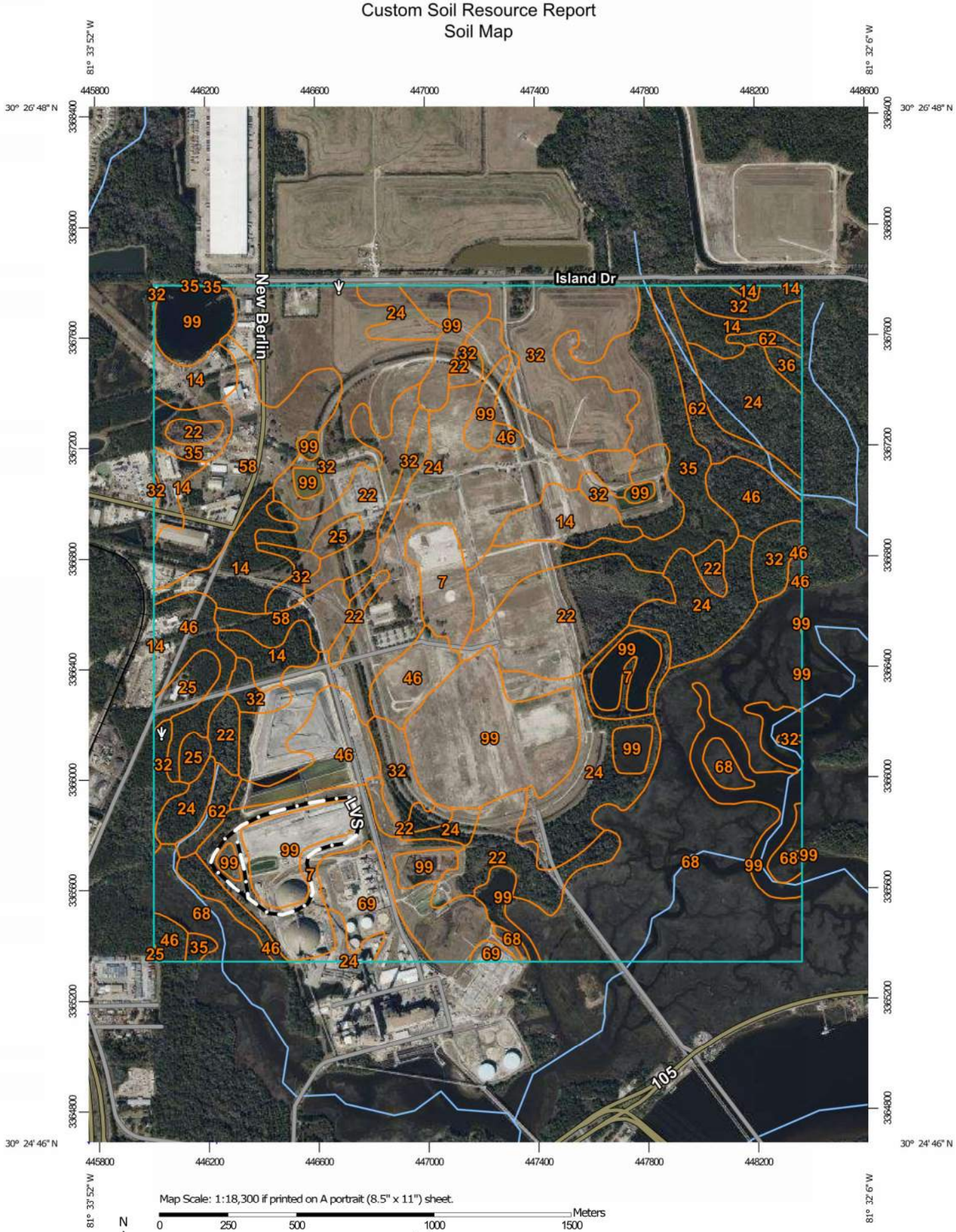
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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

Soil Map

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

Custom Soil Resource Report
Soil Map



Map Scale: 1:18,300 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 250 500 1000 1500

Feet: 0 500 1000 2000 3000

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

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

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

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

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

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

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

Soil Survey Area: Duval County, Florida
Survey Area Data: Version 20, Aug 28, 2025

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

Date(s) aerial images were photographed: Jan 7, 2022—Feb 14, 2022

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	Arents, nearly level	83.5	5.8%
14	Boulogne fine sand, 0 to 2 percent slopes	85.2	6.0%
22	Evergreen-Wesconnett complex, depressional, 0 to 2 percent slopes	133.6	9.3%
24	Hurricane and Ridgewood soils, 0 to 5 percent slopes	227.8	15.9%
25	Kershaw fine sand, 2 to 8 percent slopes	16.7	1.2%
32	Leon fine sand, 0 to 2 percent slopes	207.9	14.5%
35	Lynn Haven fine sand, 0 to 2 percent slopes	78.1	5.5%
36	Mandarin fine sand, 0 to 2 percent slopes	3.2	0.2%
46	Ortega fine sand, 0 to 5 percent slopes	99.1	6.9%
58	Pottsburg fine sand, high, 0 to 3 percent slopes	68.3	4.8%
62	Rutlege mucky fine sand, 0 to 2 percent slopes, frequently flooded	26.3	1.8%
68	Tisonia mucky peat, 0 to 1 percent slopes, very frequently flooded	193.1	13.5%
69	Urban land	24.9	1.7%
99	Water	183.6	12.8%
Totals for Area of Interest		**1,431.3**	**100.0%**

Map Unit Descriptions

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

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class.

Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

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

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

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

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

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

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

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

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The

pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

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

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

Duval County, Florida

7—Arents, nearly level

Map Unit Setting

National map unit symbol: sssw
Elevation: 0 to 120 feet
Mean annual precipitation: 48 to 60 inches
Mean annual air temperature: 64 to 72 degrees F
Frost-free period: 240 to 293 days
Farmland classification: Not prime farmland

Map Unit Composition

Arents and similar soils: 94 percent
Minor components: 6 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Arents

Setting

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

Typical profile

AC - 0 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Very high (19.98 to 50.02 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A
Forage suitability group: Forage suitability group not assigned (G153AA999FL)
Other vegetative classification: Forage suitability group not assigned (G153AA999FL)
Hydric soil rating: No

Minor Components

Corolla

Percent of map unit: 6 percent

Landform: Rises on dunes on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G153AA131FL)
Hydric soil rating: No

14—Boulogne fine sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: sst3
Elevation: 0 to 150 feet
Mean annual precipitation: 48 to 56 inches
Mean annual air temperature: 64 to 72 degrees F
Frost-free period: 263 to 293 days
Farmland classification: Not prime farmland

Map Unit Composition

Boulogne and similar soils: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Boulogne

Setting

Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 6 inches: fine sand
Bh - 6 to 16 inches: fine sand
E - 16 to 31 inches: fine sand
B'h1 - 31 to 39 inches: fine sand
B'h2 - 39 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: No

Minor Components

Lynn haven

Percent of map unit: 2 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: Yes

Pottsburg, high

Percent of map unit: 2 percent
Landform: Knolls on marine terraces, rises on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY050NC - Moist Spodosol Rises and Flats
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G153AA131FL)
Hydric soil rating: No

Wesconnett

Percent of map unit: 1 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G153AA145FL)
Hydric soil rating: Yes

22—Evergreen-Wesconnett complex, depressional, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: sstc
Elevation: 0 to 150 feet
Mean annual precipitation: 48 to 56 inches
Mean annual air temperature: 64 to 72 degrees F
Frost-free period: 263 to 293 days
Farmland classification: Not prime farmland

Map Unit Composition

Evergreen and similar soils: 63 percent
Wesconnett and similar soils: 33 percent
Minor components: 4 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Evergreen

Setting

Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Organic material over sandy marine deposits

Typical profile

Oa - 0 to 11 inches: muck
A - 11 to 17 inches: fine sand
E - 17 to 26 inches: fine sand
Bh - 26 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (0.20 to 20.00 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: High (about 12.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: A/D

Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Forage suitability group: Organic soils in depressions and on flood plains (G153AA645FL)
Other vegetative classification: Organic soils in depressions and on flood plains (G153AA645FL)
Hydric soil rating: Yes

Description of Wesconnett

Setting

Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Sandy marine deposits

Typical profile

A - 0 to 2 inches: fine sand
Bh - 2 to 32 inches: fine sand
E/Bh - 32 to 44 inches: fine sand
B'h - 44 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 6.00 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: A/D
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Forage suitability group: Sandy soils on stream terraces, flood plains, or in depressions (G153AA145FL)
Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G153AA145FL)
Hydric soil rating: Yes

Minor Components

Pamlico

Percent of map unit: 1 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: F153AY100NC - Flooded Organic Soil Flood Plains and Terraces

Other vegetative classification: Organic soils in depressions and on flood plains (G153AA645FL)
Hydric soil rating: Yes

Pottsburg

Percent of map unit: 1 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY050NC - Moist Spodosol Rises and Flats
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: No

Leon

Percent of map unit: 1 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: No

Lynn haven

Percent of map unit: 1 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: Yes

24—Hurricane and Ridgewood soils, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: sstf
Elevation: 0 to 190 feet
Mean annual precipitation: 48 to 56 inches
Mean annual air temperature: 64 to 72 degrees F
Frost-free period: 263 to 293 days
Farmland classification: Not prime farmland

Map Unit Composition

Hurricane and similar soils: 53 percent

Ridgewood and similar soils: 35 percent
Minor components: 12 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hurricane

Setting

Landform: Rises on marine terraces, flats on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 5 inches: fine sand
E - 5 to 68 inches: fine sand
Bh - 68 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (2.00 to 20.00 in/hr)
Depth to water table: About 24 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Very low (about 3.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: A
Ecological site: F153AY050NC - Moist Spodosol Rises and Flats
Forage suitability group: Sandy soils on rises and knolls of mesic uplands (G153AA131FL)
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G153AA131FL)
Hydric soil rating: No

Description of Ridgewood

Setting

Landform: Ridges on marine terraces, knolls on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 7 inches: fine sand
C - 7 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 5 percent

Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: About 18 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 3.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Ecological site: F153AY020NC - Moist Sands
Forage suitability group: Sandy soils on rises and knolls of mesic uplands (G153AA131FL)
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G153AA131FL)
Hydric soil rating: No

Minor Components

Pottsburg

Percent of map unit: 2 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY050NC - Moist Spodosol Rises and Flats
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: No

Mandarin

Percent of map unit: 2 percent
Landform: Rises on marine terraces, flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY050NC - Moist Spodosol Rises and Flats
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G153AA131FL)
Hydric soil rating: No

Leon

Percent of map unit: 2 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)

Hydric soil rating: No

Ortega

Percent of map unit: 2 percent
Landform: Knolls on marine terraces, rises on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY020NC - Moist Sands
Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G153AA121FL)
Hydric soil rating: No

Boulogne

Percent of map unit: 2 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: No

Lynn haven

Percent of map unit: 2 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: Yes

25—Kershaw fine sand, 2 to 8 percent slopes

Map Unit Setting

National map unit symbol: sstg
Elevation: 0 to 190 feet
Mean annual precipitation: 48 to 56 inches
Mean annual air temperature: 64 to 72 degrees F
Frost-free period: 263 to 293 days
Farmland classification: Not prime farmland

Map Unit Composition

Kershaw and similar soils: 94 percent
Minor components: 6 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kershaw

Setting

Landform: Knolls on marine terraces, rises on marine terraces
Landform position (three-dimensional): Side slope, interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 3 inches: fine sand
C - 3 to 80 inches: fine sand

Properties and qualities

Slope: 2 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Very high (20.00 to 99.90 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: A
Ecological site: F153AY010NC - Dry Sands
Forage suitability group: Sandy soils on ridges and dunes of xeric uplands (G153AA111FL)
Other vegetative classification: Sandy soils on ridges and dunes of xeric uplands (G153AA111FL)
Hydric soil rating: No

Minor Components

Blanton

Percent of map unit: 3 percent
Landform: Ridges on marine terraces, knolls on marine terraces
Landform position (three-dimensional): Side slope, interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY030NC - Dry Loamy Rises and Flats
Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G153AA121FL)
Hydric soil rating: No

Ortega

Percent of map unit: 3 percent
Landform: Knolls on marine terraces, rises on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex

Across-slope shape: Linear
Ecological site: F153AY020NC - Moist Sands
Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G153AA121FL)
Hydric soil rating: No

32—Leon fine sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2sxqv
Elevation: 0 to 250 feet
Mean annual precipitation: 47 to 61 inches
Mean annual air temperature: 55 to 81 degrees F
Frost-free period: 267 to 347 days
Farmland classification: Not prime farmland

Map Unit Composition

Leon, non-hydric, and similar soils: 89 percent
Minor components: 11 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Leon, Non-hydric

Setting

Landform: Flatwoods
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 8 inches: fine sand
E - 8 to 18 inches: fine sand
Bh - 18 to 37 inches: fine sand
E' - 37 to 45 inches: fine sand
B'h - 45 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 2.00 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 4.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: No

Minor Components

Leon, hydric

Percent of map unit: 5 percent
Landform: Flatwoods
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

Mandarin

Percent of map unit: 3 percent
Landform: Rises
Landform position (three-dimensional): Rise, talf
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G153AA131FL)
Hydric soil rating: No

Mascotte

Percent of map unit: 3 percent
Landform: Flatwoods
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: Yes

35—Lynn Haven fine sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: ssts
Elevation: 0 to 150 feet
Mean annual precipitation: 48 to 56 inches
Mean annual air temperature: 64 to 72 degrees F
Frost-free period: 263 to 293 days
Farmland classification: Not prime farmland

Map Unit Composition

Lynn haven and similar soils: 92 percent

Minor components: 8 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lynn Haven

Setting

Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 13 inches: fine sand
E - 13 to 21 inches: fine sand
Bh - 21 to 62 inches: fine sand
B/C - 62 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 6.00 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: High (about 10.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: Yes

Minor Components

Leon

Percent of map unit: 2 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: No

Evergreen

Percent of map unit: 2 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Organic soils in depressions and on flood plains (G153AA645FL)
Hydric soil rating: Yes

Wesconnett

Percent of map unit: 2 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G153AA145FL)
Hydric soil rating: Yes

Boulogne

Percent of map unit: 2 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: No

36—Mandarin fine sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2sxql
Elevation: 0 to 250 feet
Mean annual precipitation: 39 to 62 inches
Mean annual air temperature: 53 to 81 degrees F
Frost-free period: 209 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Mandarin and similar soils: 92 percent
Minor components: 8 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mandarin

Setting

Landform: Rises
Landform position (three-dimensional): Rise, talf
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 7 inches: fine sand
E - 7 to 13 inches: fine sand
Bh - 13 to 18 inches: fine sand
E' - 18 to 62 inches: fine sand
B'h - 62 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (1.28 to 19.98 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A
Forage suitability group: Sandy soils on rises and knolls of mesic uplands (G153AA131FL)
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G153AA131FL)
Hydric soil rating: No

Minor Components

Leon

Percent of map unit: 5 percent
Landform: Flatwoods
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: Yes

Centenary

Percent of map unit: 1 percent
Landform: Rises
Landform position (three-dimensional): Rise, talf
Down-slope shape: Linear, convex

Across-slope shape: Linear
Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G153AA121FL)
Hydric soil rating: No

Rutlege

Percent of map unit: 1 percent
Landform: Drainageways, depressions
Down-slope shape: Linear, concave
Across-slope shape: Concave
Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G153AA145FL)
Hydric soil rating: Yes

Ortega

Percent of map unit: 1 percent
Landform: Ridges, marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G153AA121FL)
Hydric soil rating: No

46—Ortega fine sand, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: ssv4
Elevation: 0 to 190 feet
Mean annual precipitation: 48 to 56 inches
Mean annual air temperature: 64 to 72 degrees F
Frost-free period: 263 to 293 days
Farmland classification: Not prime farmland

Map Unit Composition

Ortega and similar soils: 93 percent
Minor components: 7 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ortega

Setting

Landform: Knolls on marine terraces, rises on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Eolian or sandy marine deposits

Typical profile

A - 0 to 5 inches: fine sand
C - 5 to 82 inches: fine sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: About 42 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Ecological site: F153AY020NC - Moist Sands
Forage suitability group: Sandy soils on rises, knolls, and ridges of mesic uplands (G153AA121FL)
Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G153AA121FL)
Hydric soil rating: No

Minor Components

Hurricane

Percent of map unit: 2 percent
Landform: Rises on marine terraces, flats on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY050NC - Moist Spodosol Rises and Flats
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G153AA131FL)
Hydric soil rating: No

Ridgewood

Percent of map unit: 2 percent
Landform: Ridges on marine terraces, knolls on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY020NC - Moist Sands
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G153AA131FL)
Hydric soil rating: No

Kershaw

Percent of map unit: 2 percent
Landform: Knolls on marine terraces, rises on marine terraces
Landform position (three-dimensional): Side slope, interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY010NC - Dry Sands

Other vegetative classification: Sandy soils on ridges and dunes of xeric uplands (G153AA111FL)
Hydric soil rating: No

Albany
Percent of map unit: 1 percent
Landform: Ridges on marine terraces, knolls on marine terraces
Landform position (three-dimensional): Interfluve, talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY040NC - Moist Loamy Rises and Flats
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G153AA131FL)
Hydric soil rating: No

58—Pottsburg fine sand, high, 0 to 3 percent slopes

Map Unit Setting
National map unit symbol: ssvj
Elevation: 10 to 190 feet
Mean annual precipitation: 48 to 56 inches
Mean annual air temperature: 64 to 72 degrees F
Frost-free period: 263 to 293 days
Farmland classification: Not prime farmland

Map Unit Composition
Pottsburg, high, and similar soils: 93 percent
Minor components: 7 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pottsburg, High

Setting
Landform: Knolls on marine terraces, rises on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile
A - 0 to 3 inches: fine sand
E - 3 to 57 inches: fine sand
Bh - 57 to 80 inches: fine sand

Properties and qualities
Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)

Depth to water table: About 12 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 4.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: No

Minor Components

Hurricane

Percent of map unit: 2 percent
Landform: Rises on marine terraces, flats on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY050NC - Moist Spodosol Rises and Flats
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G153AA131FL)
Hydric soil rating: No

Boulogne

Percent of map unit: 2 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: No

Leon

Percent of map unit: 1 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: No

Ridgewood

Percent of map unit: 1 percent
Landform: Ridges on marine terraces, knolls on marine terraces
Landform position (three-dimensional): Interfluve

Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY020NC - Moist Sands
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G153AA131FL)
Hydric soil rating: No

Pottsburg

Percent of map unit: 1 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY050NC - Moist Spodosol Rises and Flats
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G153AA131FL)
Hydric soil rating: No

62—Rutlege mucky fine sand, 0 to 2 percent slopes, frequently flooded

Map Unit Setting

National map unit symbol: ssvn
Elevation: 0 to 190 feet
Mean annual precipitation: 48 to 56 inches
Mean annual air temperature: 64 to 72 degrees F
Frost-free period: 263 to 293 days
Farmland classification: Not prime farmland

Map Unit Composition

Rutlege, flooded, and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rutlege, Flooded

Setting

Landform: Flood plains on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Parent material: Sandy marine deposits and/or fluviomarine deposits

Typical profile

A1 - 0 to 10 inches: mucky fine sand
A2 - 10 to 14 inches: fine sand
Cg - 14 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained

Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 5.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: A/D
Ecological site: F153AY090NC - Flooded Mineral Soil Flood Plains and Terraces
Forage suitability group: Sandy soils on stream terraces, flood plains, or in depressions (G153AA145FL)
Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G153AA145FL)
Hydric soil rating: Yes

Minor Components

Boulogne

Percent of map unit: 3 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: No

Evergreen

Percent of map unit: 3 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Organic soils in depressions and on flood plains (G153AA645FL)
Hydric soil rating: Yes

Surrency, flooded

Percent of map unit: 2 percent
Landform: Flood plains on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F153AY060NC - Wet Loamy Flats and Depressions
Other vegetative classification: Sandy over loamy soils on stream terraces, flood plains, or in depressions (G153AA245FL)
Hydric soil rating: Yes

Lynn haven

Percent of map unit: 2 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F153AY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: Yes

68—Tisonia mucky peat, 0 to 1 percent slopes, very frequently flooded

Map Unit Setting

National map unit symbol: ssvv
Elevation: 0 to 150 feet
Mean annual precipitation: 48 to 56 inches
Mean annual air temperature: 64 to 72 degrees F
Frost-free period: 263 to 293 days
Farmland classification: Not prime farmland

Map Unit Composition

Tisonia and similar soils: 96 percent
Minor components: 4 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tisonia

Setting

Landform: Tidal marshes on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Organic material over clayey alluvium

Typical profile

Oe - 0 to 18 inches: mucky peat
Cg - 18 to 65 inches: clay

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: Very frequent
Frequency of ponding: None
Maximum salinity: Strongly saline (16.0 to 32.0 mmhos/cm)

Sodium adsorption ratio, maximum: 35.0
Available water supply, 0 to 60 inches: Very high (about 12.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Ecological site: R153BY140NC - Tidal Marsh on Organic Soil
Forage suitability group: Forage suitability group not assigned (G153AA999FL)
Other vegetative classification: Forage suitability group not assigned (G153AA999FL)
Hydric soil rating: Yes

Minor Components

Boulogne

Percent of map unit: 2 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F153BY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G153AA141FL)
Hydric soil rating: No

Leon, tidal

Percent of map unit: 1 percent
Landform: Tidal marshes on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: F153BY070NC - Wet Spodosol Flats and Depressions
Other vegetative classification: Forage suitability group not assigned (G153AA999FL)
Hydric soil rating: Yes

Maurepas

Percent of map unit: 1 percent
Landform: Flood plains on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F153AY100NC - Flooded Organic Soil Flood Plains and Terraces
Other vegetative classification: Organic soils in depressions and on flood plains (G153AA645FL)
Hydric soil rating: Yes

69—Urban land

Map Unit Setting

National map unit symbol: ssvw
Elevation: 0 to 190 feet
Mean annual precipitation: 48 to 56 inches
Mean annual air temperature: 64 to 72 degrees F
Frost-free period: 263 to 293 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting

Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: No parent material

Interpretive groups

Land capability classification (irrigated): None specified
Forage suitability group: Forage suitability group not assigned (G153AA999FL)
Other vegetative classification: Forage suitability group not assigned (G153AA999FL)
Hydric soil rating: Unranked

Minor Components

Pelham, hydric

Percent of map unit: 1 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned (G153AA999FL)
Hydric soil rating: Yes

Hurricane

Percent of map unit: 1 percent
Landform: Rises on marine terraces, flats on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear

Other vegetative classification: Forage suitability group not assigned (G153AA999FL)
Hydric soil rating: No

Leon

Percent of map unit: 1 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned (G153AA999FL)
Hydric soil rating: No

Ortega

Percent of map unit: 1 percent
Landform: Knolls on marine terraces, rises on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned (G153AA999FL)
Hydric soil rating: No

Albany

Percent of map unit: 1 percent
Landform: Ridges on marine terraces, knolls on marine terraces
Landform position (three-dimensional): Interfluve, talf
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Forage suitability group not assigned (G153AA999FL)
Hydric soil rating: No

99—Water

Map Unit Composition

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

Description of Water

Interpretive groups

Land capability classification (irrigated): None specified
Forage suitability group: Forage suitability group not assigned (G153AA999FL)
Other vegetative classification: Forage suitability group not assigned (G153AA999FL)
Hydric soil rating: Unranked

Soil Information for All Uses

Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

Soil Qualities and Features

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

Hydrologic Soil Group

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

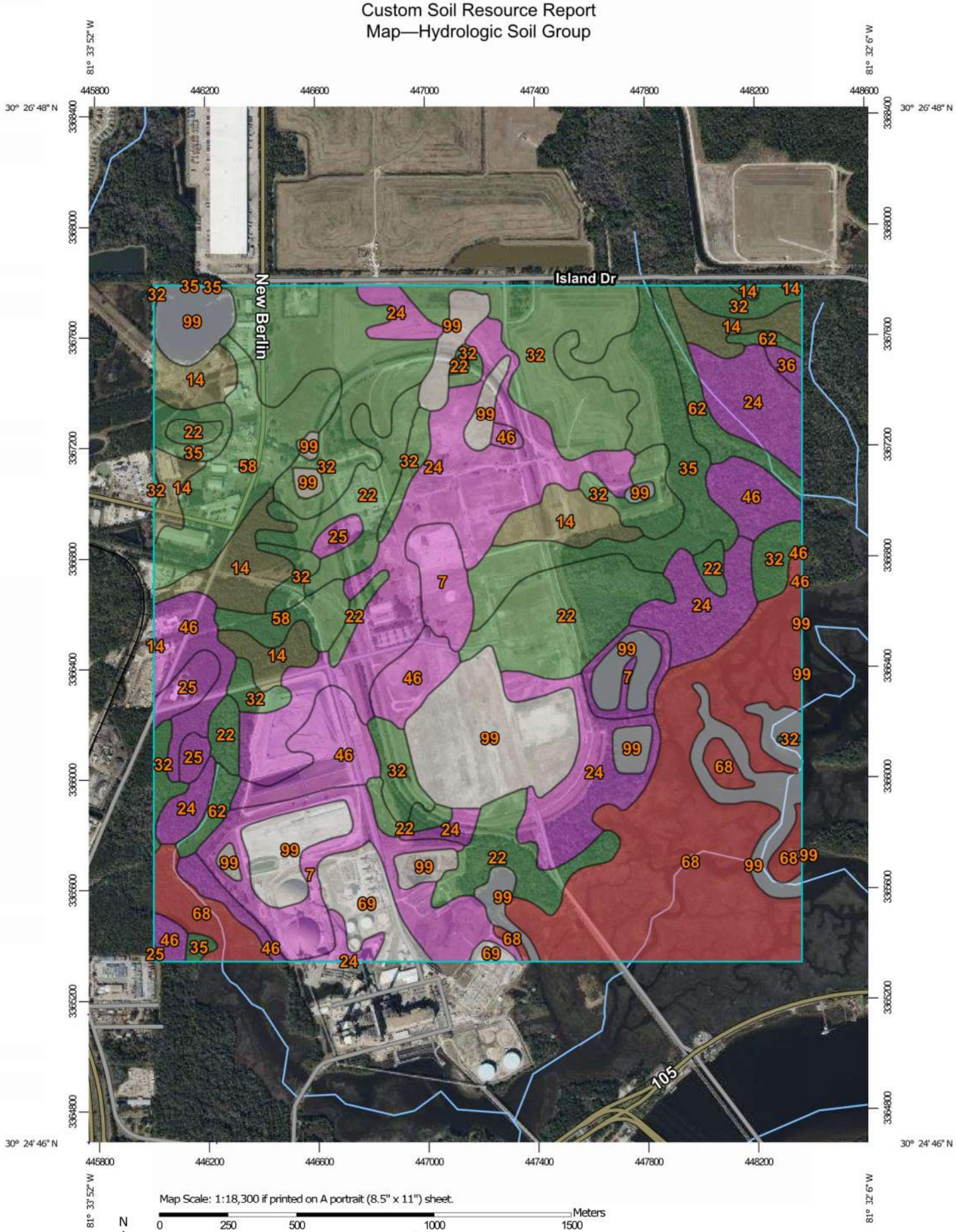
Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

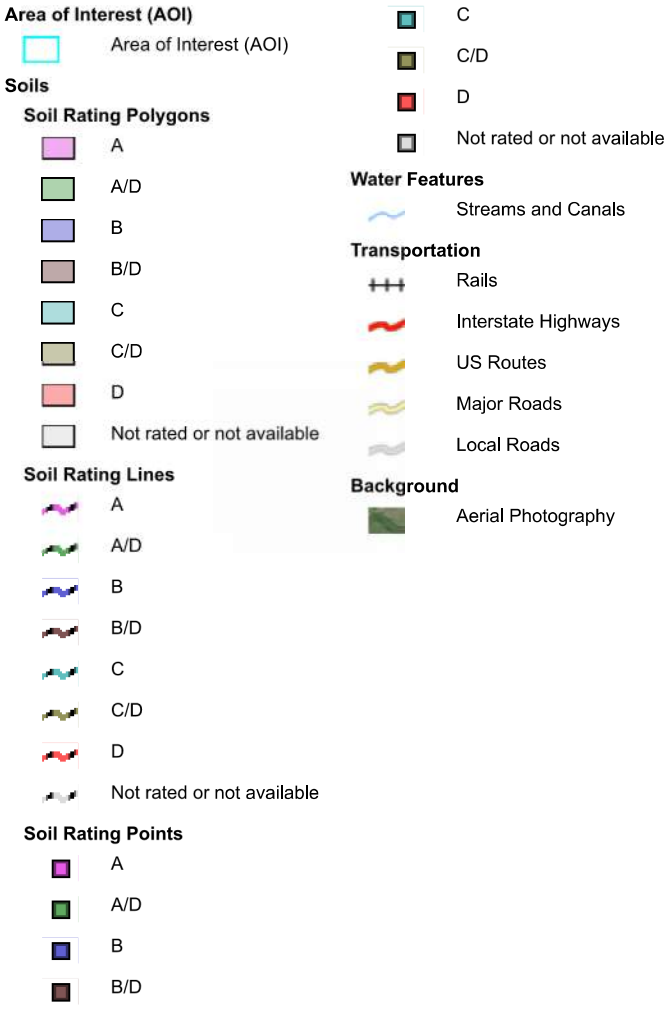
Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Custom Soil Resource Report
Map—Hydrologic Soil Group



MAP LEGEND



MAP INFORMATION

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

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

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

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

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

Soil Survey Area: Duval County, Florida
Survey Area Data: Version 20, Aug 28, 2025

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

Date(s) aerial images were photographed: Jan 7, 2022—Feb 14, 2022

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.

Table—Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
7	Arents, nearly level	A	83.5	5.8%
14	Boulogne fine sand, 0 to 2 percent slopes	C/D	85.2	6.0%
22	Evergreen-Wesconnett complex, depressional, 0 to 2 percent slopes	A/D	133.6	9.3%
24	Hurricane and Ridgewood soils, 0 to 5 percent slopes	A	227.8	15.9%
25	Kershaw fine sand, 2 to 8 percent slopes	A	16.7	1.2%
32	Leon fine sand, 0 to 2 percent slopes	A/D	207.9	14.5%
35	Lynn Haven fine sand, 0 to 2 percent slopes	A/D	78.1	5.5%
36	Mandarin fine sand, 0 to 2 percent slopes	A	3.2	0.2%
46	Ortega fine sand, 0 to 5 percent slopes	A	99.1	6.9%
58	Pottsburg fine sand, high, 0 to 3 percent slopes	A/D	68.3	4.8%
62	Rutlege mucky fine sand, 0 to 2 percent slopes, frequently flooded	A/D	26.3	1.8%
68	Tisonia mucky peat, 0 to 1 percent slopes, very frequently flooded	D	193.1	13.5%
69	Urban land		24.9	1.7%
99	Water		183.6	12.8%
Totals for Area of Interest			**1,431.3**	**100.0%**

Rating Options—Hydrologic Soil Group

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

References

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Appendix E. FEMA Flood Map

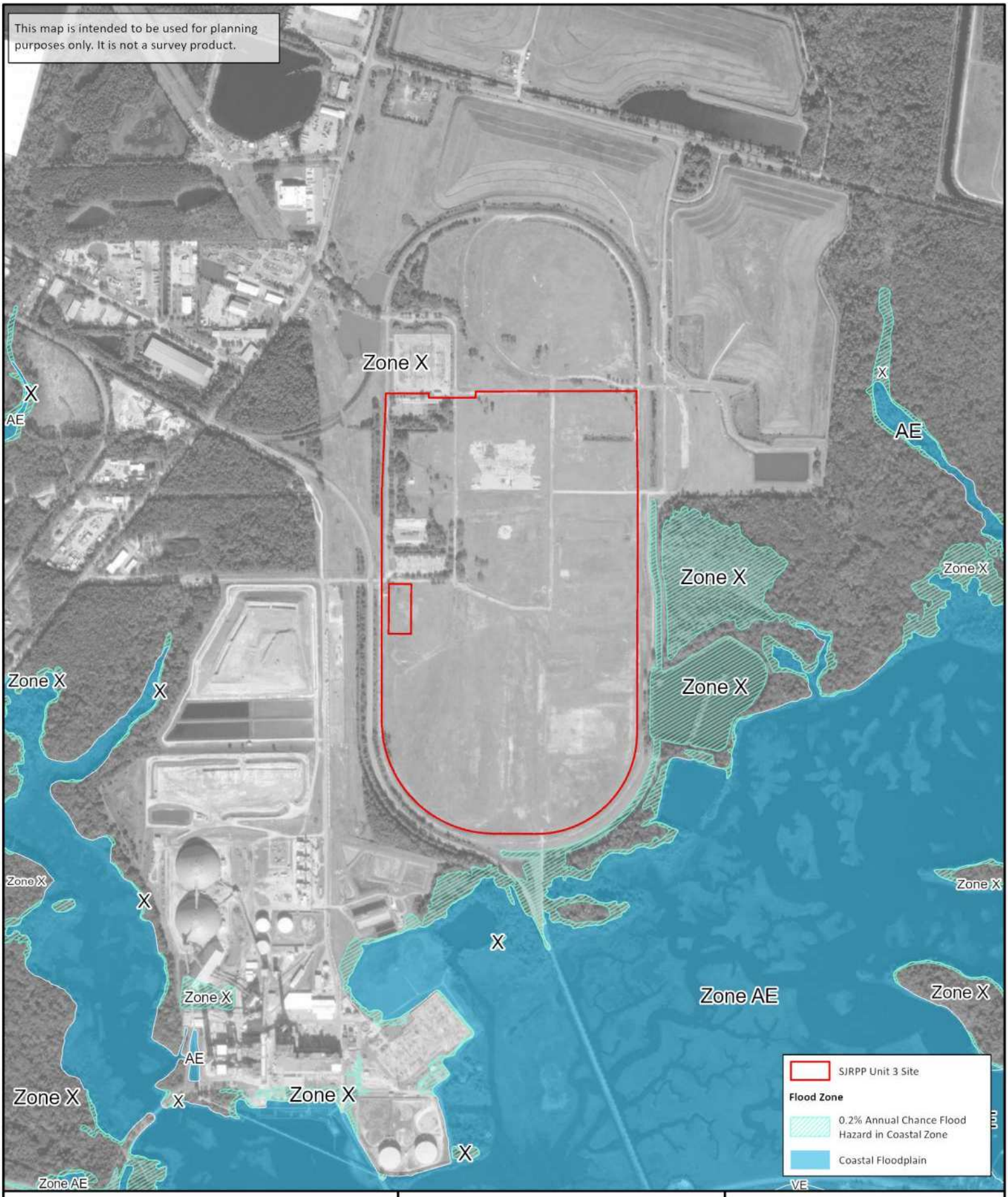


FIGURE 3-5
100-YEAR FLOOD ZONES ON SJRPP SITE

NP | 4/10/2026

0 500 1,000
US Feet
Scale: 1:13,000

PCS: NAD 1983 2011 StatePlane Florida East FIPS 0901 Ft US

Sources: Duval County, 2023; FEMA, 2025

JEA

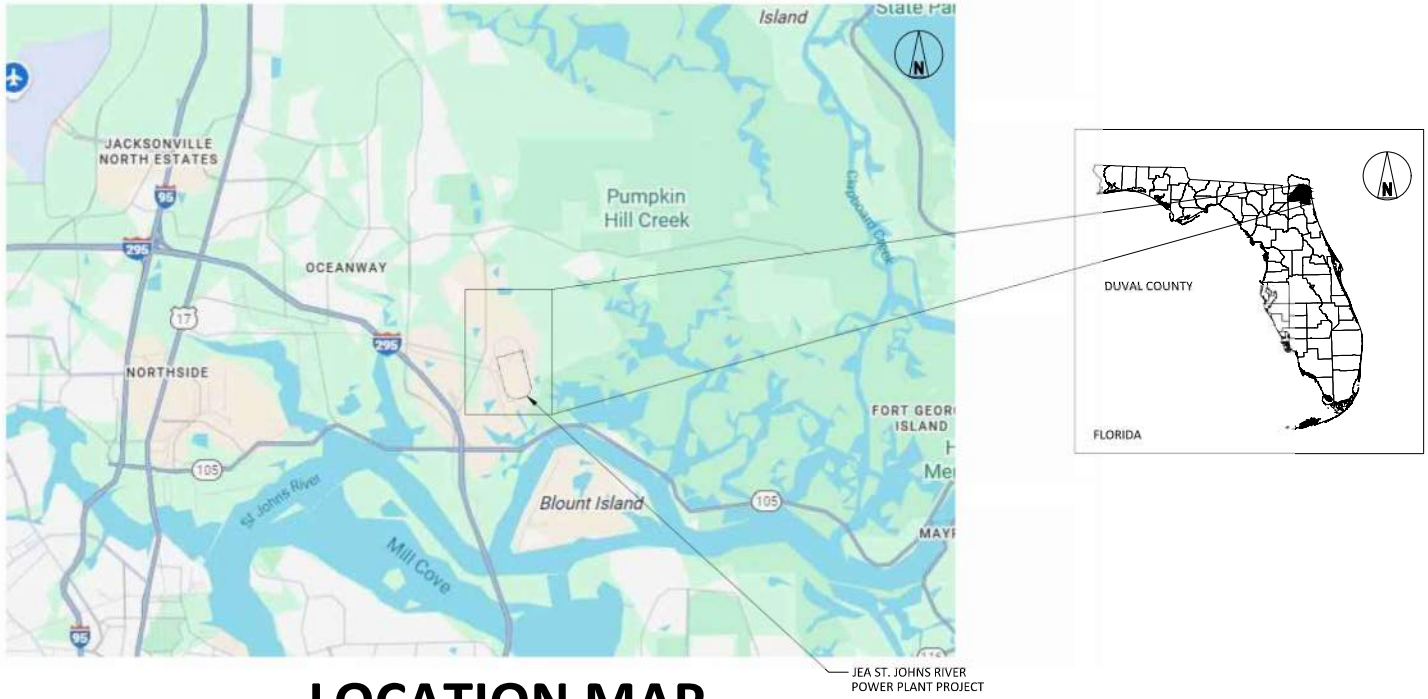
Appendix F. Post-Development Stormwater Design Drawings

JEA ST. JOHNS RIVER POWER PLANT (SJRPP)
PROJECT UNIT 3
STORMWATER MANAGEMENT SYSTEM PLANS

SECTION 12, 13, TOWNSHIP 1S, RANGE 27E
11201 NEW BERLIN ROAD
CITY OF JACKSONVILLE, DUVAL COUNTY, FLORIDA

INDEX OF PLANS

SHEET NO.	DESCRIPTION
424014-DS-0000	COVER SHEET
424014-DS-1000	OVERALL PLOT PLAN
424014-DS-1001	SITE ARRANGMENT
424014-DS-1101	PRE-DEVELOPMENT STORMWATER MANAGEMENT PLAN-PERMANENT REDEVELOPMENT AREA
424014-DS-1102	PROPOSED STORMWATER MANAGEMENT PLAN-PERMANENT REDEVELOPMENT AREA
424014-DS-1103	CONTACT STORMWATER MANAGEMENT PLAN
424014-DS-1104	PROPOSED STORMWATER MANAGEMENT SECTIONS AND DETAILS
424014-DS-1110	PROPOSED GRADING & DRAINAGE PLAN
424014-DS-1111	GRADING & DRAINAGE PLAN SECTIONS AND DETAILS
424014-DS-1120	EROSION AND SEDIMENT CONTROL PLAN
424014-DS-1121	EROSION CONTROL SECTIONS AND DETAILS



LOCATION MAP

NOT TO SCALE

NOT TO BE USED FOR CONSTRUCTION

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2	05/01/2026	ISSUED FOR INFORMATION	IDM	AEK	OC	JCB	JCB
1	03/18/2026	ISSUED FOR INFORMATION	IDM	AEK	OC	JCB	JCB
0	03/31/2026	ISSUED FOR INFORMATION	IDM	AEK	OC	JCB	JCB

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PROJ. ENGINEER	DRAWN
CHECKED	DATE

JEA
SJRPP UNIT 3
COVER SHEET

PROJECT: 424014-DS-0000
DRAWING NUMBER
REV: 3
CODE
AREA

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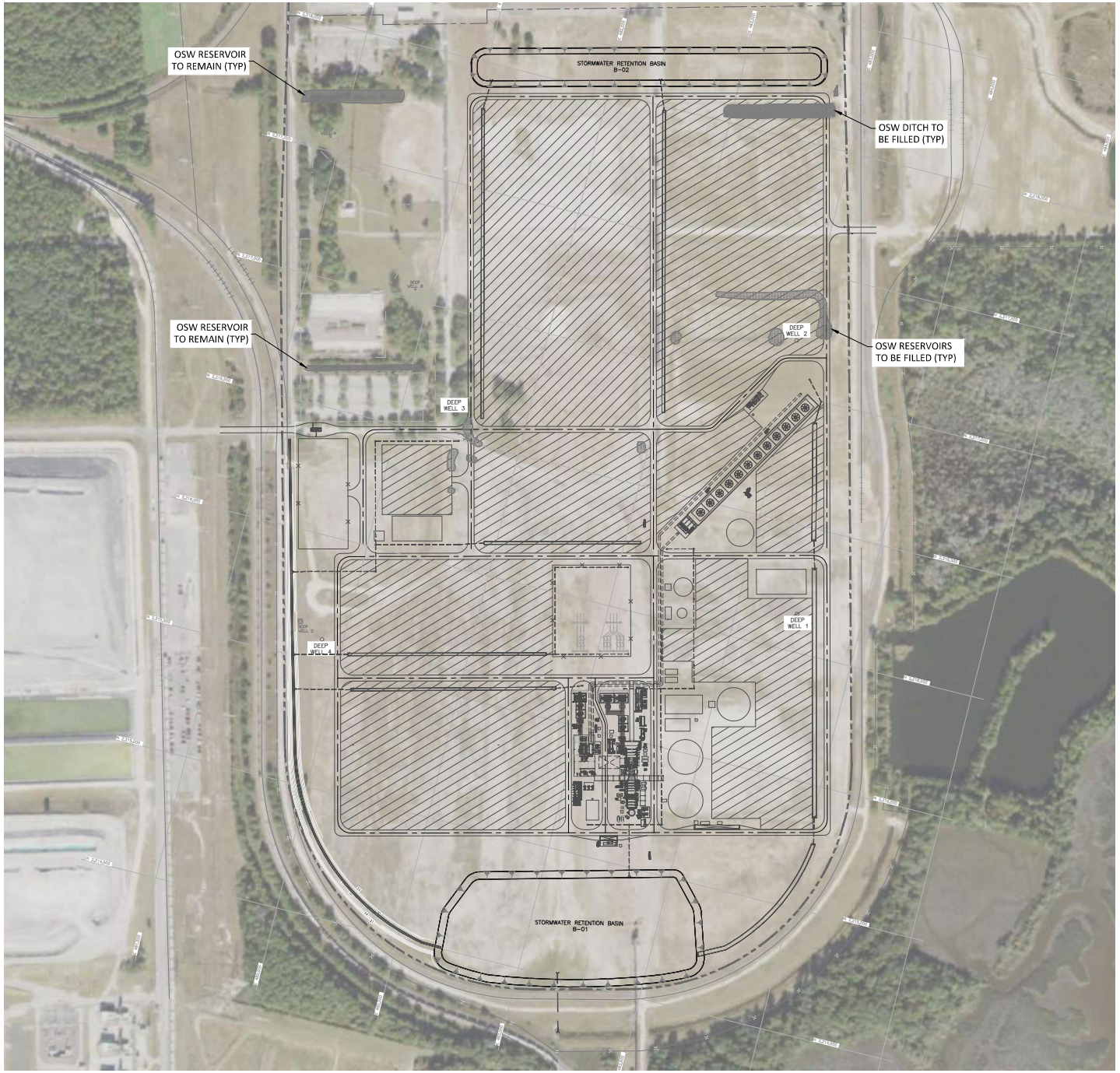

JEA ST JOHNS RIVER POWER PLANT PROJECT

LAND OWNER: JEA

APPLICANT/LESSEE/PROJECT DEVELOPER: JEA

ENGINEER:

JOHN BARRANCO JR, P.E.
BLACK & VEATCH CORPORATION
12740 GRAN BAY PKWY, SUITE 250
JACKSONVILLE, FL 32216

SURVEYOR:

SEE NOTE ON PRE-DEVELOPMENT STORMWATER MANAGEMENT PLAN PERMANENT REDEVELOPMENT AREA (DS-1101) REGARDING SURVEY.

1. PROJECT NAME: JEA SJRPP UNIT 3
2. LOCATION: JACKSONVILLE, FLORIDA
3. LAND USE: EXISTING LAND USE: PUBLIC BUILDINGS AND FACILITIES
   FUTURE LAND USE: INDUSTRIAL SACTUARY
4. PROJECT DESCRIPTION: 706MW NEW COMBINED CYCLE NATURAL GAS FACILITY
5. SEC/TOWN/RANGE: SECTIONS 12, 13, TOWNSHIP 1S, RANGE 27E
6. TOTAL PROPERTY AREA: 1,600 AC
7. TOTAL PROJECT DEVELOPMENT AREA: 194 AC
8. ZONING: PBF-1 (PUBLIC BUILDING AND FACILITIES)
9. FLOOD ZONE: PROJECT LIMITS ARE COVERED UNDER FEMA FIRM MAP NUMBER 12031C0216J EFFECTIVE DATE: NOVEMBER 02, 2018.

"PROJECT LIMITS ARE WITHIN FEMA ZONE X, WITH THE NEAREST ADJACENT ZONE AE HAVING AN ESTABLISHED BFE OF 6FT – NAVD88. THE LOWEST SITE GRADE ELEVATION AROUND EQUIPMENT IS 18FT – NAVD88 THEREFORE SIGNIFICANTLY HIGHER THAN THE NEAREST ESTABLISHED 100 YEAR ELEVATION"

10. UTILITY SERVICE: JEA
11. PROPERTY SETBACKS: NONE (PBF-1 ZONING)
12. MAXIMUM HEIGHT OF STRUCTURE: NONE (PBF-1 ZONING)
13. OTHER SURFACE WATER (OSW) IMPACTS: 1.3 AC
14. PROPOSED: IMPERVIOUS AND PERVIOUS TABLE SUMMARY

OPERATION PHASE SITE ACREAGE AND SURFACING

SUB BASIN	TOTAL AREA		PERVIOUS	IMPERVIOUS*	BASIN SURFACE AREA IMPERVIOUS
	ACRES	% IMPERVIOUS	ACRES	ACRES	ACRES
B-01	111.2	77%	35.6	75.6	10.5
B-02	56.4	85%	13.6	42.8	5.0
B-03**	28.0	28%	20.3	7.7	0.0
Total	195.6	72%	69.5	126.1	15.5

*Impervious areas include equipment areas, storage tanks, laydown areas, roads, and proposed buildings.
**Area to not be modified, CN assumptions taken from the JEA St. Johns River Power Park Decommissioning and Restoration Drainage Analysis Report (Adkinson Engineering, November 2017). Total impervious area estimated based on background imagery.

15. PROPOSED PROJECT LIMITS SURFACING SUMMARY

POST-DEVELOPMENT PROJECT LIMITS SURFACING SUMMARY

SUB BASIN	ACRES	CURVE NUMBER	STORMWATER SYSTEM
B-01	111.2	95	Proposed Pond - B-01
B-02	56.4	94	Proposed Pond - B-02
B-03*	28.0	77	Unmodified Area
Total Drainage Area/ Weighted CN	195.6	92	

*For the purposes of this study, the curve number basis from the JEA St. Johns River Power Park Decommissioning and Restoration Report prepared by Adkinson Engineering, Dated November 30,2017 was utilized.

16. EXISTING PROJECT LIMITS SURFACING SUMMARY

PRE-DEVELOPMENT PROJECT LIMITS SURFACING SUMMARY

SUB BASIN	ACRES	CURVE NUMBER*	STORMWATER SYSTEM
PR-2 MODIFIED	48.0	77	Existing offsite perimeter drainagechannel
PR-3 MODIFIED	34.9	70	Existing offsite perimeter drainagechannel
PR-4 MODIFIED	20.8	77	Existing offsite perimeter drainagechannel
PR-6	91.4	67	Existing offsite perimeter drainagechannel
POND OVERFLOW MODIFIED	0.7	97	Existing offsite perimeter drainagechannel
Total Drainage Area/ Weighted CN	195.8	71	

*For the purposes of this study, the curve number basis from the JEA St. Johns River Power Park Decommissioning and Restoration Drainage Analysis Report (Adkinson Engineering, November 2017) was used for all pre-development basins.

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PLANT NORTH
TRUE NORTH
14°

150' 75' 0 150' 300'
1"=150'

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1	03/18/2026	ISSUED FOR INFORMATION	JDM	AEK	OC	JCB	JCB
0	03/10/2026	ISSUED FOR INFORMATION	JDM	AEK	OC	JCB	JCB

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BLACK & VEATCH

OWNER	DRAWN
CHECKED	DATE

JEA
SJRPP UNITS 3
OVERALL PLOT PLAN

PROJECT 424014-DS-1000
DRAWING NUMBER
REV 3
CODE
AREA

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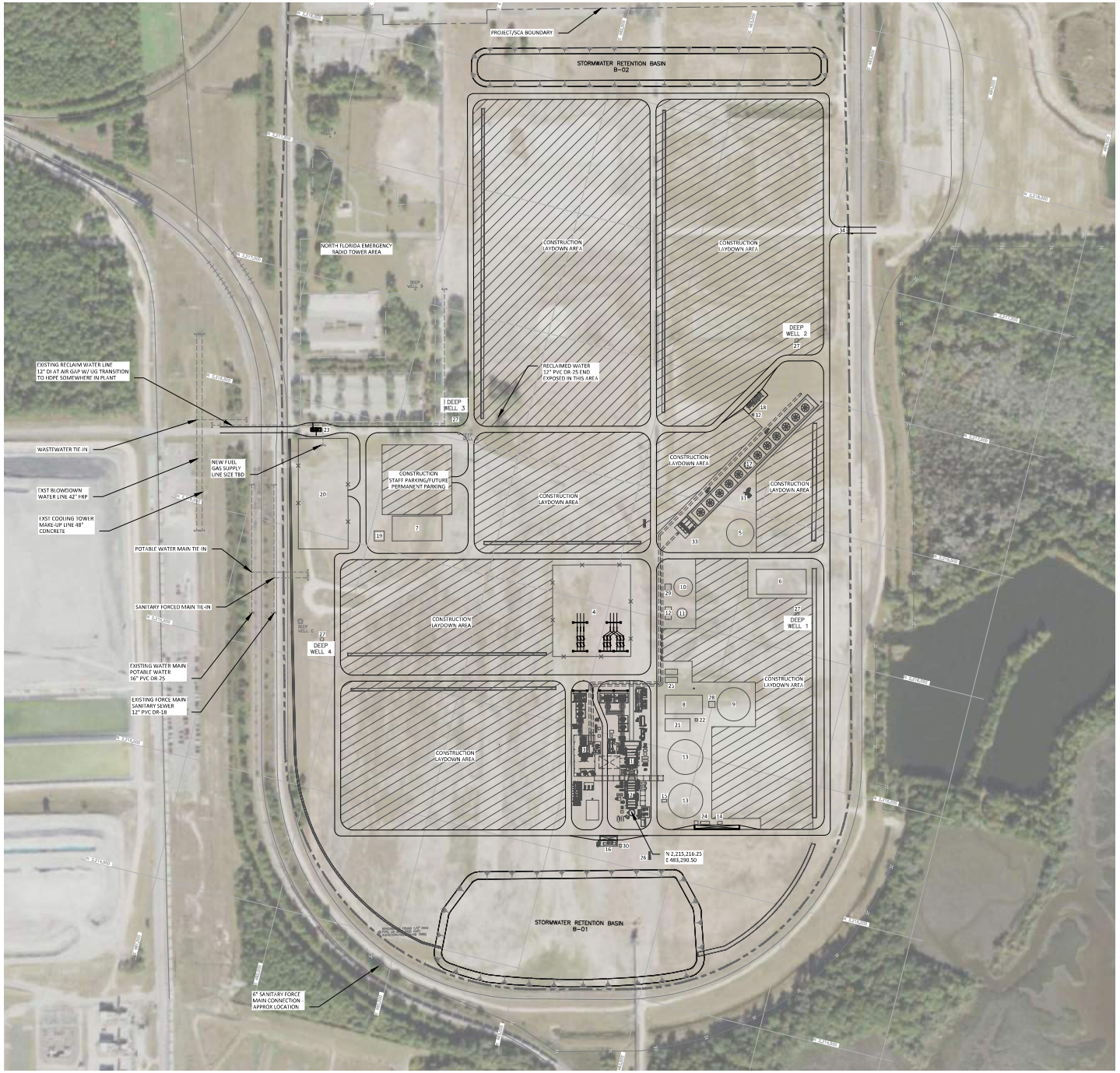

FACILITIES LEGEND

ID	FACILITY	REMARKS
1	COMBUSTION TURBINE	
2	HEAT RECOVERY STEAM GENERATOR	
3	STEAM TURBINE	
4	COLLECTOR YARD	
5	RECLAIMED WATER TANK	
6	WAREHOUSE/SHOP/MAINTENANCE BUILDING	
7	ADMINISTRATION/CONTROL BUILDING	
8	WATER TREATMENT BUILDING	
9	DEMINERALIZED WATER STORAGE TANK	
10	SERVICE/FIRE WATER STORAGE TANK	
11	FIRE WATER STORAGE TANK	
12	FIRE PROTECTION PUMPS	
13	LIQUID FUEL STORAGE TANK (DOUBLE WALL TANK)	
14	FUEL UNLOADING PUMP SKID	
15	FUEL FORWARDING PUMP SKID	
16	AMMONIA STORAGE TANKS	
17	COOLING TOWER	
18	COOLING TOWER CHEMICAL FEED BUILDING	
19	SANITARY LIFT STATION	
20	PGS M & R YARD	
21	COMPRESSED GAS STORAGE	
22	WATER TREATMENT WASTEWATER COLLECTION SUMP	
23	GUARD HOUSE	
24	EMERGENCY DIESEL GENSET	
25	MOBILE DEMIN TRAILER AREA	
26	OIL/WATER SEPARATOR	
27	DEEP WELLS	
28	DEMINERALIZED WATER PUMP SKID	
29	SERVICE WATER PUMP SKID	
30	RUNOFF SUMP	
31	TRANSFORMER & PDC	
32	COOLING TOWN CHEM UNLOADING SUMP	
33	PLANT DRAINS OIL WATER SEPARATOR	
34	BADGE ACCESSIBLE SECURITY GATE	

GENERAL NOTES

1. THE EQUIPMENT LAYOUT SHOWN IS CONCEPTUAL IN NATURE AND IS INTENDED SOLELY FOR PROJECT PLANNING AND PERMITTING. IT SHOULD NOT BE USED AS A FINAL DESIGN OR ANY CONSTRUCTION IMPLEMENTATION PURPOSES. ALL DIMENSIONS, ELEVATIONS, EQUIPMENT LAYOUTS OR PLAINMETRIC FEATURES SHOWN ON THIS DRAWING ARE SUBJECT TO CHANGE AND BE VERIFIED BY A QUALIFIED ENGINEER BEFORE ANY APPLICATION.
2. VERTICAL DATUM IS BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 - NAVD88 (US FEET)
3. HORIZONTAL DATUM IS BASED ON FLORIDA STATE PLANE, EAST ZONE - NAD83 (US FEET)

LEGEND

NEW EQUIPMENT

PROPOSED PROJECT BOUNDARY

NEW FENCE

LAYDOWN AREA

NOT TO BE USED FOR CONSTRUCTION

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PLANT NORTH
14°
TRUE NORTH

150' 75' 0 150' 300'
1"=150'

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0	09/10/2026	ISSUED FOR INFORMATION	JDK	AFK	OC	JCB	JCB

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DRAWN	DRAWN
CHECKED	DATE

JEA
SJRPP UNITS 3
1X1 COMBINED CYCLE
SITE ARRANGEMENT

PROJECT	DRAWING NUMBER	REV
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CODE		
AREA		

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PRE-DEVELOPMENT PROJECT LIMITS SURFACING SUMMARY			
SUB BASIN	ACRES	CURVE NUMBER*	STORMWATER SYSTEM
PR-2 MODIFIED	48.0	77	Existing offsite perimeter drainage channel
PR-3 MODIFIED	34.9	70	Existing offsite perimeter drainage channel
PR-4 MODIFIED	20.8	77	Existing offsite perimeter drainage channel
PR-6	91.4	67	Existing offsite perimeter drainage channel
POND OVERFLOW MODIFIED	0.7	97	Existing offsite perimeter drainage channel
Total Drainage Area/ Weighted CN	195.8	71	

*For the purposes of this study, the curve number from the JEA St. Johns River Power Park Decommissioning and Restoration Drainage Analysis Report (Atkinson Engineering, November 2017) was used as the basis for all pre-development basins.

NOTES

1. ELEVATIONS ARE REPORTED AS NAVD88.
2. ALL EXISTING FEATURES SHOWN ON THIS DRAWING ARE REFERENCED FROM JEA PROVIDED AS-BUILT SURVEY: SJRPP POST-DEMOLITION UNDERGROUND STRUCTURES DATED 8-5-22.
3. EXISTING ELEVATIONS ARE REFERENCED FROM JEA PROVIDED CONSTRUCTION AS-BUILT SURVEY: 2021-1689 CLIENT NO ZONES DWG, DATED 2021.
4. FEMA 100 YEAR FLOOD ELEVATIONS ARE BASED ON THE NATIONAL FLOODINSURANCE FIRM MAP NO. 12031C0210J EFFECTIVE DATE OF 11/02/2018. THE PROPOSED PROJECT DEVELOPMENT IS WITHIN FEMA ZONE X, HOWEVER ZONE AE IS DIRECTLY ADJACENT TO THE SITE AND SHOWN FOR REFERENCE.
5. THE PERIMETER CHANNEL IS THE LINEAR POINT OF ANALYSIS FOR PRE- AND POST-DEVELOPMENT CONDITIONS.
6. THIS EXISTING POND IS CURRENTLY THE PERMITTED SCA OUTFALL LOCATION. THE EXISTING POND DISCHARGES TO BROWNS CREEK. FOR ADDITIONAL INFORMATION REGARDING THIS OUTFALL LOCATION AND ASSOCIATED PERMITTING UNITS, REFER TO THE JEA ST. JOHNS RIVER POWER PARK DECOMMISSIONING AND DEMOLITION PLANS PREPARED BY ATKINSON ENGINEERING, DATED NOVEMBER 30, 2017.
7. THE PROJECT UTILIZES THE PROJECT BOUNDARY AS THE HYDROLOGIC CONTROL POINT FOR PRE- AND POST-DEVELOPMENT STORMWATER CALCULATIONS. PROPOSED PROJECT IMPROVEMENTS ARE LOCATED UPSTREAM OF THIS CONTROL POINT AND MODIFICATIONS ARE PROPOSED BETWEEN THE PROJECT BOUNDARY AND THE EXISTING PERMITTED OUTFALL ACCORDINGLY, BASED ON THE PROPOSED CONDITIONS, PRE- AND POST-DEVELOPMENT DISCHARGE CRITERIA ARE DEMONSTRATED TO BE MET AT THE EXISTING PERMITTED OUTFALL.

LEGEND

- PRE-DEVELOPMENT BASIN LINEWORK
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- PROPOSED PROJECT BOUNDARY
- GRADE SURFACE FLOW INDICATOR
- FEMA 100-YEAR FLOOD ZONE
- OSW RESERVOIRS
- OSW DITCHES
- (OF) BASIN OUTFALL LOCATION

NOT TO BE USED FOR CONSTRUCTION

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0	02/12/2024	ISSUED FOR INFORMATION	JDM	ACK	CC	JCB	JCB

SCALE 1"=200'

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SJRPP UNIT 3
PRE-DEVELOPMENT STORMWATER MANAGEMENT PLAN - PERMANENT REDEVELOPMENT AREA

PROJECT	DRAWING NUMBER	REV
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AREA		

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POST-DEVELOPMENT PROJECT LIMITS SURFACING SUMMARY

SUB BASIN	ACRES	CURVE NUMBER	STORMWATER SYSTEM
B-01	111.2	95	Proposed Pond - B-01
B-02	56.4	94	Proposed Pond - B-02
B-03*	28.0	77	Unmodified Area
Total Drainage Area/ Weighted CN	195.7	92	

*For the purposes of this study, the curve number basis from the JEA St. Johns River Power Park Decommissioning and Restoration Report prepared by Atkinson Engineering, Dated November 30,2017 was utilized.

WATER QUALITY ATTENUATION SUMMARY

	25-Year, 24-Hour Water Quality Attenuation Check (cfs)	Mean Annual 24-Hour Storm Water Quality Attenuation Check (cfs)
Pre-Development - Combined Basins (PR-2, PR-3, PR-4, PR-6, POND OVERFLOW)	342.57	135.19
Post-Development - Combined Basins - No Pond (B-01, B-02, B-03)	598.11	315.88
Post-Development - Combined Basins - With Ponds (B-01, B-02, B-03)	203.19	52.55

B-01 Dry Retention Basin Summary Table - Summary

Total Area Draining to Pond (ac)	=	111.2				
Rainfall Depth (25-yr, 24-hr) in	=	8.95				
Rainfall Depth (Mean Annual 24-hr) in	=	5				
Min. Dry Retention Depth (in)	=	1.76				
Min. Dry Retention Volume (ac-ft)	=	16.32				
Dry Retention Basin Summary Table						
Basin Side Slopes	=	4				
	Elevation (ft)	Cumulative Volume (cf)*				
Bottom of Sand Medium (ft)	5.6	0				
Top of Sand Medium (ft)	6.6	0				
Bottom of Basin Elevation	6.80	0				
Elevation at Minimum Required Dry Retention Storage (ft)	8.40	709491				
Rectangular Weir Elevation	8.50	826385				
25-Year, 24-Hr Duration Storm Peak	11.36	2015445				
Riser Crest Elevation (riser grate) (ft)	11.50	2210723				
Emergency Overflow Weir	12.50	2452010				
100-Year, 24-Hr Duration Storm Peak (BV Check)	13.01	2694901				
Top of Embankment	13.50	2904344				
Dry Retention Basin Conclusions						
Freeboard for 25-Year Design High Water and Top of Embankment (ft)	=	2.13	PASS	Min.	1	ft
Check to Ensure 100-Year Design High Water does not Overtop Embankment (ft)	=	13.01	PASS	Max.	13.50	ft
Freeboard for Top of Riser and Spillway Crest (ft)	=	1.30	PASS	Min.	1	ft
25-Year Design Highwater Check (ft)	=	11.35	PASS	Max.	12.50	ft
Dry Retention Volume (ac-ft)	=	18.97	PASS	Min.	16.32	ac-ft
Recovery Time to Recover Specified Dry Retention Volume (hrs)**	=	51.08	PASS	Max.	96	hrs
25-Year, 24-Hour Peak Flow (cfs)	=	53.88				
Mean Annual 24-Hour Peak Flow (cfs)	=	9.99				

*Volumes reported on the table do not account for any soil storage provided by the sand infiltration medium.

B-02 Dry Retention Basin Summary Table - Summary

Total Area Draining to Pond (ac)	=	56.4				
Rainfall Depth (25-yr, 24-hr) in	=	8.95				
Rainfall Depth (Mean Annual 24-hr) in	=	5				
Min. Dry Retention Depth (in)	=	1.70				
Min. Dry Retention Volume (ac-ft)	=	8.00				
Dry Retention Basin Summary Table						
Basin Side Slopes	=	4				
	Elevation (ft)	Cumulative Volume (cf)*				
Bottom of Sand Medium (ft)	11	0				
Top of Sand Medium (ft)	12	0				
Bottom of Basin Elevation	12.00	0				
Elevation at Minimum Required Dry Retention Storage (ft)	14.20	350024				
Rectangular Weir Elevation	14.50	402,174				
25-Year, 24-Hr Duration Storm Peak	16.44	765,358				
Riser Crest Elevation (riser grate) (ft)	16.00	678,654				
Emergency Overflow Weir	17.00	878,874				
100-Year, 24-Hr Duration Storm Peak (BV Check)	17.40	961,530				
Top of Embankment	18.00	1,090,434				
Dry Retention Basin Conclusions						
Freeboard for 25-Year Design High Water and Top of Embankment (ft)	=	1.56	PASS	Min.	1	ft
Check to Ensure 100-Year Design High Water does not Overtop Embankment (ft)	=	17.40	PASS	Max.	18.00	ft
Freeboard for Top of Riser and Spillway Crest (ft)	=	1.90	PASS	Min.	1	ft
25-Year Design Highwater Check (ft)	=	16.44	PASS	Max.	17.00	ft
Dry Retention Volume (ac-ft)	=	8.23	PASS	Min.	8.00	ac-ft
Recovery Time to Recover Specified Dry Retention Volume (hrs)**	=	10.75	PASS	Min.	96	hrs
25-Year, 24-Hour Peak Flow (cfs)	=	51.02				
Mean Annual 24-Hour Peak Flow (cfs)	=	1.12				

*Volumes reported on the table do not account for any soil storage provided by the sand infiltration medium.

NOTES

1. ELEVATIONS ARE REPORTED AS NAVD88.
2. TOP OF CONCRETE/FINISHED FLOOR ELEVATION IS 19.00 NAVD 88, UNLESS NOTED OTHERWISE.
3. ALL AREAS WITHIN LOOP ROAD OF EQUIPMENT AND BUILDING AREAS TO BE AGGREGATE SURFACED. ALL OTHER AREAS NOT INDICATED WITH SURFACING SHALL BE SEEDED/SODDED WITH BAHIA.
4. ENERGY DISSIPATORS TO BE DESIGNED BY EPC CONTRACTOR TO NON-ERODIBLE DISCHARGE VELOCITIES.
5. TEMPORARY CRAFT PARKING WILL BE AGGREGATE SURFACED DURING CONSTRUCTION AND WILL REMAIN IN PLACE AFTER CONSTRUCTION. THE IMPERVIOUS SURFACING HAS BEEN INCLUDED AS PART OF THE PERMANENT STORMWATER SYSTEM.
6. PROPOSED POND OUTLET STRUCTURE WILL BE INSTALLED AT THE EXISTING CULVERT OUTLET LOCATION. THERE IS NO PROPOSED MODIFICATION TO THE EXISTING CULVERT SIZE AND/OR INVERT ELEVATION.
7. THE PERIMETER CHANNEL IS THE LINEAR POINT OF ANALYSIS FOR PRE- AND POST- DEVELOPMENT CONDITIONS.
8. REFER TO 424014-DS-1111 FOR GRADING AND DRAINAGE DETAILS.
9. REFER TO 424014-DS-1104 FOR STORMWATER MANAGEMENT DETAILS.
10. STORMWATER RETENTION BASINS HAVE BEEN DESIGNED BASED ON A SOIL INFILTRATION RATE OF 0.25 AND 0.8 IN/HR FOR B-01 AND B-02 RESPECTIVELY. THE CONTRACTOR SHALL PROTECT BASINS AREAS FROM SEDIMENT INFLOW DURING CONSTRUCTION AND SHALL REMOVE ANY ACCUMULATED SEDIMENT FROM THE BASINS UPON COMPLETION OF CONSTRUCTION. PRIOR TO PROJECT CLOSEOUT, THE CONTRACTOR SHALL PERFORM FIELD INFILTRATION TESTING WITHIN EACH STORMWATER RETENTION BASIN TO VERIFY THAT A MINIMUM INFILTRATION RATE OF 0.25 AND 0.8 IN/HR FOR B-01 AND B-02 RESPECTIVELY IS ACHIEVED.
11. THIS EXISTING POND IS CURRENTLY THE PERMITTED SCA OUTFALL LOCATION. THE EXISTING POND DISCHARGES TO BROWNS CREEK. FOR ADDITIONAL INFORMATION REGARDING THIS OUTFALL LOCATION AND ASSOCIATED PERMITTING LIMITS, REFER TO THE JEA ST. JOHNS RIVER POWER PARK DECOMMISSIONING AND DEMOLITION PLANS PREPARED BY ATKINSON ENGINEERING, DATED NOVEMBER 30, 2017.
12. ALL EXISTING DITCHES AND RESERVOIRS WITHIN THE PROJECT LIMITS OF DISTURBANCE WILL BE FILLED PER GRADING PLANS SHOWN ON 424014-DS-1110. ANY OTHER SURFACE WATERS OUTSIDE OF LOD WILL REMAIN IN PLACE UNDISTURBED.

LEGEND

- PROPOSED STORM WATER DRAINAGE AREA
- PROPOSED PROJECT BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- CONSTRUCTION/ MAINTENANCE USE AREAS
- CATCH BASIN INLET
- MANHOLE
- DRY RETENTION BASIN OUTFALL STRUCTURE
- GRADE SURFACE FLOW INDICATOR
- STORMWATER CULVERT
- PROPOSED STORMWATER POND OUTFALL LOCATION
- RIPRAP
- CFS CHECK DAM

NOT TO BE USED FOR CONSTRUCTION

THE DISTRIBUTION AND USE OF THE NATIVE FORMAT CAD FILE OF THIS DRAWING IS UNCONTROLLED. THE USER SHALL VERIFY TRACEABILITY OF THIS DRAWING TO THE LATEST CONTROLLED VERSION.

NO	DATE	REVISIONS AND RECORD OF ISSUE	DRN	DES	CHK	PDE	APP
3	08/07/2026	ISSUED FOR CLIENT REVIEW	JDM	AIX	OC	JCB	JCB
2	05/01/2026	ISSUED FOR INFORMATION	JDM	AIX	OC	JCB	JCB
1	03/18/2026	ISSUED FOR INFORMATION	JDM	AIX	OC	JCB	JCB
0	03/10/2026	ISSUED FOR INFORMATION	JDM	AIX	OC	JCB	JCB

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OVERLAND PARK, KANSAS 66211
FLORIDA REGISTRATION NO. 8132

BLACK & VEATCH

ENG. DESIGNER	DRAWN
CHECKED	DATE

JEA
SJRPP UNIT 3
PROPOSED STORM WATER MANAGEMENT PLAN - PERMANENT REDEVELOPMENT AREA

PROJECT	DRAWING NUMBER	REV
424014-DS-1102		3
CODE		
AREA		

ANSI E 44x34
USER: JDMCGUIRE 10:23:03 EDT
N:\JOBS\424014\CAD\DS\424014-DS-1102.DWG 8/4/2026 10:14 AM

FACILITIES LEGEND

ID	FACILITY	REMARKS
1	COMBUSTION TURBINE	
2	HEAT RECOVERY STEAM GENERATOR	
3	STEAM TURBINE	
4	COLLECTOR YARD	
5	RECLAIMED WATER TANK	
6	WAREHOUSE/SHOP/MAINTENANCE BUILDING	
7	ADMINISTRATION/CONTROL BUILDING	
8	WATER TREATMENT BUILDING	
9	DEMINERALIZED WATER STORAGE TANK	
10	SERVICE/FIRE WATER STORAGE TANK	
11	FIRE WATER STORAGE TANK	
12	FIRE PROTECTION PUMPS	
13	LIQUID FUEL STORAGE TANK (DOUBLE WALL TANK)	
14	FUEL UNLOADING PUMP SKID	
15	FUEL FORWARDING PUMP SKID	
16	AMMONIA STORAGE TANKS	
17	COOLING TOWER	
18	COOLING TOWER CHEMICAL FEED BUILDING	
19	SANITARY LIFT STATION	
20	PGS M & R YARD	
21	COMPRESSED GAS STORAGE	
22	WATER TREATMENT WASTEWATER COLLECTION SUMP	
23	GUARD HOUSE	
24	EMERGENCY DIESEL GENSET	
25	MOBILE DEMIN TRAILER AREA	
26	OIL/WATER SEPARATOR	
27	EXISTING DEEP WELLS	
28	DEMINERALIZED WATER PUMP SKID	
29	SERVICE WATER PUMP SKID	
30	RUNOFF SUMP	
31	RO REJECTS SUMP (INSIDE OF WATER TREATMENT BUILDING)	
32	COOLING TOWN CHEM UNLOADING SUMP	
33	PLANT DRAINS OIL WATER SEPARATOR	
34	TRANSFORMER & PDC	

NOTES

1. THIS DRAWING IS INTENDED TO CONVEY THE PROJECT'S NON-CONTACT STORMWATER DESIGN PHILOSOPHY. AREAS SHOWN OR IMPLIED AS NON-CONTACT STORMWATER ARE BASED ON CONCEPTUAL LAYOUT AND INTENDED OPERATIONAL EQUIPMENT. FINAL DETERMINATION OF CONTACT VS NON-CONTACT STORMWATER AREAS, INCLUDING IDENTIFICATION OF EQUIPMENT AREAS PROVIDING LOCAL SECONDARY CONTAINMENT VERSUS AREAS THAT WILL USE AN OIL/WATER SEPARATOR AS THE SECONDARY CONTAINMENT DEVICE, SHALL BE CONFIRMED AND REFINED DURING DETAILED DESIGN. FINAL DESIGN SHALL BE BASED ON EQUIPMENT SELECTION, MANUFACTURER REQUIREMENTS, REGULATORY AGENCY COORDINATION, AND OPERATIONAL CONSIDERATIONS.
2. OILY WATER WASTE DRAINS AND CONTACT STORMWATER SHALL BE DESIGNED, CONVEYED, AND MANAGED IN COMPLIANCE WITH EPA 40 CFR PART 112 SPILL PREVENTION, CONTROL, AND COUNTERMEASURE (SPCC) REGULATIONS AND APPLICABLE STATE OF FLORIDA REQUIREMENTS, INCLUDING FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) INDUSTRIAL STORMWATER REGULATIONS AND THE FDEP NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) INDUSTRIAL MULTI - SECTOR GENERIC PERMIT (MSGP), AS APPLICABLE.
3. AREAS WHICH CONTRIBUTE RUNOFF TO THE CONTACT WATER SYSTEM SHALL BE CONVEYED TO THE OIL/WATER SEPARATOR AND DISCHARGED TO THE STORMWATER RETENTION POND AT <50 PPM OR FREE OILS.
4. ALL PERMANENT PAVING LOTS WILL BE ROUTED TO THE STORMWATER RETENTION POND, WITH DISCHARGE CONTROLLED BY AN OIL SKIMMER INSTALLED AT THE OUTFALL STRUCTURE.
5. OIL CONTENT METERING IS TO BE PROVIDED ON THE DISCHARGE OF EACH OIL/WATER SEPARATOR (OWS). THE METER SHALL CONTINUOUSLY MONITOR EFFLUENT OIL CONCENTRATION AND PROVIDE AN ALARM SIGNAL TO THE PLANT DCS WHEN OIL CONCENTRATION APPROACHES 15 PPM. UPON ALARM, PLANT OPERATORS SHALL ISOLATE THE OWS DISCHARGE BY CLOSING THE DISCHARGE ISOLATION VALVE AND EVALUATE THE SYSTEM FOR MAINTENANCE, CLEANING, OR OTHER CORRECTIVE ACTIONS NECESSARY TO REDUCE OIL CONCENTRATION TO ACCEPTABLE OPERATING LEVELS PRIOR TO RESTORING DISCHARGE.

LEGEND

- SECONDARY CONTAINMENT OR BUNDED AREAS THAT FULLY CONTRIBUTE TO CONTACT STORMWATER
- AREAS THAT CONTAIN OILY WASTEWATER BELL-UPS OR FLOOR DRAIN, BUT THE FULL AREA DOES NOT CONTRIBUTE TO CONTACT STORMWATER
- CHEMICAL CONTAINMENT AREAS WITH LOCAL SECONDARY CONTAINMENT
- OIL/WATER SEPARATOR
- CONSTRUCTION LAYDOWN AREA
- CONTACT STORM WATER FLOW INDICATOR

NOT TO BE USED FOR CONSTRUCTION

THE DISTRIBUTION AND USE OF THE NATIVE FORMAT CAD FILE OF THIS DRAWING IS UNCONTROLLED. THE USER SHALL VERIFY TRACEABILITY OF THIS DRAWING TO THE LATEST CONTROLLED VERSION.

NO	DATE	REVISIONS AND RECORDS OF ISSUE	DRN	DES	CHK	PDE	APP
3	08/07/2024	ISSUED FOR CLIENT REVIEW	JDW	ACK	OC	JCB	JCB
2	05/31/2024	ISSUED FOR INFORMATION	JDW	ACK	OC	JCB	JCB
1	03/18/2024	ISSUED FOR INFORMATION	JDW	ACK	OC	JCB	JCB
0	02/16/2024	ISSUED FOR INFORMATION	JDW	ACK	OC	JCB	JCB

SCALE 1"=80'

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PROJECT	JEA SJRPP UNIT 3
DRAWING NUMBER	424014-DS-1103
REV	3
TITLE	CONTACT STORMWATER MANAGEMENT PLAN
ENG. INITIATOR	
DRAWN	
CHECKED	
DATE	
CLIENT	
AREA	

ANSI E 44x34
PLOTTED: 08/07/2024 - 10:03AM
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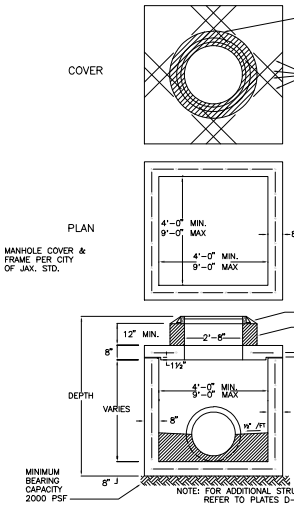
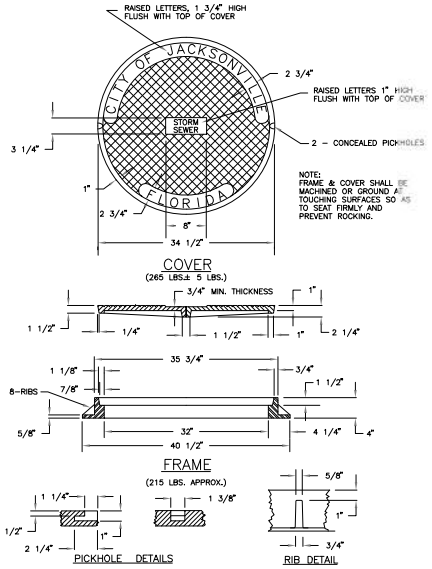
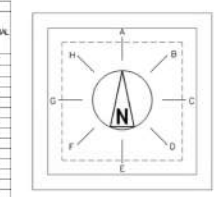


STORM SEWER TYPE J-2
MANHOLE DETAIL



STORM SEWER MANHOLE
COVER AND FRAME DETAIL

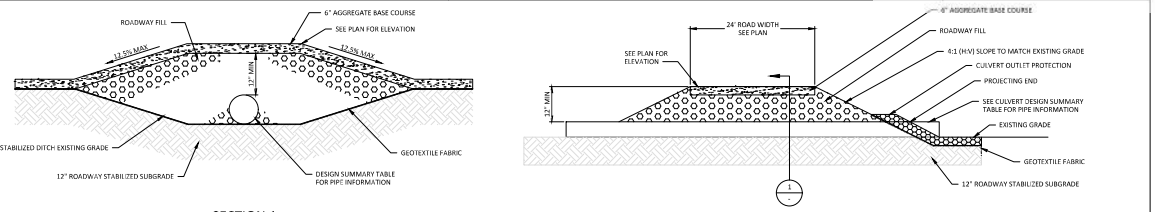


CATCH BASIN AND MANHOLE DESIGN TABLE

STRUCTURE NO.	DOWNSTREAM ELEMENT	DRAWING NO.	CENTERLINE COORDINATES		STRUCTURE SIZE	TOP OF GRATE ELEVATION	BOTTOM OF CATCH BASIN ELEVATION	INLET & OUTLET PIPE INFORMATION																PIPE MATERIAL
								A		B		C		D		E		F		G		H		
			NORTHING	EASTING	FT×FT	FT	FT	INVEL	DIA	INVEL	DIA	INVEL	DIA	INVEL	DIA	INVEL	DIA	INVEL	DIA	INVEL	DIA	INVEL	DIA	
								FT	IN	FT	IN	FT	IN	FT	IN	FT	IN	FT	IN	FT	IN	FT	IN	
CB-1	CB-2	DS-1110	2216496.44	482254.38	3x3	19	14.89	-	-	-	-	-	-	-	-	-	-	-	-	14.89	30	-	-	CHDPE
CB-2	CB-3	DS-1110	2216414.89	481930.39	4x4	19	14.07	-	-	-	-	14.07	30	-	-	14.07	36	-	-	-	-	-	-	CHDPE
CB-3	MH-1	DS-1110	2216011.3	482231.99	5x5	19.00	13.04	13.04	36.00	-	-	13.04	48.00	-	-	13.04	48.00	-	-	-	-	-	-	CHDPE
CB-4	CB-3	DS-1110	2216092.86	482355.97	5x5	19.00	13.86	-	-	-	-	13.86	42.00	-	-	-	-	-	-	13.86	48.00	-	-	CHDPE
MH-1	CH-1	DS-1110	2215907.13	482258.11	5x5	18.00	12.79	12.79	48.00	-	-	-	-	-	-	-	-	-	-	12.79	54.00	-	-	CHDPE
CB-5	CB-7	DS-1110	2216696.99	482753	3x3	18.00	14.82	-	-	-	-	14.82	24	-	-	14.82	30	-	-	-	-	-	-	CHDPE
CB-6	CB-5	DS-1110	2216168.57	483037.23	3x3	18.00	15.54	-	-	-	-	-	-	-	-	-	-	-	-	15.54	24.00	-	-	CHDPE
CB-7	CD-8	DS-1110	2215759.77	482637.7	4x4	18.00	13.96	13.96	30.00	-	-	13.96	24.00	-	-	-	-	-	-	13.96	36.00	-	-	CHDPE
CB-8	CB-7	DS-1110	2215831.14	483122.57	3x3	18.00	14.68	-	-	-	-	-	-	-	-	-	-	-	-	14.68	24.00	-	-	CHDPE
CB-9	CD-10	DS-1110	2215962.94	482874.25	3x3	18.00	13.97	-	-	-	-	-	-	-	-	-	-	-	-	13.97	30.00	-	-	CHDPE
CB-10	CB-15	DS-1110	2215691.13	483139.09	3x3	18.00	11.52	-	-	-	-	11.52	24.00	-	-	-	-	-	-	-	-	-	-	CHDPE
CB-11	CB-12	DS-1110	2215126.26	483129.46	2x2	18.00	9.90	-	-	-	-	9.90	18.00	-	-	-	-	-	-	-	-	-	-	CHDPE
CB-12	CI-2	DS-1110	2215166.96	483291.89	5x5	18.00	9.50	-	-	-	-	9.50	36.00	-	-	9.50	48.00	-	-	9.50	18.00	-	-	CHDPE
CB-18	MH-3	DS-1110	2216277.98	483170.5	3x3	19.00	13.10	-	-	-	-	13.10	24.00	-	-	-	-	-	-	-	-	-	-	CHDPE
MH-3	CB-13	DS-1110	2215304.5	483275	3x3	19.00	12.85	-	-	-	-	-	-	-	-	12.85	24	-	-	12.85	24.00	-	-	CHDPE
CB-13	CB-14	DS-1110	2216109.52	483324.17	4x4	18.00	12.36	12.36	24	-	-	-	-	-	-	12.36	36.00	-	-	-	-	-	-	CHDPE
CB-14	MH-2	DS-1110	2215951.67	483388.79	4x4	18.00	11.71	11.71	36.00	-	-	-	-	-	-	11.71	36.00	-	-	-	-	-	-	CHDPE
MH-2	CB-15	DS-1110	2215760.39	483411.67	5x5	18.00	11.48	11.48	36.00	-	-	-	-	-	-	-	-	-	-	11.48	48.00	-	-	CHDPE
CB-15	CB-16	DS-1110	2215726.95	483282.3	5x5	18.00	11.16	-	-	-	-	11.16	48.00	-	-	11.16	48.00	-	-	11.16	24.00	-	-	CHDPE
CB-16	CB-17	DS-1110	2215501	483340.62	5x5	18.00	10.59	10.59	48.00	-	-	-	-	-	-	10.59	48.00	-	-	-	-	-	-	CHDPE
CB-17	CB-12	DS-1110	2215189.06	483418.65	5x5	18.00	9.82	9.82	48.00	-	-	-	-	-	-	-	-	-	-	9.82	48.00	-	-	CHDPE
CB-19	MH-4	DS-1110	2217076.61	483501.86	3x3	19	13.9	-	-	-	-	-	-	13.9	24	-	-	-	-	-	-	-	-	CHDPE
MH-4	CH-2	DS-1110	2217002.06	483628.61	3x3	19	13.68	-	-	-	-	-	-	-	-	13.68	30	-	-	-	-	13.68	24	CHDPE

CULVERT DESIGN TABLE (SEE NOTE 3)

CULVERT ID	DRAWING NO.	INLET INVERT COORDINATES		OUTLET INVERT COORDINATES		INLET INVERT ELEVATION	OUTLET INVERT ELEVATION	NO. OF BARRELS	PIPE DIAMETER	END SECTION	PIPE MATERIAL
		NORTHING	EASTING	NORTHING	EASTING	FT	FT		IN		
CO-1	DS-1110	2216445.76	483741.99	2216345.57	483765.79	12.42	12.15	2	42	PROJECTING	CHDPE
CO-2	DS-1110	2215373.44	484005.93	2215271.83	484026.33	9.96	9.77	2	42	PROJECTING	CHDPE
CO-4	DS-1110	2217985.92	482733.46	2218094.53	482691.64	13.19	13.00	2	48	PROJECTING	CHDPE
CO-5	DS-1110	2217816.27	482026.94	2217928.43	482033.31	13.22	13.00	2	36	PROJECTING	CHDPE
CO-6	DS-1110	2216122.38	482447.99	2216093.60	482358.36	14.09	13.86	1	42	PROJECTING	CHDPE
CO-7	DS-1110	2215906.51	482055.69	2215827.48	481739.40	12.79	12.00	1	54	PROJECTING	CHDPE
CO-8	DS-1110	2215759.17	482835.27	2215751.50	482804.47	13.96	13.89	1	36	PROJECTING	CHDPE
CO-9	DS-1110	2215556.91	482028.80	2215505.74	481824.88	11.85	11.39	1	54	PROJECTING	CHDPE
CO-10	DS-1110	2215661.92	482971.96	2215627.38	482875.36	13.97	13.68	1	30	PROJECTING	CHDPE
CO-11	DS-1110	2215422.57	482076.12	2215372.14	481861.34	11.59	11.04	1	48	PROJECTING	CHDPE
CO-12	DS-1110	2215164.56	483292.50	2214969.94	483341.31	9.50	9.00	1	48	PROJECTING	CHDPE
CO-13	DS-1110	2216999.57	483628.51	2216914.02	483625.12	13.90	13.68	1	30	PROJECTING	CHDPE



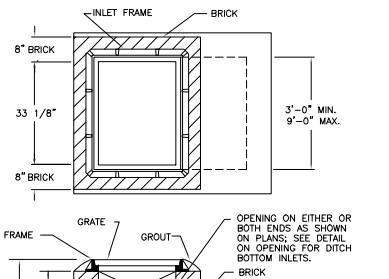
SECTION 1
NO SCALE

TYPICAL ROAD CULVERT CROSSING DETAIL
NO SCALE

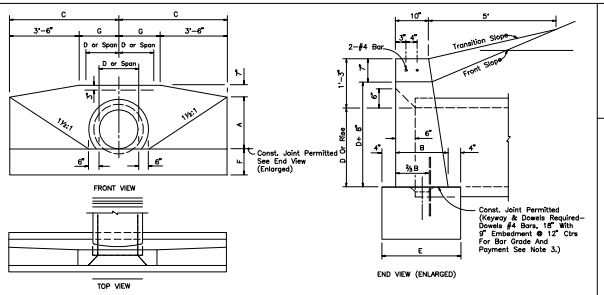
ROUND CONCRETE AND CORRUGATED METAL PIPE

D	Opening Area (SF) Number of Pipes				Dimensions							Dimensions X			
	1	2	3	4	A	B	C	E	F	G	S	0°	15°	30°	45°
15"	1.23	2.46	3.69	4.92	1'-11"	1'-2"	4'-0"	1'-10"	1'-2"	0'-6"	2'-7"	2'-7"	2'-8"	3'-0"	3'-8"
18"	1.77	3.54	5.31	7.08	2'-2"	1'-3"	4'-6"	1'-11"	1'-3"	1'-0"	2'-10"	2'-10"	2'-11"	3'-3"	4'-0"
24"	3.14	6.28	9.42	12.56	2'-8"	1'-4"	5'-6"	2'-0"	1'-4"	2'-0"	3'-5"	3'-5"	3'-6"	3'-11"	4'-10"
30"	4.91	9.82	14.73	19.64	3'-2"	1'-6"	6'-6"	2'-2"	1'-6"	3'-0"	4'-3"	4'-3"	4'-5"	4'-11"	6'-0"
36"	7.07	14.14	21.21	28.28	3'-8"	1'-8"	7'-6"	2'-4"	1'-8"	4'-0"	5'-1"	5'-1"	5'-3"	5'-10"	7'-2"
42"	9.62	19.24	28.86	38.48	4'-2"	1'-10"	8'-6"	2'-6"	2'-0"	5'-0"	6'-0"	6'-0"	6'-3"	6'-11"	8'-6"
48"	12.57	25.14	37.71	50.28	4'-8"	2'-1"	9'-6"	2'-9"	2'-0"	6'-0"	6'-9"	6'-9"	7'-0"	7'-10"	9'-7"
54"	15.90	31.80	47.70	63.60	5'-2"	2'-6"	10'-6"	3'-2"	2'-3"	7'-0"	7'-8"	7'-8"	7'-11"	8'-10"	10'-10"

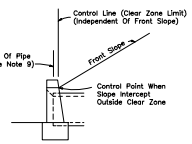
STRAIGHT CONCRETE ENDWALLS SINGLE AND MULTIPLE PIPE



STORM SEWER TYPE "B"
INLET DETAIL



ENDWALL DIMENSIONS (EXCLUSIVE OF MULTIPLE PIPE SPACING)

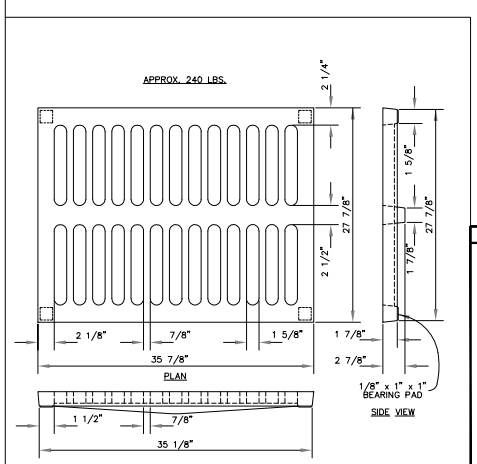


STANDARD
LOCATION CONTROL

STRAIGHT CONCRETE ENDWALLS-
SINGLE AND MULTIPLE PIPE
DETAIL

GENERAL NOTES

1. Endwall dimensions, locations and positions are for round and elliptical concrete pipe and for round and pipe-arch corrugated metal pipe. Round concrete pipe shown. See plates D-403, 404, & 405.
2. Endwalls may be cast in place or precast concrete. Reinforcing steel shall be Grades 40 or 60. Additional reinforcement necessary for handling precast units shall be determined by the Contractor or the supplier. Cost of reinforcement shall be included in the contract unit price for concrete, (endwalls).
3. All exposed corners and edges of concrete are to be chamfered ¾".
4. Concrete meeting the requirements of ASTM C-478 (4000 psi) may be used in lieu of Class ∞ concrete in precast items manufactured in plants which are under the Standard Operating Procedures for the inspection of precast drainage products.
5. On outfall ditches with side slopes flatter than 1½:1 provide 20' transitions from the endwall to the flatter side slopes, right of way permitting.
6. Pipe length plan quantities shall be based on the pipe and locations shown in the standard location control end view, or lengths based on special endwall locations called for in the plans.



STORM SEWER INLET GRATE

NOTES

1. VERTICAL DATUM IS BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 - NAVD88 (US FEET)
   HORIZONTAL DATUM IS BASED ON FLORIDA STATE PLANE, EAST ZONE - NAD83 (US FEET).
2. SEE DRAWING DS-1110 AND DS-1102 FOR GRADING AND STORMWATER DRAINAGE LAYOUT.
3. INTERNAL CONVEYANCE DEVICES AND APPURTENANCES SHOWN ON THIS DETAIL SHEET ARE PROVIDED FOR CONCEPTUAL AND PERMITTING PURPOSES ONLY AND ARE INTENDED TO DESIGNATE THE OVERALL PROJECT DESIGN PHILOSOPHY. THE DEPICTED FEATURES ARE NOT INTENDED TO REPRESENT FINAL LAYOUT, CONFIGURATION, DESIGN, OR SIZING WITH THE EXCEPTION OF SWALES THAT ARE MODELED AS TREATMENT SWALES. THE FINAL DESIGN OF THE INTERNAL CONVEYANCE SYSTEM, INCLUDING DEVICE SELECTION, LAYOUT, HYDRAULIC SIZING, MATERIALS, AND CONNECTION LOCATIONS, SHALL BE DEVELOPED AND CONFIRMED DURING DETAILED DESIGN BASED ON FINAL SITE ARRANGEMENT, OPERATIONAL REQUIREMENTS, SITE CONDITIONS, AND APPLICABLE REGULATORY AND PERMITTING CRITERIA.

NOT TO BE USED FOR CONSTRUCTION

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1	03/18/2026	ISSUED FOR INFORMATION	JDM	AIX	OC	JCB	JCB
0	03/10/2026	ISSUED FOR INFORMATION	JDM	AIX	OC	JCB	JCB

200' 100' 0 200' 400'
SCALE 1"=200'

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PROJECT	DRAWING NUMBER	REV
JEA SJRPP UNIT 3	424014-DS-1104	3
PROPOSED STORMWATER MANAGEMENT SECTIONS AND DETAILS		

ENG, DESIGNER: | DRAWN: | CHECKED: | DATE: | CODE: | AREA:

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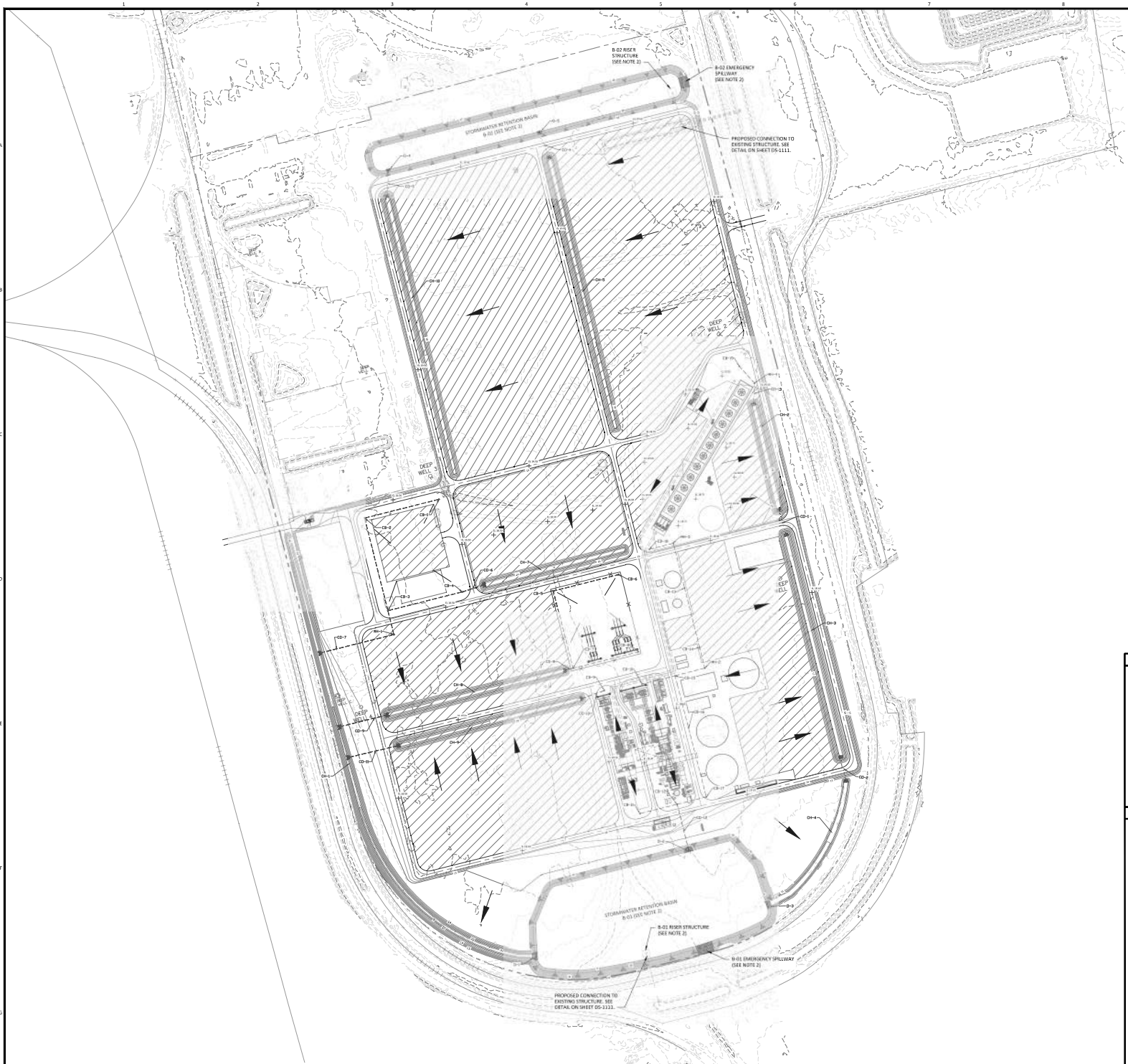

NOTES

1. VERTICAL DATUM IS BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 - NAVD88 (US FEET).
   HORIZONTAL DATUM IS BASED ON FLORIDA STATE PLANE, EAST ZONE - NAD83 (US FEET).
2. REFER TO 424014-DS-1111 FOR GRADING AND DRAINAGE DETAILS.
3. REFER TO 424014-DS-1104 FOR STORMWATER MANAGEMENT DETAILS.
4. THE GRADING SHOWN HEREIN IS INTENDED TO CONVEY THE OVERALL GRADING DESIGN PHILOSOPHY, DELINEATE PERMITTED DRAINAGE SUB BASINS, AND ESTABLISH NOMINAL GRADES FOR PERMITTING PURPOSES. THE GRADING DEPICTED IS CONCEPTUAL IN NATURE AND DOES NOT REPRESENT FINAL, CONSTRUCTION LEVEL, GRADING. FINAL GRADING WILL BE REFINED DURING DETAILED DESIGN TO ACCOMMODATE SITE CONDITIONS, CONSTRUCTABILITY, AND FINALIZED INFRASTRUCTURE LAYOUTS. DRAINAGE BASIN LIMITS AND FLOW PATTERNS SHALL BE MAINTAINED CONSISTENT WITH THE AS-PERMITTED CONDITION TO THE MAXIMUM EXTENT PRACTICABLE.
5. OIL CONTENT METERING TO BE PROVIDED ON THE DISCHARGE OF EACH OIL/WATER SEPARATOR (OWS). THE METER SHALL CONTINUOUSLY MONITOR EFFLUENT OIL CONCENTRATION AND PROVIDE AN ALARM SIGNAL TO THE PLANT DCS WHEN OIL CONCENTRATION APPROACHES 15 PPM. UPON ALARM, PLANT OPERATORS SHALL ISOLATE THE OWS DISCHARGE BY CLOSING THE DISCHARGE ISOLATION VALVE AND EVALUATE THE SYSTEM FOR MAINTENANCE, CLEANING, OR OTHER CORRECTIVE ACTIONS NECESSARY TO REDUCE OIL CONCENTRATION TO ACCEPTABLE OPERATING LEVELS PRIOR TO RESTORING DISCHARGE.

LEGEND

- CULVERTS
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- PROPOSED MAJOR CONTOURS
- PROPOSED MINOR CONTOURS
- EXISTING ROAD CL
- PROPOSED ROAD
- GRADE SURFACE FLOW INDICATOR
- CATCH BASIN
- MANHOLE
- RIPRAP APRON

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SCALE 1"=150'

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PROJECT: JEA SJRPP UNIT 3
DRAWING NUMBER: 424014-DS-1110
REV: 3
PROPOSED GRADING AND DRAINAGE PLAN
ENG. DESIGNER | DRAWN | CHECKED | DATE | CODE | AREA

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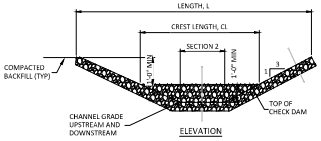

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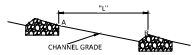
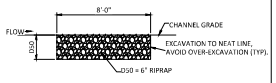
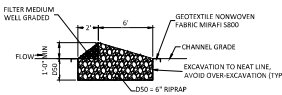


SPACING BETWEEN CHECK DAMS



SECTION 1



SECTION 2

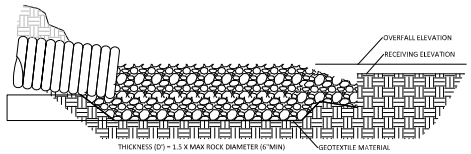
ROCK CHECK DAM INSTALLATION NOTES:

1. SEE PLAN VIEW FOR LOCATION OF CHECK DAMS.
2. CHECK DAMS INDICATED ON INITIAL SWMP SHALL BE INSTALLED AFTER CONSTRUCTION FENCE, BUT PRIOR TO ANY UPSTREAM LAND DISTURBING ACTIVITIES.
3. RIPRAP UTILIZED FOR CHECK DAMS SHOULD BE OF APPROPRIATE SIZE FOR THE APPLICATION. TYPICAL TYPES OF RIPRAP USED FOR CHECK DAMS ARE TYPE M (D50 6") OR TYPE L (D50 9").
4. RIPRAP PAD SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 6".
5. THE ENDS OF THE CHECK DAM SHALL BE A MINIMUM OF 1'-0" HIGHER THAN THE CENTER OF THE CHECK DAM.

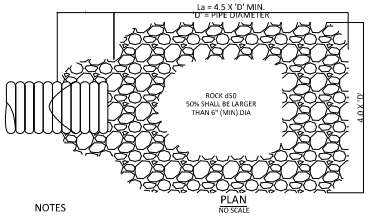
ROCK CHECK DAM MAINTENANCE NOTES:

1. INSPECTION SHALL BE FREQUENT (AT MINIMUM WEEKLY AND BEFORE AND AFTER ANY RAINFALL THAT EXCEEDS 1/2") AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMP'S IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. SEDIMENT ACCUMULATED UPSTREAM OF THE CHECK DAMS SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS WITHIN 1/2 OF THE HEIGHT OF THE CREST.
4. CHECK DAMS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
5. WHEN CHECK DAMS ARE REMOVED, EXCAVATIONS SHALL BE FILLED WITH SUITABLE COMPACTED BACKFILL. DISTURBED AREA SHALL BE SEEDED AND MULCHED AND COVERED WITH GEOTEXTILE OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

ROCK CHECK DAM IN DRAINAGE WAY
NO SCALE



SECTION
NO SCALE



PLAN
NO SCALE

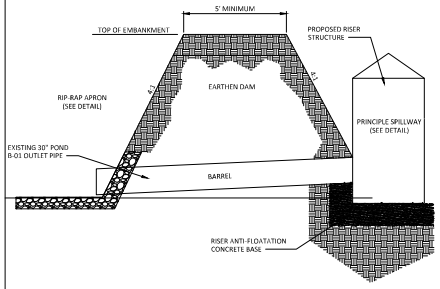
NOTES

1. 'La' = LENGTH OF APRON. DISTANCE 'La' SHALL BE OF SUFFICIENT LENGTH TO DISSPATE ENERGY.
2. APRON SHALL BE SET AT A ZERO GRADE AND ALIGNED STRAIGHT.
3. GEOTEXTILE MATERIAL SHALL BE MIRAFI S800 FABRIC OR APPROVED EQUAL.

DETAIL FOR BMP OUTLET PROTECTION RIPRAP
NO SCALE

CONVEYANCE SWALE DESIGN SUMMARY TABLE

CHANNEL ID	APPROX. CHANNEL LENGTH	APPROX. INLET INVERT ELEVATION	APPROX. OUTLET INVERT ELEVATION	AVERAGE SLOPE (%)	SHAPE	CHANNEL LINING	AVERAGE DESIGN DEPTH "B"	MINIMUM BOTTOM WIDTH "A	AVERAGE TOP WIDTH	SIDE SLOPES	MODELED FOR TREATMENT?
	FT	FT	FT	%			FT	FT	FT	FT/FT	
CH-1	2295.20	13.89	5.10	0.20	Trapezoidal	SOD	1.00	6.00	53	4	YES
CH-2	591.78	13.68	12.12	0.25	Trapezoidal	SOD	1.00	11.00	53	4	YES
CH-3	878.26	12.12	9.96	0.25	Trapezoidal	SOD	1.00	11.00	53	4	YES
CH 4	709.12	9.77	8.00	0.25	Trapezoidal	SOD	4.00	11.00	63	4	YES
CH 5	1254.02	11.70	11.10	0.20	Trapezoidal	SOD	1.50	11.00	89	4	YES
CH 7	960.12	15.74	14.05	0.25	Trapezoidal	SOD	4.00	6.00	38	4	NO
CH-8	826.07	13.89	11.85	0.25	Trapezoidal	SOD	4.00	7.00	47	4	NO
CH-9	859.37	11.89	11.39	0.25	Trapezoidal	SOD	4.00	6.00	46	4	NO
CH-10	1243.51	15.88	13.22	0.20	Trapezoidal	SOD	4.00	9.50	41.5	4	YES



B-01 POND CONNECTION DETAIL
PROPOSED OUTLET STRUCTURE
CONNECTION TO EXISTING CULVERT

CONVEYANCE SWALE OUTLET PROTECTION RIPRAP SUMMARY TABLE

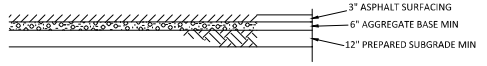
CHANNEL ID	CHANNEL BOTTOM WIDTH	WIDTH 4 X D	LA LENGTH 4.5 X D	RIPRAP DEPTH	AGGREGATE DIA. D50	RIPRAP AREA
	FT	FT	FT	FT	FT	SQYD
CH-1	6	24	27	1	0.5	72
CH-2	11	44	50	1	0.5	242
CH-3	11	44	50	1	0.5	242
CH-4	11	44	50	1	0.5	242
CH-5	11	44	50	1	0.5	242
CH 7	6	24	27	1	0.5	72
CH 8	7	28	32	1	0.5	98
CH 9	6	24	27	1	0.5	72
CH-10	10	38	43	1	0.5	181

CULVERT RIPRAP SUMMARY TABLE

CULVERT ID	CULVERT DIAM. D	NUMBER OF BARRELS	WIDTH 4 X D	LA LENGTH 4.5 X D	RIPRAP DEPTH	AGGREGATE DIA. D50	RIPRAP AREA
	IN	FT	FT	FT	FT	FT	SQYD
CO-1	30	2.00	20.00	22.50	1	0.5	50
CO-2	42	2.00	28.00	31.50	1	0.5	98
CO-4	48	2.00	32.00	36.00	1	0.5	128
CO-5	36	2.00	24.00	27.00	1	0.5	72
CO-6	42	1.00	14.00	15.75	1	0.5	25
CO-7	54	1.00	18.00	20.25	1	0.5	41
CO-8	36	1.00	12.00	13.50	1	0.5	18
CO-9	54	1.00	18.00	20.25	1	0.5	41
CO-10	30	1.00	10.00	11.25	1	0.5	13
CO-11	48	1.00	16.00	18.00	1	0.5	32
CO-12	48	1.00	16.00	18.00	1	0.5	32
CO-13	30	1.00	10.00	11.25	1	0.5	13

BASIN SPILLWAY RIPRAP SUMMARY TABLE

BASIN ID	TOP WIDTH	APPROX. RIPRAP WIDTH	AGGREGATE DIA. D50	RIPRAP DEPTH	RIPRAP AREA
	FT	FT	FT	FT	SQYD
B-01	50	10	0.5	1	56
B-02	60	10	0.5	1	67



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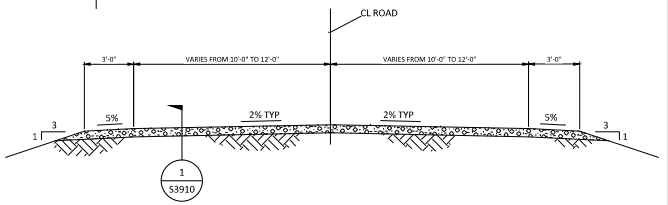

TYPICAL AGGREGATE SURFACE ROAD SECTION
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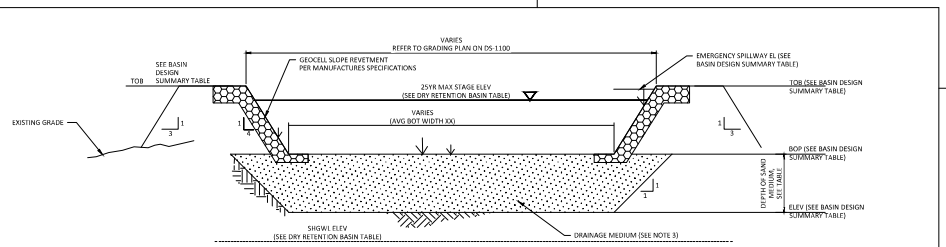

PERMANENT DRY RETENTION POND - SECTION 1
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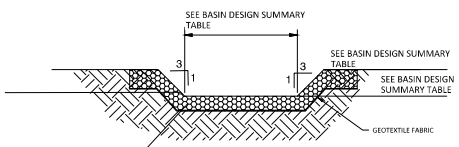
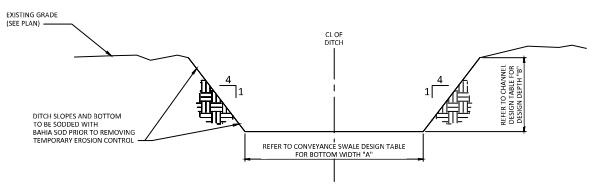


EMERGENCY SPILLWAY DETAIL
NO SCALE

1. SEE SEDIMENT BASIN DESIGN SUMMARY TABLE, SECTION "SPILLWAY" FOR SPILLWAY DETAILS SUCH AS CREST ELEVATION AND LENGTH.



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CONVEYANCE SWALE
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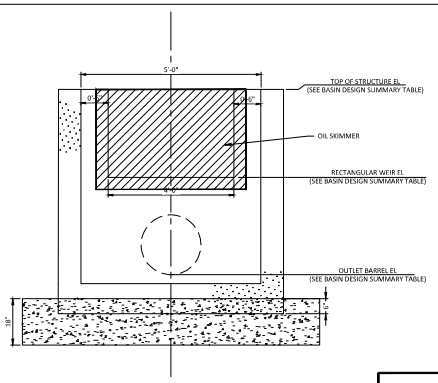
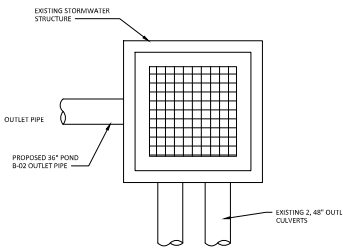


SECTION

P-1 STORMWATER DISCHARGE STRUCTURE DETAIL
NO SCALE

1. AN 18" THICK CONCRETE BASE WITH A MINIMUM LENGTH EQUAL TO TWICE THE WIDTH OF THE RISER DIAMETER SHALL BE USED TO ANCHOR THE RISER. THE RISER PIPE MUST BE EMBEDDED AT LEAST 6 INCHES INTO THE CONCRETE.



B-02 POND CONNECTION DETAIL
PROPOSED OUTLET PIPE CONNECTION
TO EXISTING STORMWATER STRUCTURE

NOTES

1. ELEVATIONS ARE REPORTED AS NAVD 88.
2. SEE DRAWING DS-1110 AND DS-1102 FOR GRADING AND STORMWATER DRAINAGE LAYOUT.
3. IN SITU MATERIAL SHALL BE REMOVED AND REPLACED WITH A SAND DRAINAGE MEDIUM TO THE DEPTH SPECIFIED IN THE BASIN SUMMARY TABLE. THE SAND MEDIUM SHALL HAVE A MINIMUM VOID RATIO OF 20%.
4. STORMWATER RETENTION BASINS HAVE BEEN DESIGNED BASED ON A SOIL INFILTRATION RATE OF 0.25 AND 0.8 IN/HR FOR B-01 AND B-02 RESPECTIVELY. THE CONTRACTOR SHALL PROTECT BASIN AREAS FROM SEDIMENT INFLOW DURING CONSTRUCTION AND SHALL REMOVE ANY ACCUMULATED SEDIMENT FROM THE BASINS UPON COMPLETION OF CONSTRUCTION. PRIOR TO PROJECT CLOSEOUT, THE CONTRACTOR SHALL PERFORM FIELD INFILTRATION TESTING WITHIN EACH STORMWATER RETENTION BASIN TO VERIFY THAT A MINIMUM INFILTRATION RATE OF 0.25 AND 0.8 IN/HR FOR B-01 AND B-02 RESPECTIVELY IS ACHIEVED.

DRY RETENTION BASIN SUMMARY TABLE

BASIN ID	SAND INFILTRATION MEDIUM		25-YEAR HIGHWATER ELEVATION NAVD88	SHGWL ELEVATION NAVD88	STORAGE		RISER				SPILLWAY						BARREL			
	BOTTOM OF SAND MEDIUM ELEVATION	BOTTOM OF BASIN ELEVATION			RETENTION VOLUME RECLIMED	RETENTION VOLUME PROVIDED	CONCRETE RISER CUTFALL STRUCTURE SIZE	4-FT WIDE RECTANGULAR WEIR ELEVATION	RISER CREST ELEVATION	RISER MATERIAL	SPILLWAY CREST ELEVATION	SPILLWAY CREST LENGTH	SPILLWAY SIDE SLOPES	TOP OF EMBANKMENT ELEVATION	TOP OF EMBANKMENT WIDTH (MIN)	PIPE LENGTH	PIPE DIAMETER	PIPE MATERIAL	INVERT IN	INVERT OUT
	FT	FT	FT	FT	AC-FT	AC-FT	FT&FT	FT	FT	FT	FT	FT	F'FT	FT	FT	FT	IN		FT	FT
B-01	5.6	6.80	11.35	3.0	18.32	18.97	5x5	8.50	11.50	CONCRETE BOX	12.50	30.00	10	13.50	10.00	163.15	30.00	RCP - EXISTING PIPE TO REMAIN	6.50	2.85
B-02	11	12.00	16.44	8.9	8.00	9.23	5x5	14.50	16.00	CONCRETE BOX	17.00	40.00	10	18.00	10.00	144.85	36.00	RCP	12.00	4.22

NO	DATE	REVISIONS AND RECORD OF ISSUE	DRN	DES	CHK	PDE	APP
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0	03/10/2026	ISSUED FOR INFORMATION	JDM	AJK	OC	JCB	JCB

NO SCALE

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FLORIDA REGISTRATION NO. 8132

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Engineering | Construction

ENG. DESIGNER	
DRAWN	
CHECKED	
DATE	

PROJECT: JEA
SJRPP UNIT 3

DRAWING NUMBER: 424014-DS-1111

REV: 3

GRADING & DRAINAGE PLAN
SECTIONS AND DETAILS

CODE:

AREA:

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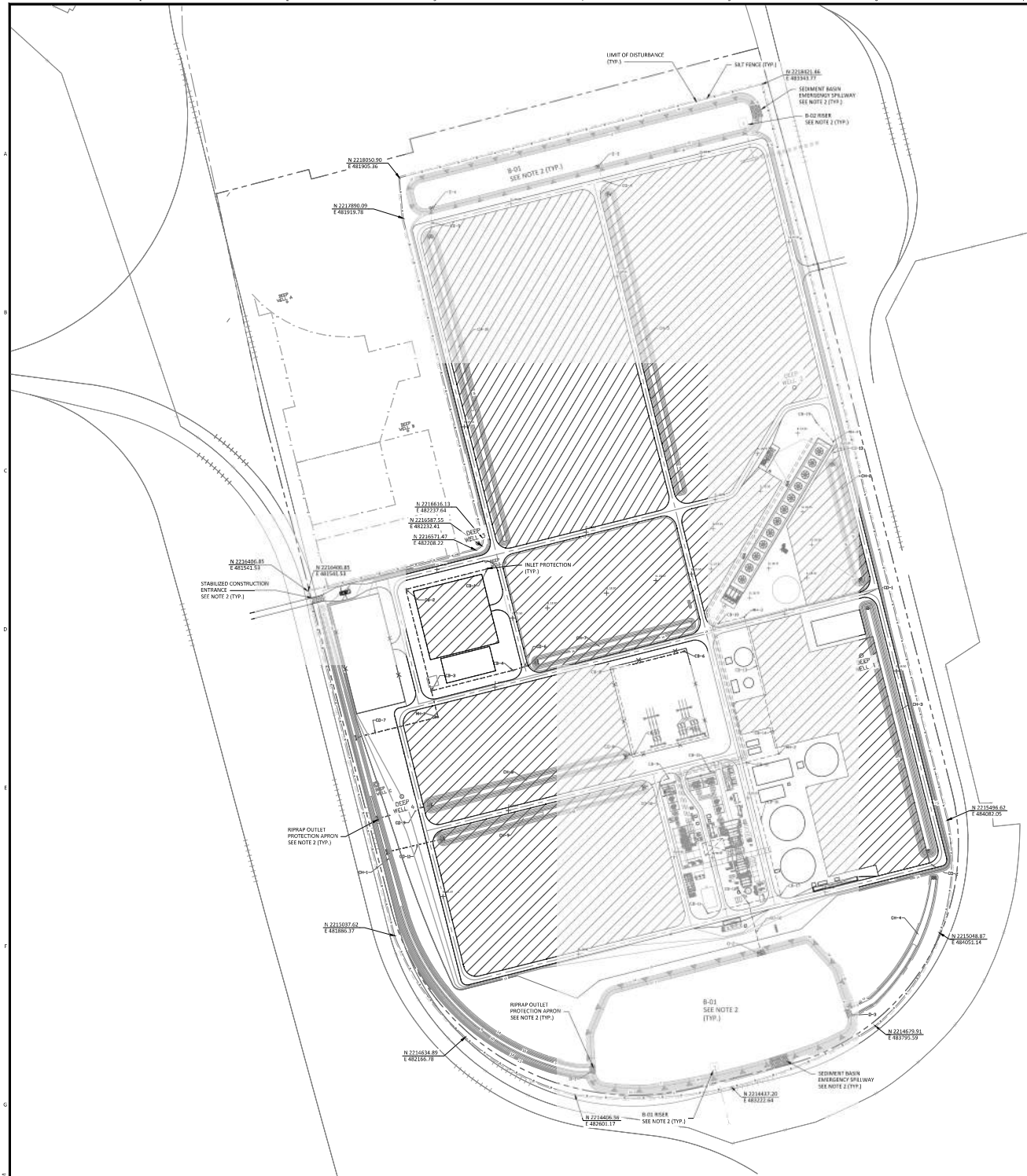

NOTES

1. ELEVATIONS ARE REPORTED AS NAVD88.
2. REFER TO 424014-DS-1121 FOR EROSION CONTROL DETAILS.

LEGEND

- LOD — LIMIT OF DISTURBANCE
- SILT FENCE
- CATCH BASIN WITH INLET PROTECTION
- STABILIZED CONSTRUCTION ENTRANCE
- LAYDOWN AREAS
- RIPRAP
- SEDIMENT BASIN OUTFALL STRUCTURE

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SCALE 1":150'

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CHECKED	DATE

JEA
SJRPP UNIT 3
EROSION AND SEDIMENT CONTROL PLAN

PROJECT 424014-DS-1120
DRAWING NUMBER
REV 3
CODE
AREA

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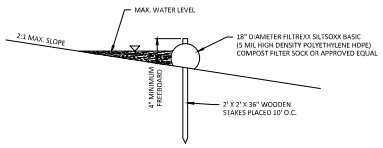
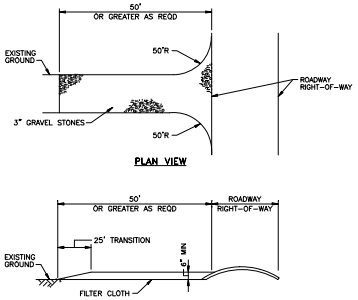
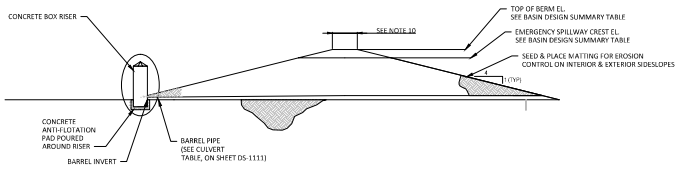


STAKING DETAIL FOR FILTER SOCK CHECK DAM
NO SCALE



TYPICAL STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

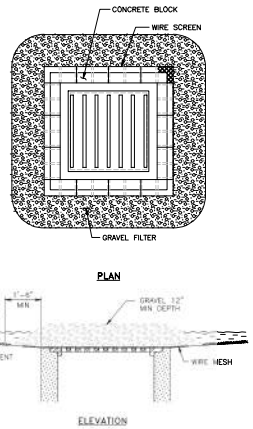


SEDIMENT BASIN DETAIL
NO SCALE

NOTE: SEE SEDIMENT BASIN SKIMMER STRUCTURE AND PIPE TABLES (THIS DRAWING) FOR POND-SPECIFIC INFORMATION

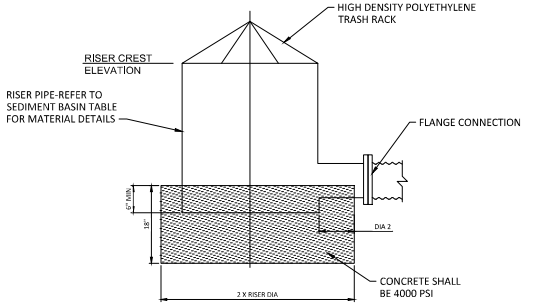
SKIMMER SEDIMENT BASIN AND ROCK CHECK DAM NOTES:

1. BUILD RIDGE HIGHER THAN DESIGN AND COMPACT WITH WHEELS OF CONSTRUCTION EQUIPMENT. COMPACTED RIDGE MUST BE AT OR ABOVE DESIGN GRADE AT ALL POINTS.
2. VEGETATE DITCH AND BERM IMMEDIATELY AFTER CONSTRUCTION. STABILIZATION METHOD SHALL BE SEED SUPPLEMENTED WITH EROSION CONTROL BLANKETS.
3. INSPECT ROLLED EROSION CONTROL PRODUCTS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT REPAIR IMMEDIATELY. MONITOR AND REPAIR THE ROLLED EROSION CONTROL BLANKET AS NECESSARY UNTIL GORUND COVER IS ESTABLISHED.
4. RIPIRAP OUTLET APRON AT EMERGENCY SPILLWAY SHALL EXTEND FOR 20' PAST TOE OF SLOPE, AND BE EQUAL IN WIDTH TO THE SPILLWAY WIDTH. RIPRAP OUTLET APRON AT BARREL SHALL BE PER TYPICAL CULVERT RIPRAP OUTLET PROTECTION DETAIL, SHEET DS-1111.
5. IN ORDER TO REDUCE VELOCITY AND HELP PREVENT CHANNEL DEGREDATION, INSTALL CHECK DAMS ALONG DIVERSION DITCHES ANYWHERE THE BOTTOM SLOPE EXCEEDS 0.03 FT/FT.
6. KEY THE STONE INTO THE DITCH BANKS AND EXTEND IT BEYOND THE ABUTMENTS A MINIMUM OF 1.5 FT. TO AVOID WASHOUTS FROM OVERFLOW AROUND THE DAM.
7. SET SPACING BETWEEN DAMS TO ASSURE THAT THE ELEVATION AT THE TOP OF THE LOWER DAM IS THE SAME AS THE TOE ELEVATION OF THE UPPER DAM.
8. INSPECT CHECK DAMS AND CHANNELS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. CLEAN OUT SEDIMENT, STRAW, LIMBS, OR OTHER DEBRIS THAT COULD CLOG THE CHANNEL WHEN NEEDED. IF SIGNIFICANT EROSION OCCURS BETWEEN DAMS, ADDITIONAL MEASURES CAN BE TAKEN SUCH AS, INSTALLING A PROTECTIVE RIPRAP LINE IN THAT PORTION OF THE CHANNEL.
9. THE MINIMUM TOP WIDTH OF THE EMBANKMENT SHALL BE 10FT.
10. SPILLWAY SHALL BE LINED WITH A 30 MILL POND PVC LINER OR WOVEN STABILIZATION FABRIC AND 12" THICK OF MEDIAN 8" DIA RIPRAP OVERTOP. LINING AND RIPRAP SHALL BE AS WIDE AS THE SPILLWAY AND SHALL EXTEND FROM THE INVERT ELEVATION OF THE BASIN TO STABLE THE GROUND OUTSIDE THE BASIN. LINING SHALL BE SECURED TO THE SPILLWAY.
11. CONTRACTOR SHALL CLEAN OUT THE OUTLET END OF THE CULVERT BARREL TO ENSURE THE INVERT ELEVATION ALIGNS WITH THE ELEVATION SPECIFIED IN THE SEDIMENT BASIN SUMMARY TABLE.

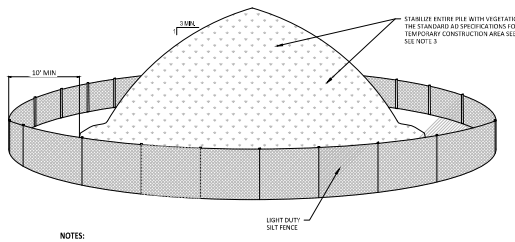


GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER
NOT TO SCALE

NOTE: PRE-FABRICATED INLET SEDIMENT FILTERS MAY BE USED IN LIEU OF THE GRAVEL INLET FILTER DETAIL SHOWN, PROVIDED THE SELECTED DEVICE MEETS OR EXCEEDS FLORIDA EROSION AND SEDIMENT CONTROL BMP REQUIREMENTS AND IS INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.



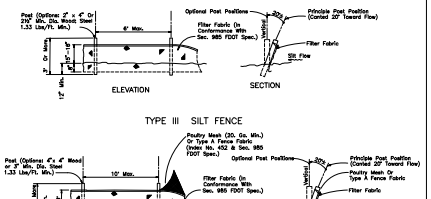
SEDIMENT BASIN RISER DETAIL
NO SCALE



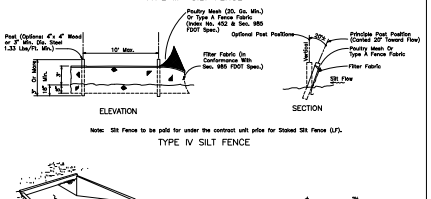
NOTES:

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY, STABILIZED AND LOCATED AWAY FROM KNOWN WORK AREAS TO PREVENT RELOCATION.
2. MAXIMUM STOCKPILE HEIGHT SHALL SHALL BE 6 FEET.
3. EACH SOIL STOCKPILE SHALL BE SURROUNDED WITH SILT FENCING. INSTALLED PER SILT FENCE DETAIL, THEN STABILIZED IN ACCORDANCE WITH THE SPECIFICATION FOR TEMPORARY CONSTRUCTION AREA SEEDING WITHIN 7 DAYS OF COMPLETION.
4. A PERIMETER DIKE/SWALE SHALL BE LOCATED UP SLOPE OF THE TOPSOIL STOCKPILE TO DIVERT STORMWATER AROUND THE STOCKPILE IF LOCATED IN AREA OF CONCENTRATED FLOW.

STABILIZED SOIL STOCKPILE DETAIL
NOT TO SCALE

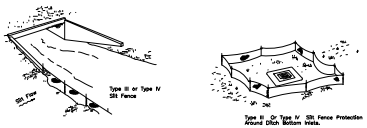


TYPE III SILT FENCE



Note: Silt Fence to be paid for under the contract unit price for Staked Silt Fence (LF).

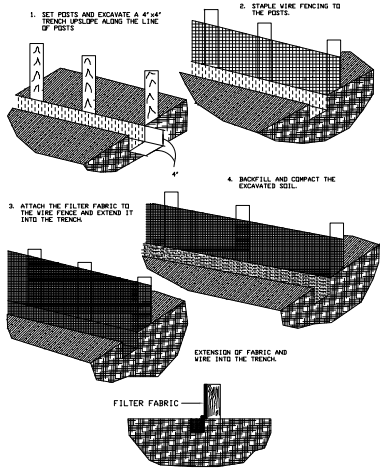
TYPE IV SILT FENCE



Do not deploy in a manner that silt fences will act as a dam across permanent flowing watercourses. Silt fences are to be used at upland locations and turbidity barriers used at permanent bodies of water.

SILT FENCE APPLICATIONS

Note: Spacing for Type III Fence to be in accordance with Chart 1, Plate D-606 and other instructions at drainage structures above.



CONSTRUCTION DETAILS FOR SILT FENCES
NOT TO SCALE

SEDIMENT BASIN SUMMARY TABLE

SEDIMENT BASIN ID	SAND INFILTRATION MEDIUM		STORAGE		CLEANOUT			RISER				SPILLWAY					BARREL				
	BOTTOM OF SAND MEDIUM ELEVATION	BOTTOM OF BASIN ELEVATION	SEDIMENT STORAGE REQUIRED	SEDIMENT STORAGE PROVIDED	SEDIMENT CLEANOUT VOLUME	DEWATERING ORIFICE DIAM.	DEWATERING ORIFICE ELEVATION	CONCRETE RISER OUTFALL STRUCTURE SIZE	4-FT WIDE RECTANGULAR WEIR ELEVATION	RISER CREST ELEVATIO N	RISER MATERIAL	SPILLWAY CREST ELEVATIO N	SPILLWAY CREST LENGTH	SPILLWAY SIDE SLOPES	TOP OF EMBANK MENT ELEVATIO N	TOP OF EMBANK MENT WIDTH (MIN)	PIPE LENGTH	PIPE DIAMETER	PIPE MATERIAL	INVERT IN	INVERT OUT
	FT	FT	AC-FT	AC-FT	CF	IN	FT	FTxFT	FT	FT		FT	FT	FT/FT	FT	FT	FT	IN		FT	FT
B-01	5.6	8.60	9.19	21.88	200,244	4	6.91	5x5	8.50	11.50	CONCRETE BOX	11.50	30.00	10	13.04	10.00	163.15	30.00	RCP - EXISTING PIPE TO REMAIN	6.60	2.85
B-02	11	12.00	4.66	9.23	301,597	4	12.48	5x5	14.50	16.00	CONCRETE BOX	17.00	40.00	10	18.00	10.00	144.85	36.00	RCP	12.00	4.22

SEEDING MIXTURES, RATES AND DATES

Site Conditions	Seeding Mixtures	Seeding Rate Per Acre	Seeding Rate Per 1000 Ft²	Seeding Dates N. Fla.	Comments
High Maintenance Lawns					
General Use	1. Bahiagrass	40-60 lbs	1 lb	2/15-8/31	Use 50% scarified seed.
	2. Bahiagrass Bermudagrass (hulled)	40-60 lbs 8-12 lbs	1 lb 4 oz	2/15-8/15	Use 50% scarified Bahia seed.
	3. Bahiagrass with one of the following:	20-30 lbs	.5 lb		Use 50% scarified Bahia seed.
	Southern White Clover	3 lbs	1.2 oz	9/1-1/1	Innoculate legumes.
	Annual White Sweetclover	8 lbs	3 oz	9/1-1/1	
	Crimson Clover	12 lbs	4.5 oz	9/1-1/1	
	Arrowleaf Clover	8 lbs	3 oz	9/1-1/1	
	Alyce Clover	8 lbs	3 oz	2/15-7/15	
	Hairy Indigo	4 lbs	1.5 oz	2/15-7/15	
	Aschynomene	12 lbs	4.5 oz	2/15-7/15	
Slopes	1. Sericea lespedeza	a.40-50 lbs b. 75 lbs	1.2 lbs 1.7 lbs	1/1-7/15 7/15-1/1	For scarified seed. For unhulled seed.
	2. Sericea lespedeza with one of the following:				Use seeding rate specified above.
	Bahiagrass	15 lbs	7 oz	2/15-8/15	
	Tall Fescue	20 lbs	8 oz	10/1-11/15	Best adapted to N. Florida
	Weeping Lovegrass	3 lbs	1.2 oz	2/15-8/15	
Droughty Areas	1. Weeping Lovegrass	5 lbs	2 oz	2/15-8/15	Gives quick summer cover.
	2. Weeping Lovegrass with one of the following:				
	a. Bahiagrass (50% scarified seed)	5 lbs	2 oz	2/15-8/15	
	b. Bermudagrass (Hulled)	30-40 lbs	12 oz	2/15-8/15	
	c. Hairy panicum	8-12 lbs	4 oz	2/15-8/15	
	d. Serica lespedeza	8-12 lbs	4 oz	2/15-8/15	Use seeding rate and dates specified above.

EROSION & SEDIMENT CONTROL MAINTENANCE SCHEDULE

THE FOLLOWING PROCEDURES WILL BE USED TO MAINTAIN EROSION AND SEDIMENTATION CONTROLS:

1. A RECORD OF THE RAINFALL AMOUNTS AND DATES SHALL BE KEPT BY THE CONTRACTOR.
2. SILT FENCES SHALL BE INSPECTED FOR DEPTH OF ACCUMULATED SEDIMENT, TEARS, ATTACHMENT TO POST AND STABILITY.
3. COMPOST FILTER SOCK SHALL BE INSPECTED PER DETAILS ON SHEET DS-1121.
4. FOR SPECIFIC MAINTENANCE REQUIREMENTS FOR EACH SPECIFIC EROSION CONTROL BMP, REFER TO DETAIL SHEET DS-1123.
5. TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS AND HEALTHY GROWTH.
6. INSPECT DOWNSTREAM DRAINAGE PATHS FROM THE SITE TO DETERMINE IF ANY SEDIMENT HAD BEEN DISPOSED OFFSITE.
7. INSPECT SURFACED AREAS FOR BARE SPOTS AND WASHOUTS.
8. THE CONTRACTOR WILL SELECT INDIVIDUALS TO BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE, REPAIRS AND REPORTING. THE DESIGNATED INSPECTORS WILL RECEIVE THE NECESSARY TRAINING FROM THE CONTRACTOR TO PROPERLY INSPECT AND MAINTAIN THE CONTROLS IN GOOD WORKING ORDER.
9. AN INSPECTION FORM WILL BE COMPLETED AFTER EACH INSPECTION.
10. WHEN EROSION CONTROL BMP'S ARE REMOVED EXCAVATIONS SHALL BE FILLED WITH SIX TABLE COMPACTED BACKFILL. DISTURBED AREAS SHALL BE SEEDED AND MULCHED OR OTHERWISE APPROPRIATELY STABILIZED.

NOTES

1. SEE DRAWINGS DS-1120 FOR EROSION CONTROL PLANS.
2. EROSION AND SEDIMENT CONTROL MEASURE DETAILS CAN BE ALTERED AS NEEDED BY THE PROJECT SITE MANAGER WITH THE APPROVAL OF THE ENGINEER. RECORDS OF CHANGES SHALL BE MAINTAINED ON THE DRAWINGS AND SWPPP THROUGH THE END OF CONSTRUCTION. IF DESIGN CHANGE IS DEEMED NECESSARY, THE PROJECT FIELD MANAGER SHALL CONTACT THE DESIGN ENGINEER TO DISCUSS DESIGN CHANGE/SOLUTION.
3. INSTALL A STABILIZED CONSTRUCTION ENTRANCE WITH FILTER FABRIC UNDERLINER AT THE ACCESS ROAD ENTRANCE AND ANY SECONDARY ENTRANCES. SEE DETAIL ON THIS DRAWING.
4. CONTRACTOR SHALL PROVIDE DUST CONTROL AS NEEDED.
5. ALL TEMPORARY CONSTRUCTION FACILITIES AND AREAS SHALL BE RESTORED TO PRE-EXISTING DRAINAGE PATHS AND SURFACING CONDITIONS AT THE END OF CONSTRUCTION.
6. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO THE PAVED ROADWAYS. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.

NOT TO BE USED FOR CONSTRUCTION

THE DISTRIBUTION AND USE OF THE NATIVE FORMAT CAD FILE OF THIS DRAWING IS UNCONTROLLED. THE USER SHALL VERIFY TRACEABILITY OF THIS DRAWING TO THE LATEST CONTROLLED VERSION.

NO	DATE	REVISIONS AND RECORD OF ISSUE	DRN	DES	CHK	PDE	APP
3	08/07/2026	ISSUED FOR CLIENT REVIEW	JDM	AJX	OC	JCB	JCB
2	05/01/2026	ISSUED FOR INFORMATION	JDM	AJX	OC	JCB	JCB
1	03/18/2026	ISSUED FOR INFORMATION	JDM	AJX	OC	JCB	JCB
0	03/10/2026	ISSUED FOR INFORMATION	JDM	AJX	OC	JCB	JCB

NO SCALE

BLACK & VEATCH CORPORATION
11401 LAMAR AVENUE
OVERLAND PARK, KANSAS 66211
FLORIDA REGISTRATION NO. 8132

BLACK & VEATCH

ENG. DRAWER	DRAWN
ENG. ENGINEER	DRD. DRAWN
CHECKED	DATE
ENG. CHECKED	DRD. CHK DATE

JEA
SJRPP UNIT 3
EROSION CONTROL SECTIONS AND DETAILS

PROJECT	DRAWING NUMBER	REV
424014-DS-1121		3
CODE		
AREA		

ANSI E 44x34
Plotted: 03 Feb 2026 - 10:23AM
K:\JAX\424014-JEA SJRPP UNIT 3\DS\424014-DS-1121.dwg

Appendix G. Select Pages From JEA St. John's River Power Park Decommissioning Drainage Report

1.3 DESIGN STORMS RAINFALL INTENSITIES

The Interconnected Channel and Pond Routing Model (ICPR) provided has used the following rainfall intensities for pre-demolition and post demolition. The rainfall distribution used for this simulation is the SCS method. The rainfall amounts were obtained from the previous permit conditions.

1.4 DESIGN CRITERIA AND CONSTRAINTS

Based on the regulatory criteria, the discharge from the post-demolition site cannot exceed the pre-demolition existing conditions.

Browns Creek is designated as an Outstanding Florida Water, as a result an additional 50% treatment volume has been provided in both the existing pond and the proposed northeast treatment pond. Table 1.4.1 below summarizes a comparison of the pre- and post-demolition runoff curve numbers for the site

Table 1.4.1

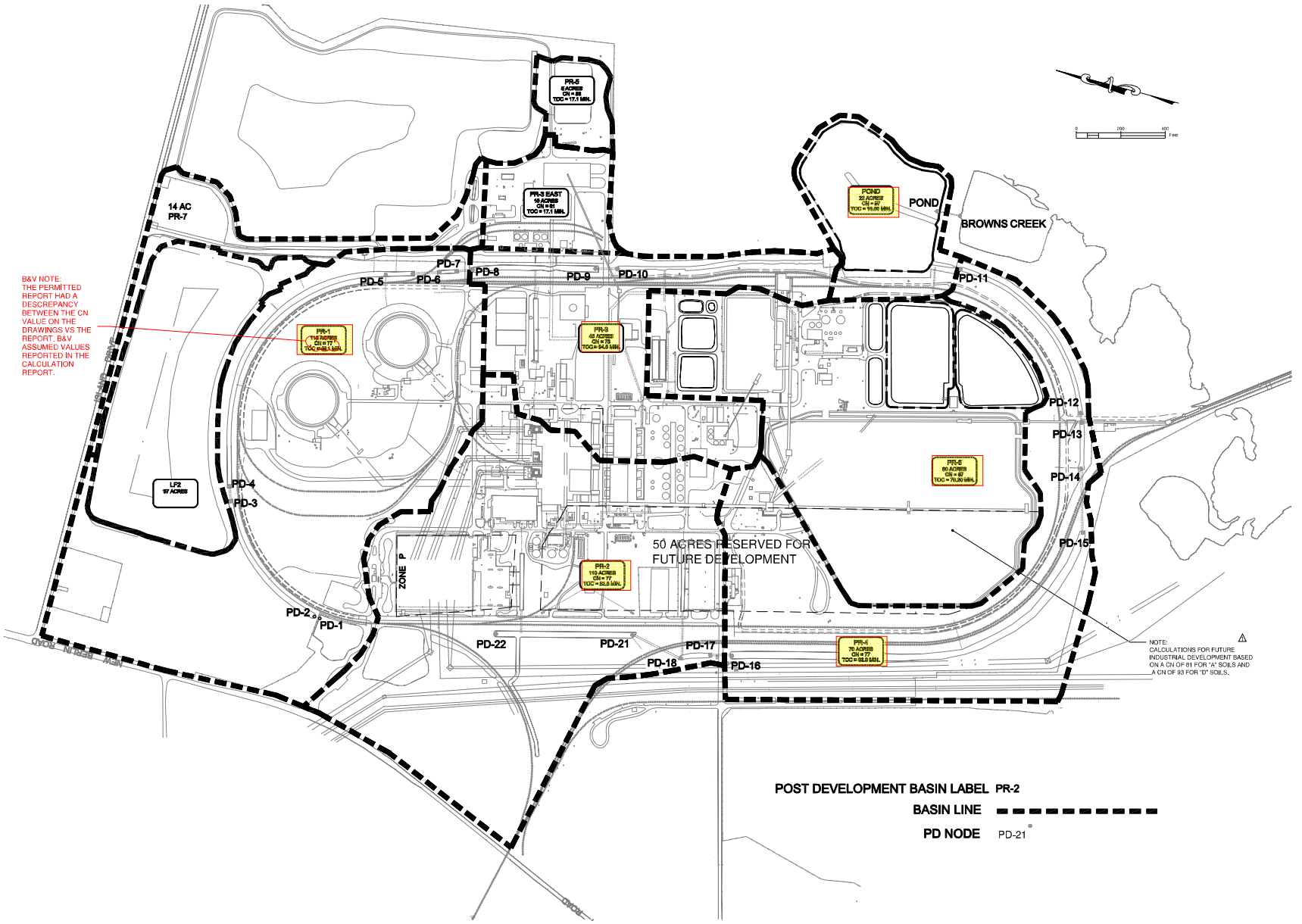
CURVE NUMBER COMPARISON					
PRE-DEMOLITION			POST-DEMOLITION		
AREA NAME	CN	ACRES	AREA NAME	CN	ACRES
EX-1	88	113.3	PR-1	81	113.3
EX-2	83	110.4	PR-2	77	110.4
EX-3	90	60.1	PR-3	70	45
			PR-3 East	61	15.1
EX-4	88	70.3	PR-4	77	70.3
EX-5	95	6.2	PR-5	88	6.2
EX-6	96	90.2	PR-6	67	90.2
EX-7	82	13.7	PR-7	82	13.7
POND	97	22.6	POND	97	22.6
LF2		37.7	LF2		37.7

CN ASSUMPTIONS USED FOR PRE-DEVELOPMENT DRAINAGE AREAS

Table 1.4.2 below summarizes the comparison of pre- and post-demolition treatment volumes. Specific water quality calculations are provided in Section 3.2 of this design package.

Table 1.4.2

TREATMENT VOLUME COMPARISON		
	PRE-DEMOLITION	POST-DEMOLITION
EXISTING POND	50.3 Ac-Ft	61.1 Ac-Ft
NORTHEAST POND	N/A	4.4 Ac-Ft
TOTAL	50.3 Ac-Ft	65.5 Ac-Ft



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4720 SALISBURY ROAD, SUITE 223
JACKSONVILLE, FLORIDA 32256
PHONE (904) 861-4266

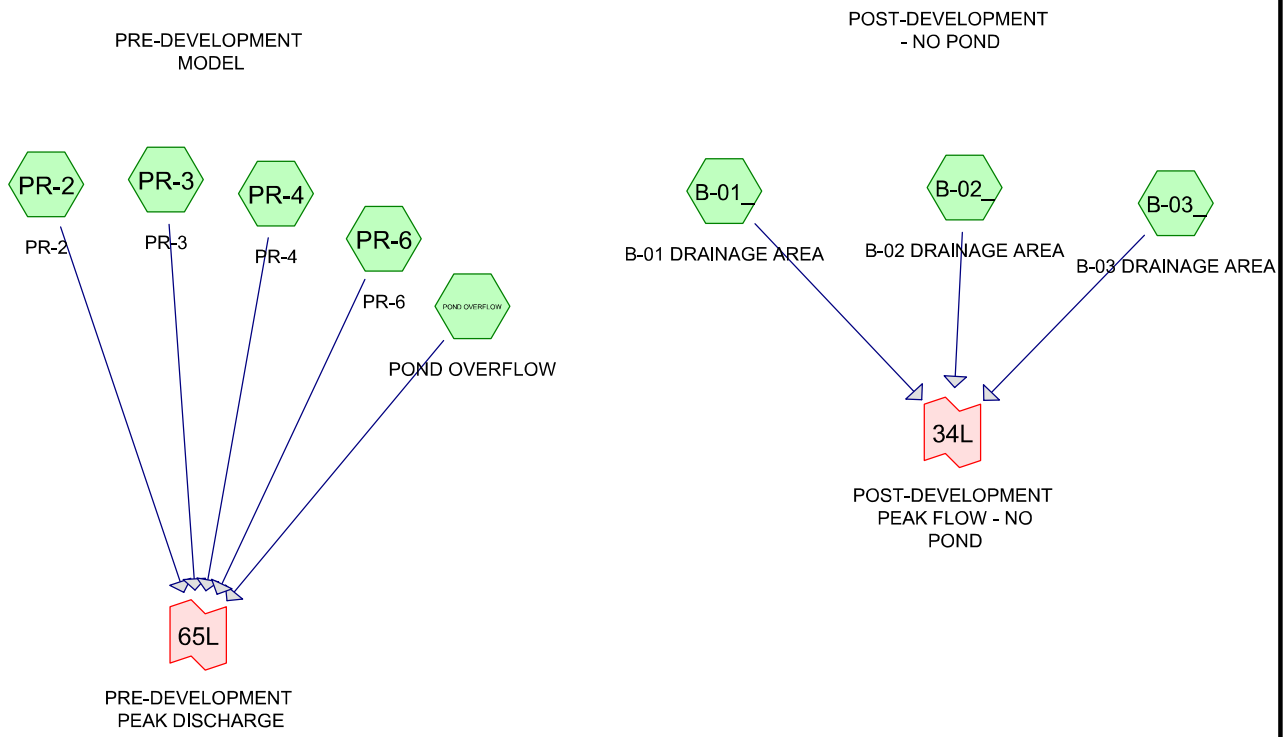
JEA
ST. JOHNS RIVER POWER PARK
DECOMMISSIONING & DEMOLITION
GRADING, DRAINAGE
AND EROSION CONTROL PLANS
ST. JOHNS RIVER POWER PARK
DUVAL COUNTY, FLORIDA

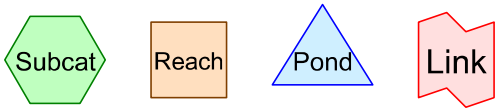
NO.	DATE	REVISION DESCRIPTION
1	11-08-17	SJRPP#3 COMMENTS

POST DEVELOPMENT DRAINAGE MAP

JOB NO.	JOB
DATE	October 9, 2017
SCALE	AS SHOWN
SHEET	C-003

Appendix H. Pre- And Post-Development Peak Flow Hydrocad Report





Routing Diagram for JEA SJRPP
Prepared by Black & Veatch, Printed 3/4/2026
HydroCAD® 10.20-5c s/n 02393 © 2023 HydroCAD Software Solutions LLC

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	25-YR, 24-HR	Type II FL 24-hr		Default	24.00	1	8.95	2
2	Mean Annual 24 Hour Storm	Type II FL 24-hr		Default	24.00	1	5.00	2

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
111.250	95	(B-01_)
56.440	94	(B-02_)
96.810	77	(B-03_, PR-2, PR-4)
0.730	97	(POND OVERFLOW)
34.870	70	(PR-3)
91.370	67	(PR-6)
391.470	**82**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
391.470	Other	B-01_, B-02_, B-03_, POND OVERFLOW, PR-2, PR-3, PR-4, PR-6
391.470		**TOTAL AREA**

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.000	391.470	391.470		B-01_, B-02_, B-03_, POND OVERFLOW, PR-2, PR-3, PR-4, PR-6
0.000	**0.000**	**0.000**	**0.000**	**391.470**	**391.470**	**TOTAL AREA**	

Time span=0.00-500.00 hrs, dt=0.05 hrs, 10001 points
Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment B-01_: B-01 DRAINAGE Runoff Area=111.250 ac 0.00% Impervious Runoff Depth=8.35"
Tc=28.0 min CN=95 Runoff=328.85 cfs 77.393 af

Subcatchment B-02_: B-02 DRAINAGE Runoff Area=56.440 ac 0.00% Impervious Runoff Depth=8.23"
Tc=19.8 min CN=94 Runoff=189.74 cfs 38.695 af

Subcatchment B-03_: B-03 DRAINAGE Runoff Area=28.040 ac 0.00% Impervious Runoff Depth=6.15"
Tc=8.0 min CN=77 Runoff=98.27 cfs 14.376 af

Subcatchment POND OVERFLOW: POND Runoff Area=0.730 ac 0.00% Impervious Runoff Depth=8.59"
Tc=5.0 min CN=97 Runoff=3.48 cfs 0.523 af

Subcatchment PR-2: PR-2 Runoff Area=47.980 ac 0.00% Impervious Runoff Depth=6.15"
Tc=17.6 min CN=77 Runoff=135.13 cfs 24.599 af

Subcatchment PR-3: PR-3 Runoff Area=34.870 ac 0.00% Impervious Runoff Depth=5.29"
Tc=13.0 min CN=70 Runoff=93.44 cfs 15.375 af

Subcatchment PR-4: PR-4 Runoff Area=20.790 ac 0.00% Impervious Runoff Depth=6.15"
Tc=9.4 min CN=77 Runoff=70.31 cfs 10.659 af

Subcatchment PR-6: PR-6 Runoff Area=91.370 ac 0.00% Impervious Runoff Depth=4.92"
Tc=70.2 min CN=67 Runoff=105.10 cfs 37.473 af

Link 34L: POST-DEVELOPMENT PEAK FLOW - NO POND Inflow=598.11 cfs 130.464 af
Primary=598.11 cfs 130.464 af

Link 65L: PRE-DEVELOPMENT PEAK DISCHARGE Inflow=342.57 cfs 88.629 af
Primary=342.57 cfs 88.629 af

Total Runoff Area = 391.470 ac Runoff Volume = 219.093 af Average Runoff Depth = 6.72"
100.00% Pervious = 391.470 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment B-01_: B-01 DRAINAGE AREA

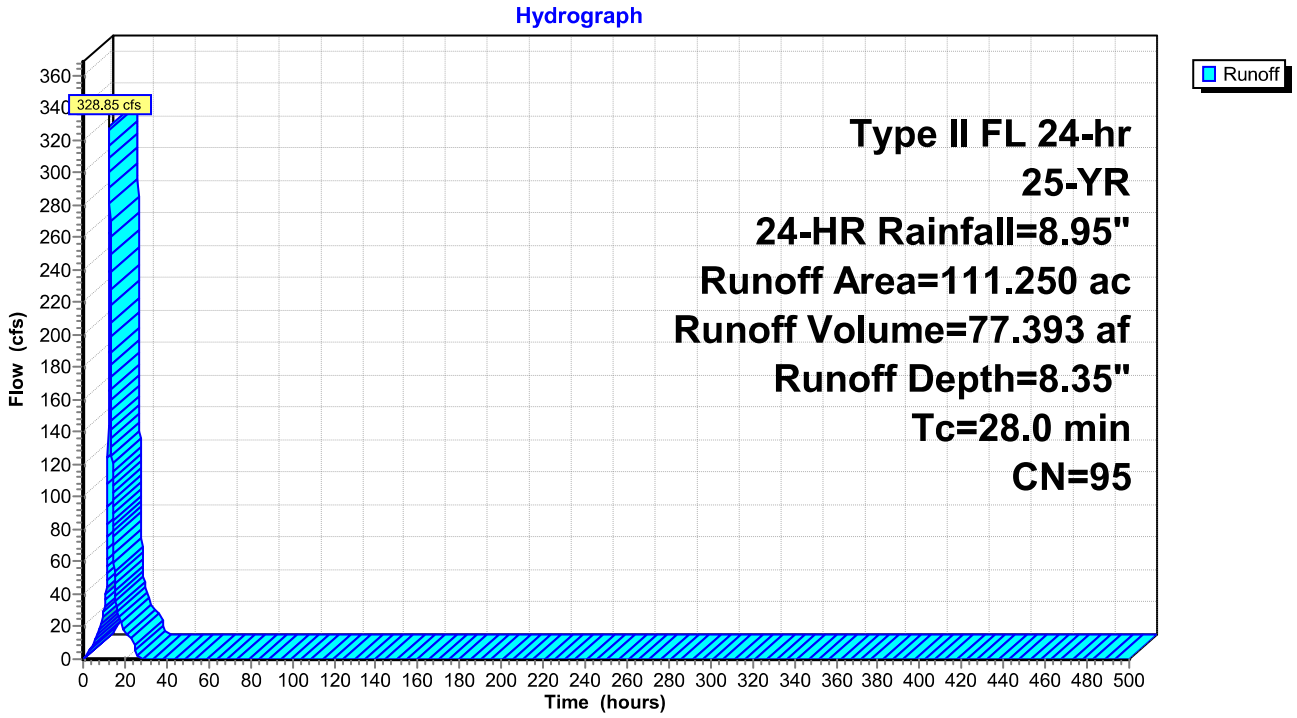
Runoff = 328.85 cfs @ 12.55 hrs, Volume= 77.393 af, Depth= 8.35"
Routed to Link 34L : POST-DEVELOPMENT PEAK FLOW - NO POND

Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Type II FL 24-hr 25-YR, 24-HR Rainfall=8.95"

	Area (ac)	CN	Description
*	111.250	95	
	111.250		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
28.0					**Direct Entry,**

Subcatchment B-01_: B-01 DRAINAGE AREA



Hydrograph for Subcatchment B-01_: B-01 DRAINAGE AREA

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
5.00	0.60	0.24	10.31
10.00	1.71	1.21	**30.47**
15.00	7.48	6.89	**47.84**
20.00	**8.47**	**7.87**	17.65
25.00	**8.95**	**8.35**	3.23
30.00	8.95	8.35	0.00
35.00	8.95	8.35	0.00
40.00	8.95	8.35	0.00
45.00	8.95	8.35	0.00
50.00	8.95	8.35	0.00
55.00	8.95	8.35	0.00
60.00	8.95	8.35	0.00
65.00	8.95	8.35	0.00
70.00	8.95	8.35	0.00
75.00	8.95	8.35	0.00
80.00	8.95	8.35	0.00
85.00	8.95	8.35	0.00
90.00	8.95	8.35	0.00
95.00	8.95	8.35	0.00
100.00	8.95	8.35	0.00
105.00	8.95	8.35	0.00
110.00	8.95	8.35	0.00
115.00	8.95	8.35	0.00
120.00	8.95	8.35	0.00
125.00	8.95	8.35	0.00
130.00	8.95	8.35	0.00
135.00	8.95	8.35	0.00
140.00	8.95	8.35	0.00
145.00	8.95	8.35	0.00
150.00	8.95	8.35	0.00
155.00	8.95	8.35	0.00
160.00	8.95	8.35	0.00
165.00	8.95	8.35	0.00
170.00	8.95	8.35	0.00
175.00	8.95	8.35	0.00
180.00	8.95	8.35	0.00
185.00	8.95	8.35	0.00
190.00	8.95	8.35	0.00
195.00	8.95	8.35	0.00
200.00	8.95	8.35	0.00
205.00	8.95	8.35	0.00
210.00	8.95	8.35	0.00
215.00	8.95	8.35	0.00
220.00	8.95	8.35	0.00
225.00	8.95	8.35	0.00
230.00	8.95	8.35	0.00
235.00	8.95	8.35	0.00
240.00	8.95	8.35	0.00
245.00	8.95	8.35	0.00
250.00	8.95	8.35	0.00
255.00	8.95	8.35	0.00
260.00	8.95	8.35	0.00
265.00	8.95	8.35	0.00
270.00	8.95	8.35	0.00
275.00	8.95	8.35	0.00
280.00	8.95	8.35	0.00
285.00	8.95	8.35	0.00
290.00	8.95	8.35	0.00
295.00	8.95	8.35	0.00
300.00	8.95	8.35	0.00
305.00	8.95	8.35	0.00
310.00	8.95	8.35	0.00
315.00	8.95	8.35	0.00
320.00	8.95	8.35	0.00
325.00	8.95	8.35	0.00
330.00	8.95	8.35	0.00
335.00	8.95	8.35	0.00
340.00	8.95	8.35	0.00
345.00	8.95	8.35	0.00
350.00	8.95	8.35	0.00
355.00	8.95	8.35	0.00
360.00	8.95	8.35	0.00
365.00	8.95	8.35	0.00
370.00	8.95	8.35	0.00
375.00	8.95	8.35	0.00
380.00	8.95	8.35	0.00
385.00	8.95	8.35	0.00
390.00	8.95	8.35	0.00
395.00	8.95	8.35	0.00
400.00	8.95	8.35	0.00
405.00	8.95	8.35	0.00
410.00	8.95	8.35	0.00
415.00	8.95	8.35	0.00
420.00	8.95	8.35	0.00
425.00	8.95	8.35	0.00
430.00	8.95	8.35	0.00
435.00	8.95	8.35	0.00
440.00	8.95	8.35	0.00
445.00	8.95	8.35	0.00
450.00	8.95	8.35	0.00
455.00	8.95	8.35	0.00
460.00	8.95	8.35	0.00
465.00	8.95	8.35	0.00
470.00	8.95	8.35	0.00
475.00	8.95	8.35	0.00
480.00	8.95	8.35	0.00
485.00	8.95	8.35	0.00
490.00	8.95	8.35	0.00
495.00	8.95	8.35	0.00
500.00	8.95	8.35	0.00

Summary for Subcatchment B-02_: B-02 DRAINAGE AREA

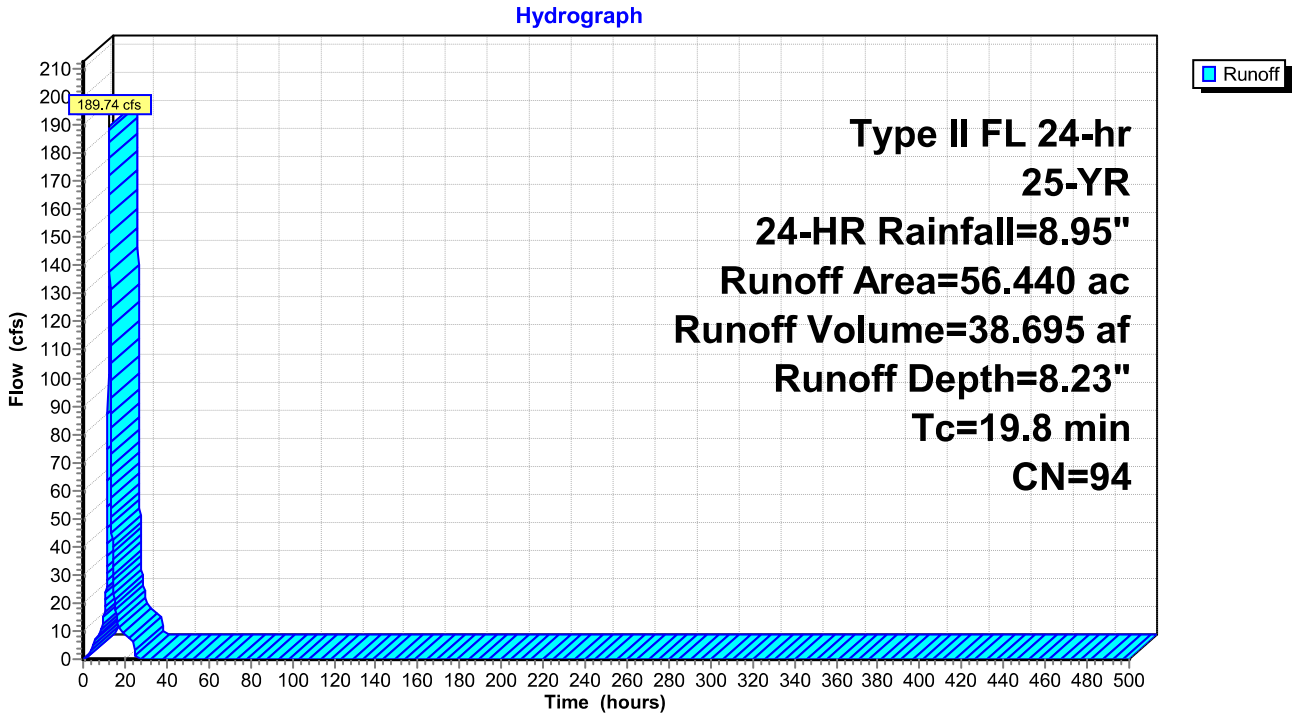
Runoff = 189.74 cfs @ 12.43 hrs, Volume= 38.695 af, Depth= 8.23"
Routed to Link 34L : POST-DEVELOPMENT PEAK FLOW - NO POND

Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Type II FL 24-hr 25-YR, 24-HR Rainfall=8.95"

	Area (ac)	CN	Description
*	56.440	94	
	56.440		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					**Direct Entry,**

Subcatchment B-02_: B-02 DRAINAGE AREA



Hydrograph for Subcatchment B-02_: B-02 DRAINAGE AREA

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
5.00	0.60	0.20	5.01
10.00	1.71	1.13	**15.90**
15.00	7.48	6.77	**19.98**
20.00	**8.47**	**7.75**	8.79
25.00	**8.95**	**8.23**	0.84
30.00	8.95	8.23	0.00
35.00	8.95	8.23	0.00
40.00	8.95	8.23	0.00
45.00	8.95	8.23	0.00
50.00	8.95	8.23	0.00
55.00	8.95	8.23	0.00
60.00	8.95	8.23	0.00
65.00	8.95	8.23	0.00
70.00	8.95	8.23	0.00
75.00	8.95	8.23	0.00
80.00	8.95	8.23	0.00
85.00	8.95	8.23	0.00
90.00	8.95	8.23	0.00
95.00	8.95	8.23	0.00
100.00	8.95	8.23	0.00
105.00	8.95	8.23	0.00
110.00	8.95	8.23	0.00
115.00	8.95	8.23	0.00
120.00	8.95	8.23	0.00
125.00	8.95	8.23	0.00
130.00	8.95	8.23	0.00
135.00	8.95	8.23	0.00
140.00	8.95	8.23	0.00
145.00	8.95	8.23	0.00
150.00	8.95	8.23	0.00
155.00	8.95	8.23	0.00
160.00	8.95	8.23	0.00
165.00	8.95	8.23	0.00
170.00	8.95	8.23	0.00
175.00	8.95	8.23	0.00
180.00	8.95	8.23	0.00
185.00	8.95	8.23	0.00
190.00	8.95	8.23	0.00
195.00	8.95	8.23	0.00
200.00	8.95	8.23	0.00
205.00	8.95	8.23	0.00
210.00	8.95	8.23	0.00
215.00	8.95	8.23	0.00
220.00	8.95	8.23	0.00
225.00	8.95	8.23	0.00
230.00	8.95	8.23	0.00
235.00	8.95	8.23	0.00
240.00	8.95	8.23	0.00
245.00	8.95	8.23	0.00
250.00	8.95	8.23	0.00
255.00	8.95	8.23	0.00
260.00	8.95	8.23	0.00
265.00	8.95	8.23	0.00
270.00	8.95	8.23	0.00
275.00	8.95	8.23	0.00
280.00	8.95	8.23	0.00
285.00	8.95	8.23	0.00
290.00	8.95	8.23	0.00
295.00	8.95	8.23	0.00
300.00	8.95	8.23	0.00
305.00	8.95	8.23	0.00
310.00	8.95	8.23	0.00
315.00	8.95	8.23	0.00
320.00	8.95	8.23	0.00
325.00	8.95	8.23	0.00
330.00	8.95	8.23	0.00
335.00	8.95	8.23	0.00
340.00	8.95	8.23	0.00
345.00	8.95	8.23	0.00
350.00	8.95	8.23	0.00
355.00	8.95	8.23	0.00
360.00	8.95	8.23	0.00
365.00	8.95	8.23	0.00
370.00	8.95	8.23	0.00
375.00	8.95	8.23	0.00
380.00	8.95	8.23	0.00
385.00	8.95	8.23	0.00
390.00	8.95	8.23	0.00
395.00	8.95	8.23	0.00
400.00	8.95	8.23	0.00
405.00	8.95	8.23	0.00
410.00	8.95	8.23	0.00
415.00	8.95	8.23	0.00
420.00	8.95	8.23	0.00
425.00	8.95	8.23	0.00
430.00	8.95	8.23	0.00
435.00	8.95	8.23	0.00
440.00	8.95	8.23	0.00
445.00	8.95	8.23	0.00
450.00	8.95	8.23	0.00
455.00	8.95	8.23	0.00
460.00	8.95	8.23	0.00
465.00	8.95	8.23	0.00
470.00	8.95	8.23	0.00
475.00	8.95	8.23	0.00
480.00	8.95	8.23	0.00
485.00	8.95	8.23	0.00
490.00	8.95	8.23	0.00
495.00	8.95	8.23	0.00
500.00	8.95	8.23	0.00

Summary for Subcatchment B-03_: B-03 DRAINAGE AREA

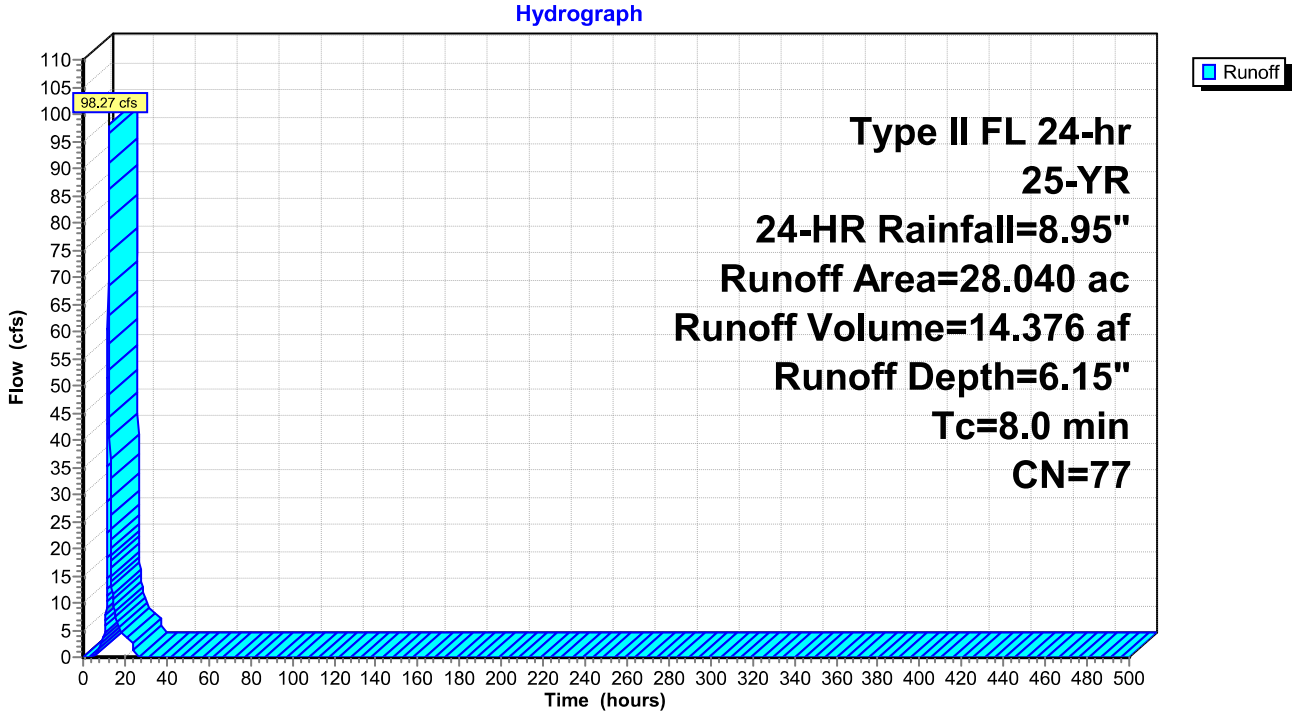
Runoff = 98.27 cfs @ 12.24 hrs, Volume= 14.376 af, Depth= 6.15"
Routed to Link 34L : POST-DEVELOPMENT PEAK FLOW - NO POND

Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Type II FL 24-hr 25-YR, 24-HR Rainfall=8.95"

	Area (ac)	CN	Description
*	28.040	77	
	28.040		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.0					**Direct Entry,**

Subcatchment B-03_: B-03 DRAINAGE AREA



Hydrograph for Subcatchment B-03_: B-03 DRAINAGE AREA

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
5.00	0.60	0.00	0.00
10.00	1.71	0.30	**4.26**
15.00	7.48	4.80	**7.99**
20.00	**8.47**	**5.71**	3.95
25.00	**8.95**	**6.15**	0.00
30.00	8.95	6.15	0.00
35.00	8.95	6.15	0.00
40.00	8.95	6.15	0.00
45.00	8.95	6.15	0.00
50.00	8.95	6.15	0.00
55.00	8.95	6.15	0.00
60.00	8.95	6.15	0.00
65.00	8.95	6.15	0.00
70.00	8.95	6.15	0.00
75.00	8.95	6.15	0.00
80.00	8.95	6.15	0.00
85.00	8.95	6.15	0.00
90.00	8.95	6.15	0.00
95.00	8.95	6.15	0.00
100.00	8.95	6.15	0.00
105.00	8.95	6.15	0.00
110.00	8.95	6.15	0.00
115.00	8.95	6.15	0.00
120.00	8.95	6.15	0.00
125.00	8.95	6.15	0.00
130.00	8.95	6.15	0.00
135.00	8.95	6.15	0.00
140.00	8.95	6.15	0.00
145.00	8.95	6.15	0.00
150.00	8.95	6.15	0.00
155.00	8.95	6.15	0.00
160.00	8.95	6.15	0.00
165.00	8.95	6.15	0.00
170.00	8.95	6.15	0.00
175.00	8.95	6.15	0.00
180.00	8.95	6.15	0.00
185.00	8.95	6.15	0.00
190.00	8.95	6.15	0.00
195.00	8.95	6.15	0.00
200.00	8.95	6.15	0.00
205.00	8.95	6.15	0.00
210.00	8.95	6.15	0.00
215.00	8.95	6.15	0.00
220.00	8.95	6.15	0.00
225.00	8.95	6.15	0.00
230.00	8.95	6.15	0.00
235.00	8.95	6.15	0.00
240.00	8.95	6.15	0.00
245.00	8.95	6.15	0.00
250.00	8.95	6.15	0.00
255.00	8.95	6.15	0.00
260.00	8.95	6.15	0.00
265.00	8.95	6.15	0.00
270.00	8.95	6.15	0.00
275.00	8.95	6.15	0.00
280.00	8.95	6.15	0.00
285.00	8.95	6.15	0.00
290.00	8.95	6.15	0.00
295.00	8.95	6.15	0.00
300.00	8.95	6.15	0.00
305.00	8.95	6.15	0.00
310.00	8.95	6.15	0.00
315.00	8.95	6.15	0.00
320.00	8.95	6.15	0.00
325.00	8.95	6.15	0.00
330.00	8.95	6.15	0.00
335.00	8.95	6.15	0.00
340.00	8.95	6.15	0.00
345.00	8.95	6.15	0.00
350.00	8.95	6.15	0.00
355.00	8.95	6.15	0.00
360.00	8.95	6.15	0.00
365.00	8.95	6.15	0.00
370.00	8.95	6.15	0.00
375.00	8.95	6.15	0.00
380.00	8.95	6.15	0.00
385.00	8.95	6.15	0.00
390.00	8.95	6.15	0.00
395.00	8.95	6.15	0.00
400.00	8.95	6.15	0.00
405.00	8.95	6.15	0.00
410.00	8.95	6.15	0.00
415.00	8.95	6.15	0.00
420.00	8.95	6.15	0.00
425.00	8.95	6.15	0.00
430.00	8.95	6.15	0.00
435.00	8.95	6.15	0.00
440.00	8.95	6.15	0.00
445.00	8.95	6.15	0.00
450.00	8.95	6.15	0.00
455.00	8.95	6.15	0.00
460.00	8.95	6.15	0.00
465.00	8.95	6.15	0.00
470.00	8.95	6.15	0.00
475.00	8.95	6.15	0.00
480.00	8.95	6.15	0.00
485.00	8.95	6.15	0.00
490.00	8.95	6.15	0.00
495.00	8.95	6.15	0.00
500.00	8.95	6.15	0.00

Summary for Subcatchment POND OVERFLOW: POND OVERFLOW

[49] Hint: Tc<2dt may require smaller dt

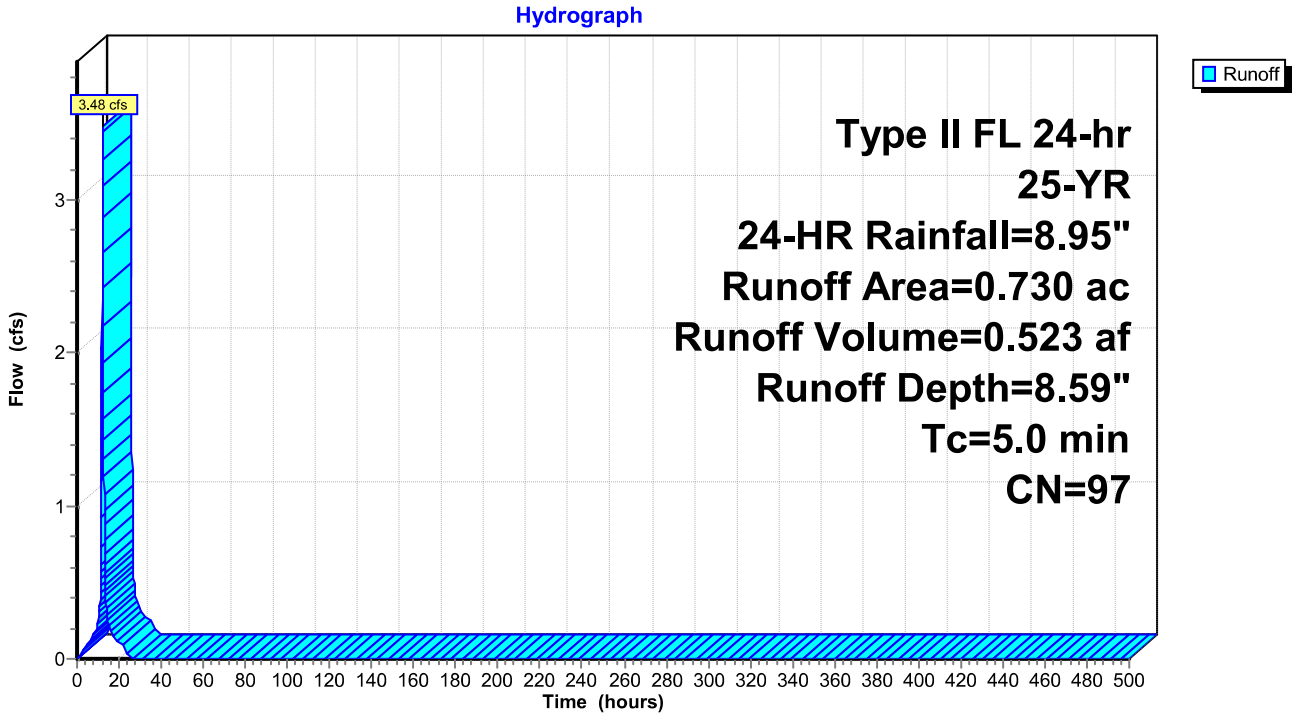
Runoff = 3.48 cfs @ 12.13 hrs, Volume= 0.523 af, Depth= 8.59"
Routed to Link 65L : PRE-DEVELOPMENT PEAK DISCHARGE

Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Type II FL 24-hr 25-YR, 24-HR Rainfall=8.95"

	Area (ac)	CN	Description
*	0.730	97	
	0.730		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment POND OVERFLOW: POND OVERFLOW



Hydrograph for Subcatchment POND OVERFLOW: POND OVERFLOW

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
5.00	0.60	0.34	0.10
10.00	1.71	1.39	**0.25**
15.00	7.48	7.12	**0.22**
20.00	**8.47**	**8.11**	0.11
25.00	**8.95**	**8.59**	0.00
30.00	8.95	8.59	0.00
35.00	8.95	8.59	0.00
40.00	8.95	8.59	0.00
45.00	8.95	8.59	0.00
50.00	8.95	8.59	0.00
55.00	8.95	8.59	0.00
60.00	8.95	8.59	0.00
65.00	8.95	8.59	0.00
70.00	8.95	8.59	0.00
75.00	8.95	8.59	0.00
80.00	8.95	8.59	0.00
85.00	8.95	8.59	0.00
90.00	8.95	8.59	0.00
95.00	8.95	8.59	0.00
100.00	8.95	8.59	0.00
105.00	8.95	8.59	0.00
110.00	8.95	8.59	0.00
115.00	8.95	8.59	0.00
120.00	8.95	8.59	0.00
125.00	8.95	8.59	0.00
130.00	8.95	8.59	0.00
135.00	8.95	8.59	0.00
140.00	8.95	8.59	0.00
145.00	8.95	8.59	0.00
150.00	8.95	8.59	0.00
155.00	8.95	8.59	0.00
160.00	8.95	8.59	0.00
165.00	8.95	8.59	0.00
170.00	8.95	8.59	0.00
175.00	8.95	8.59	0.00
180.00	8.95	8.59	0.00
185.00	8.95	8.59	0.00
190.00	8.95	8.59	0.00
195.00	8.95	8.59	0.00
200.00	8.95	8.59	0.00
205.00	8.95	8.59	0.00
210.00	8.95	8.59	0.00
215.00	8.95	8.59	0.00
220.00	8.95	8.59	0.00
225.00	8.95	8.59	0.00
230.00	8.95	8.59	0.00
235.00	8.95	8.59	0.00
240.00	8.95	8.59	0.00
245.00	8.95	8.59	0.00
250.00	8.95	8.59	0.00
255.00	8.95	8.59	0.00
260.00	8.95	8.59	0.00
265.00	8.95	8.59	0.00
270.00	8.95	8.59	0.00
275.00	8.95	8.59	0.00
280.00	8.95	8.59	0.00
285.00	8.95	8.59	0.00
290.00	8.95	8.59	0.00
295.00	8.95	8.59	0.00
300.00	8.95	8.59	0.00
305.00	8.95	8.59	0.00
310.00	8.95	8.59	0.00
315.00	8.95	8.59	0.00
320.00	8.95	8.59	0.00
325.00	8.95	8.59	0.00
330.00	8.95	8.59	0.00
335.00	8.95	8.59	0.00
340.00	8.95	8.59	0.00
345.00	8.95	8.59	0.00
350.00	8.95	8.59	0.00
355.00	8.95	8.59	0.00
360.00	8.95	8.59	0.00
365.00	8.95	8.59	0.00
370.00	8.95	8.59	0.00
375.00	8.95	8.59	0.00
380.00	8.95	8.59	0.00
385.00	8.95	8.59	0.00
390.00	8.95	8.59	0.00
395.00	8.95	8.59	0.00
400.00	8.95	8.59	0.00
405.00	8.95	8.59	0.00
410.00	8.95	8.59	0.00
415.00	8.95	8.59	0.00
420.00	8.95	8.59	0.00
425.00	8.95	8.59	0.00
430.00	8.95	8.59	0.00
435.00	8.95	8.59	0.00
440.00	8.95	8.59	0.00
445.00	8.95	8.59	0.00
450.00	8.95	8.59	0.00
455.00	8.95	8.59	0.00
460.00	8.95	8.59	0.00
465.00	8.95	8.59	0.00
470.00	8.95	8.59	0.00
475.00	8.95	8.59	0.00
480.00	8.95	8.59	0.00
485.00	8.95	8.59	0.00
490.00	8.95	8.59	0.00
495.00	8.95	8.59	0.00
500.00	8.95	8.59	0.00

Summary for Subcatchment PR-2: PR-2

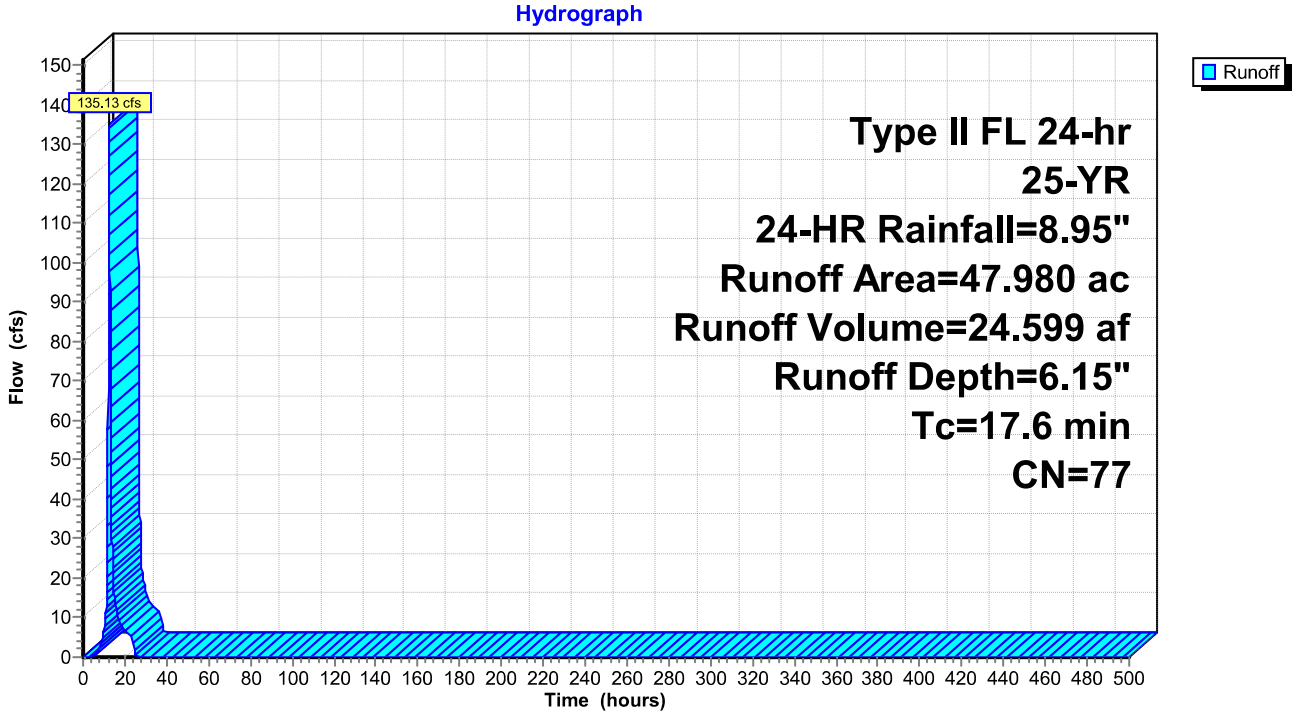
Runoff = 135.13 cfs @ 12.43 hrs, Volume= 24.599 af, Depth= 6.15"
Routed to Link 65L : PRE-DEVELOPMENT PEAK DISCHARGE

Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Type II FL 24-hr 25-YR, 24-HR Rainfall=8.95"

	Area (ac)	CN	Description
*	47.980	77	
	47.980		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.6					**Direct Entry,**

Subcatchment PR-2: PR-2



Hydrograph for Subcatchment PR-2: PR-2

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
5.00	0.60	0.00	0.00
10.00	1.71	0.30	**6.48**
15.00	7.48	4.80	**15.06**
20.00	**8.47**	**5.71**	6.90
25.00	**8.95**	**6.15**	0.49
30.00	8.95	6.15	0.00
35.00	8.95	6.15	0.00
40.00	8.95	6.15	0.00
45.00	8.95	6.15	0.00
50.00	8.95	6.15	0.00
55.00	8.95	6.15	0.00
60.00	8.95	6.15	0.00
65.00	8.95	6.15	0.00
70.00	8.95	6.15	0.00
75.00	8.95	6.15	0.00
80.00	8.95	6.15	0.00
85.00	8.95	6.15	0.00
90.00	8.95	6.15	0.00
95.00	8.95	6.15	0.00
100.00	8.95	6.15	0.00
105.00	8.95	6.15	0.00
110.00	8.95	6.15	0.00
115.00	8.95	6.15	0.00
120.00	8.95	6.15	0.00
125.00	8.95	6.15	0.00
130.00	8.95	6.15	0.00
135.00	8.95	6.15	0.00
140.00	8.95	6.15	0.00
145.00	8.95	6.15	0.00
150.00	8.95	6.15	0.00
155.00	8.95	6.15	0.00
160.00	8.95	6.15	0.00
165.00	8.95	6.15	0.00
170.00	8.95	6.15	0.00
175.00	8.95	6.15	0.00
180.00	8.95	6.15	0.00
185.00	8.95	6.15	0.00
190.00	8.95	6.15	0.00
195.00	8.95	6.15	0.00
200.00	8.95	6.15	0.00
205.00	8.95	6.15	0.00
210.00	8.95	6.15	0.00
215.00	8.95	6.15	0.00
220.00	8.95	6.15	0.00
225.00	8.95	6.15	0.00
230.00	8.95	6.15	0.00
235.00	8.95	6.15	0.00
240.00	8.95	6.15	0.00
245.00	8.95	6.15	0.00
250.00	8.95	6.15	0.00
255.00	8.95	6.15	0.00
260.00	8.95	6.15	0.00
265.00	8.95	6.15	0.00
270.00	8.95	6.15	0.00
275.00	8.95	6.15	0.00
280.00	8.95	6.15	0.00
285.00	8.95	6.15	0.00
290.00	8.95	6.15	0.00
295.00	8.95	6.15	0.00
300.00	8.95	6.15	0.00
305.00	8.95	6.15	0.00
310.00	8.95	6.15	0.00
315.00	8.95	6.15	0.00
320.00	8.95	6.15	0.00
325.00	8.95	6.15	0.00
330.00	8.95	6.15	0.00
335.00	8.95	6.15	0.00
340.00	8.95	6.15	0.00
345.00	8.95	6.15	0.00
350.00	8.95	6.15	0.00
355.00	8.95	6.15	0.00
360.00	8.95	6.15	0.00
365.00	8.95	6.15	0.00
370.00	8.95	6.15	0.00
375.00	8.95	6.15	0.00
380.00	8.95	6.15	0.00
385.00	8.95	6.15	0.00
390.00	8.95	6.15	0.00
395.00	8.95	6.15	0.00
400.00	8.95	6.15	0.00
405.00	8.95	6.15	0.00
410.00	8.95	6.15	0.00
415.00	8.95	6.15	0.00
420.00	8.95	6.15	0.00
425.00	8.95	6.15	0.00
430.00	8.95	6.15	0.00
435.00	8.95	6.15	0.00
440.00	8.95	6.15	0.00
445.00	8.95	6.15	0.00
450.00	8.95	6.15	0.00
455.00	8.95	6.15	0.00
460.00	8.95	6.15	0.00
465.00	8.95	6.15	0.00
470.00	8.95	6.15	0.00
475.00	8.95	6.15	0.00
480.00	8.95	6.15	0.00
485.00	8.95	6.15	0.00
490.00	8.95	6.15	0.00
495.00	8.95	6.15	0.00
500.00	8.95	6.15	0.00

Summary for Subcatchment PR-3: PR-3

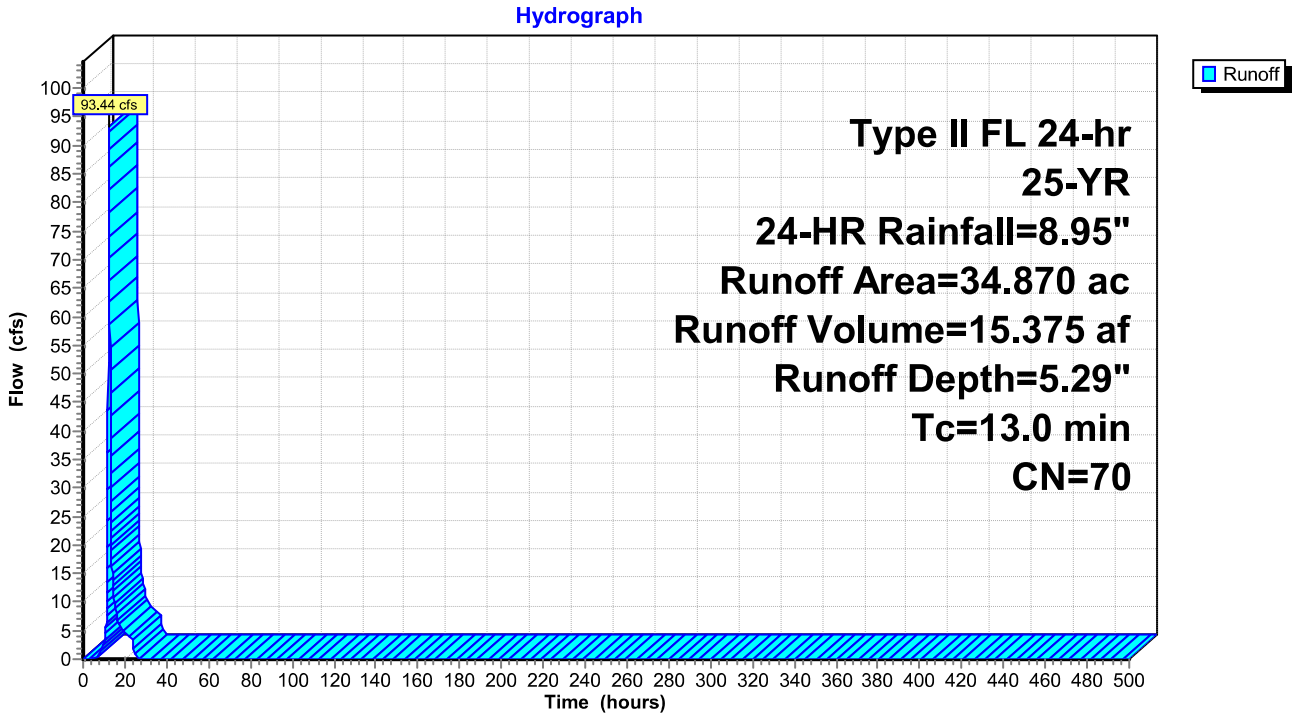
Runoff = 93.44 cfs @ 12.37 hrs, Volume= 15.375 af, Depth= 5.29"
Routed to Link 65L : PRE-DEVELOPMENT PEAK DISCHARGE

Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Type II FL 24-hr 25-YR, 24-HR Rainfall=8.95"

	Area (ac)	CN	Description
*	34.870	70	
	34.870		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.0					**Direct Entry,**

Subcatchment PR-3: PR-3



Hydrograph for Subcatchment PR-3: PR-3

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
5.00	0.60	0.00	0.00
10.00	1.71	0.14	**3.09**
15.00	7.48	4.02	**9.69**
20.00	**8.47**	**4.87**	4.67
25.00	**8.95**	**5.29**	0.08
30.00	8.95	5.29	0.00
35.00	8.95	5.29	0.00
40.00	8.95	5.29	0.00
45.00	8.95	5.29	0.00
50.00	8.95	5.29	0.00
55.00	8.95	5.29	0.00
60.00	8.95	5.29	0.00
65.00	8.95	5.29	0.00
70.00	8.95	5.29	0.00
75.00	8.95	5.29	0.00
80.00	8.95	5.29	0.00
85.00	8.95	5.29	0.00
90.00	8.95	5.29	0.00
95.00	8.95	5.29	0.00
100.00	8.95	5.29	0.00
105.00	8.95	5.29	0.00
110.00	8.95	5.29	0.00
115.00	8.95	5.29	0.00
120.00	8.95	5.29	0.00
125.00	8.95	5.29	0.00
130.00	8.95	5.29	0.00
135.00	8.95	5.29	0.00
140.00	8.95	5.29	0.00
145.00	8.95	5.29	0.00
150.00	8.95	5.29	0.00
155.00	8.95	5.29	0.00
160.00	8.95	5.29	0.00
165.00	8.95	5.29	0.00
170.00	8.95	5.29	0.00
175.00	8.95	5.29	0.00
180.00	8.95	5.29	0.00
185.00	8.95	5.29	0.00
190.00	8.95	5.29	0.00
195.00	8.95	5.29	0.00
200.00	8.95	5.29	0.00
205.00	8.95	5.29	0.00
210.00	8.95	5.29	0.00
215.00	8.95	5.29	0.00
220.00	8.95	5.29	0.00
225.00	8.95	5.29	0.00
230.00	8.95	5.29	0.00
235.00	8.95	5.29	0.00
240.00	8.95	5.29	0.00
245.00	8.95	5.29	0.00
250.00	8.95	5.29	0.00
255.00	8.95	5.29	0.00
260.00	8.95	5.29	0.00
265.00	8.95	5.29	0.00
270.00	8.95	5.29	0.00
275.00	8.95	5.29	0.00
280.00	8.95	5.29	0.00
285.00	8.95	5.29	0.00
290.00	8.95	5.29	0.00
295.00	8.95	5.29	0.00
300.00	8.95	5.29	0.00
305.00	8.95	5.29	0.00
310.00	8.95	5.29	0.00
315.00	8.95	5.29	0.00
320.00	8.95	5.29	0.00
325.00	8.95	5.29	0.00
330.00	8.95	5.29	0.00
335.00	8.95	5.29	0.00
340.00	8.95	5.29	0.00
345.00	8.95	5.29	0.00
350.00	8.95	5.29	0.00
355.00	8.95	5.29	0.00
360.00	8.95	5.29	0.00
365.00	8.95	5.29	0.00
370.00	8.95	5.29	0.00
375.00	8.95	5.29	0.00
380.00	8.95	5.29	0.00
385.00	8.95	5.29	0.00
390.00	8.95	5.29	0.00
395.00	8.95	5.29	0.00
400.00	8.95	5.29	0.00
405.00	8.95	5.29	0.00
410.00	8.95	5.29	0.00
415.00	8.95	5.29	0.00
420.00	8.95	5.29	0.00
425.00	8.95	5.29	0.00
430.00	8.95	5.29	0.00
435.00	8.95	5.29	0.00
440.00	8.95	5.29	0.00
445.00	8.95	5.29	0.00
450.00	8.95	5.29	0.00
455.00	8.95	5.29	0.00
460.00	8.95	5.29	0.00
465.00	8.95	5.29	0.00
470.00	8.95	5.29	0.00
475.00	8.95	5.29	0.00
480.00	8.95	5.29	0.00
485.00	8.95	5.29	0.00
490.00	8.95	5.29	0.00
495.00	8.95	5.29	0.00
500.00	8.95	5.29	0.00

Summary for Subcatchment PR-4: PR-4

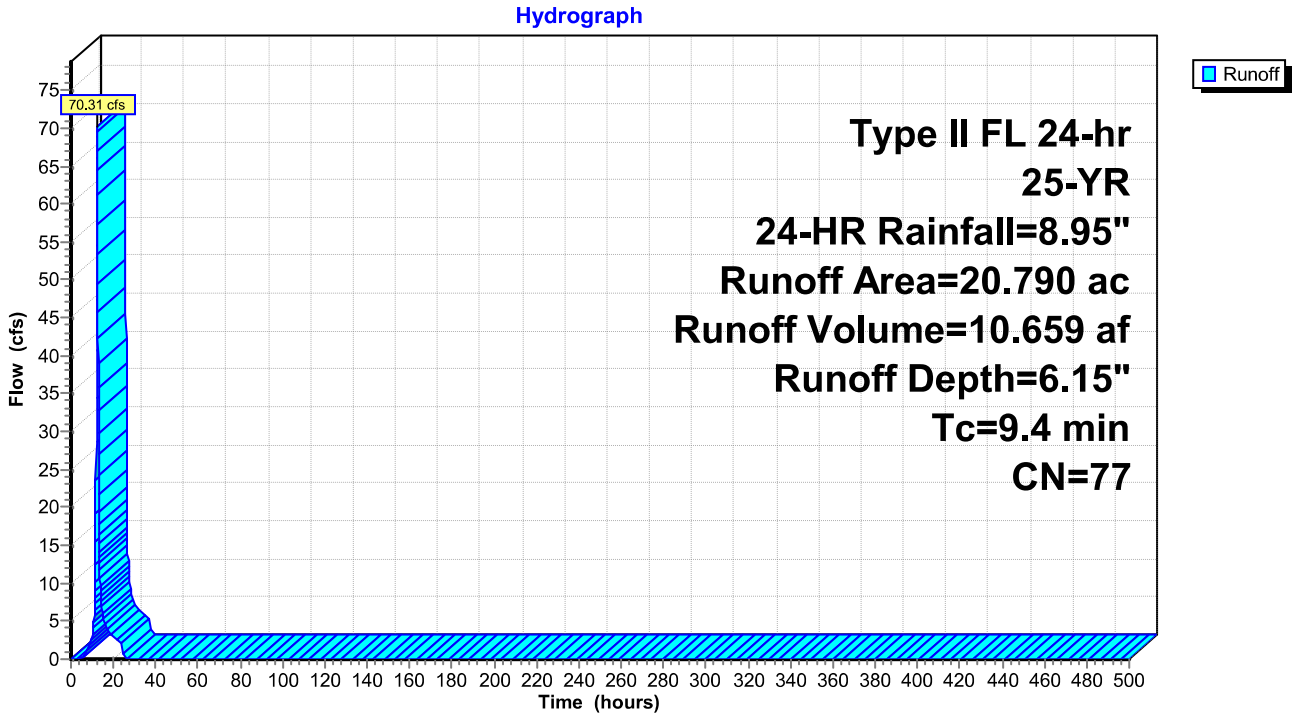
Runoff = 70.31 cfs @ 12.27 hrs, Volume= 10.659 af, Depth= 6.15"
Routed to Link 65L : PRE-DEVELOPMENT PEAK DISCHARGE

Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Type II FL 24-hr 25-YR, 24-HR Rainfall=8.95"

	Area (ac)	CN	Description
*	20.790	77	
	20.790		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4					**Direct Entry,**

Subcatchment PR-4: PR-4



Hydrograph for Subcatchment PR-4: PR-4

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
5.00	0.60	0.00	0.00
10.00	1.71	0.30	**3.10**
15.00	7.48	4.80	**6.01**
20.00	**8.47**	**5.71**	2.94
25.00	**8.95**	**6.15**	0.00
30.00	8.95	6.15	0.00
35.00	8.95	6.15	0.00
40.00	8.95	6.15	0.00
45.00	8.95	6.15	0.00
50.00	8.95	6.15	0.00
55.00	8.95	6.15	0.00
60.00	8.95	6.15	0.00
65.00	8.95	6.15	0.00
70.00	8.95	6.15	0.00
75.00	8.95	6.15	0.00
80.00	8.95	6.15	0.00
85.00	8.95	6.15	0.00
90.00	8.95	6.15	0.00
95.00	8.95	6.15	0.00
100.00	8.95	6.15	0.00
105.00	8.95	6.15	0.00
110.00	8.95	6.15	0.00
115.00	8.95	6.15	0.00
120.00	8.95	6.15	0.00
125.00	8.95	6.15	0.00
130.00	8.95	6.15	0.00
135.00	8.95	6.15	0.00
140.00	8.95	6.15	0.00
145.00	8.95	6.15	0.00
150.00	8.95	6.15	0.00
155.00	8.95	6.15	0.00
160.00	8.95	6.15	0.00
165.00	8.95	6.15	0.00
170.00	8.95	6.15	0.00
175.00	8.95	6.15	0.00
180.00	8.95	6.15	0.00
185.00	8.95	6.15	0.00
190.00	8.95	6.15	0.00
195.00	8.95	6.15	0.00
200.00	8.95	6.15	0.00
205.00	8.95	6.15	0.00
210.00	8.95	6.15	0.00
215.00	8.95	6.15	0.00
220.00	8.95	6.15	0.00
225.00	8.95	6.15	0.00
230.00	8.95	6.15	0.00
235.00	8.95	6.15	0.00
240.00	8.95	6.15	0.00
245.00	8.95	6.15	0.00
250.00	8.95	6.15	0.00
255.00	8.95	6.15	0.00
260.00	8.95	6.15	0.00
265.00	8.95	6.15	0.00
270.00	8.95	6.15	0.00
275.00	8.95	6.15	0.00
280.00	8.95	6.15	0.00
285.00	8.95	6.15	0.00
290.00	8.95	6.15	0.00
295.00	8.95	6.15	0.00
300.00	8.95	6.15	0.00
305.00	8.95	6.15	0.00
310.00	8.95	6.15	0.00
315.00	8.95	6.15	0.00
320.00	8.95	6.15	0.00
325.00	8.95	6.15	0.00
330.00	8.95	6.15	0.00
335.00	8.95	6.15	0.00
340.00	8.95	6.15	0.00
345.00	8.95	6.15	0.00
350.00	8.95	6.15	0.00
355.00	8.95	6.15	0.00
360.00	8.95	6.15	0.00
365.00	8.95	6.15	0.00
370.00	8.95	6.15	0.00
375.00	8.95	6.15	0.00
380.00	8.95	6.15	0.00
385.00	8.95	6.15	0.00
390.00	8.95	6.15	0.00
395.00	8.95	6.15	0.00
400.00	8.95	6.15	0.00
405.00	8.95	6.15	0.00
410.00	8.95	6.15	0.00
415.00	8.95	6.15	0.00
420.00	8.95	6.15	0.00
425.00	8.95	6.15	0.00
430.00	8.95	6.15	0.00
435.00	8.95	6.15	0.00
440.00	8.95	6.15	0.00
445.00	8.95	6.15	0.00
450.00	8.95	6.15	0.00
455.00	8.95	6.15	0.00
460.00	8.95	6.15	0.00
465.00	8.95	6.15	0.00
470.00	8.95	6.15	0.00
475.00	8.95	6.15	0.00
480.00	8.95	6.15	0.00
485.00	8.95	6.15	0.00
490.00	8.95	6.15	0.00
495.00	8.95	6.15	0.00
500.00	8.95	6.15	0.00

Summary for Subcatchment PR-6: PR-6

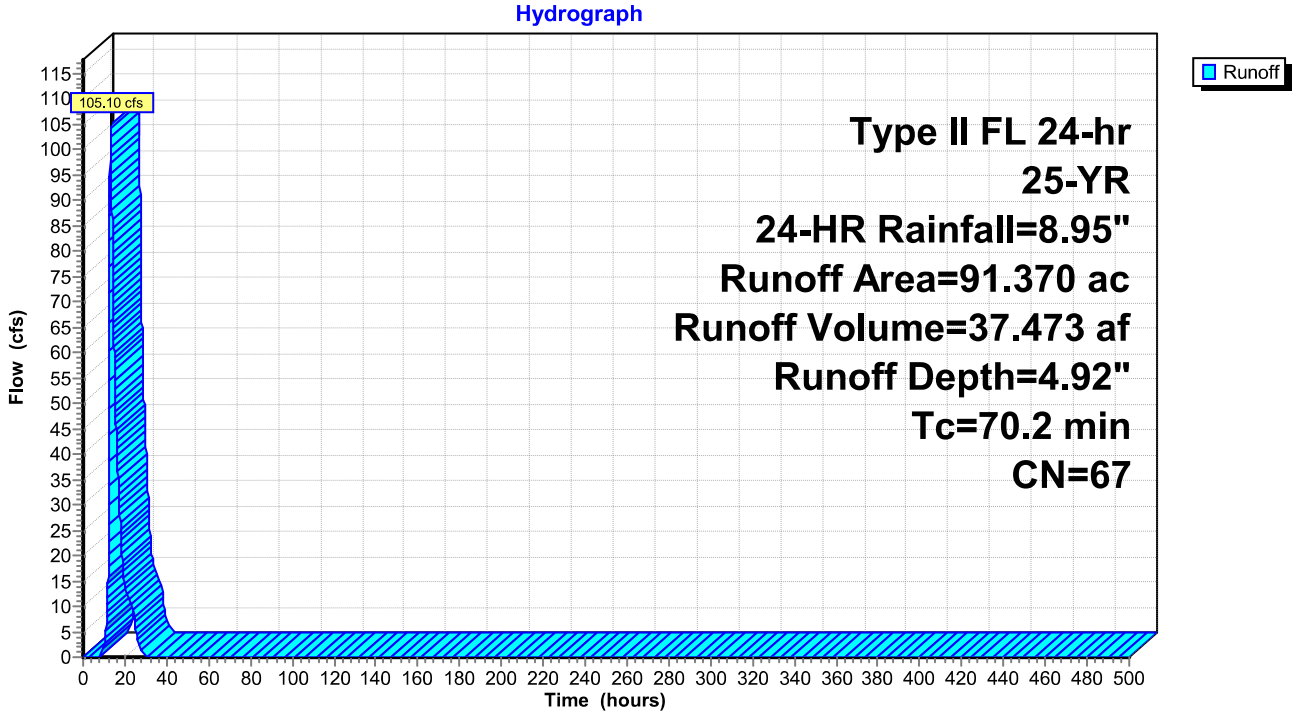
Runoff = 105.10 cfs @ 13.24 hrs, Volume= 37.473 af, Depth= 4.92"
Routed to Link 65L : PRE-DEVELOPMENT PEAK DISCHARGE

Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Type II FL 24-hr 25-YR, 24-HR Rainfall=8.95"

	Area (ac)	CN	Description
*	91.370	67	
	91.370		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
70.2					**Direct Entry,**

Subcatchment PR-6: PR-6



Hydrograph for Subcatchment PR-6: PR-6

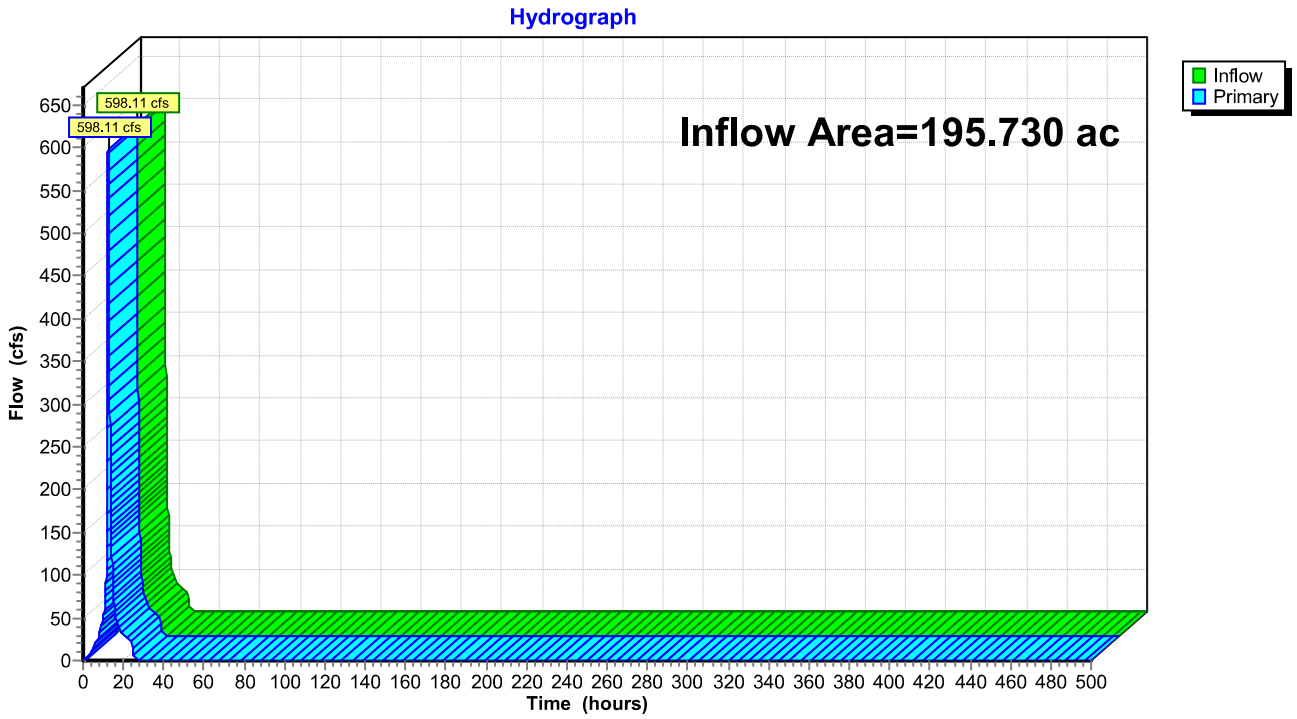
Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
5.00	0.60	0.00	0.00
10.00	1.71	0.09	**2.35**
15.00	7.48	3.70	**56.98**
20.00	**8.47**	**4.51**	14.23
25.00	**8.95**	**4.92**	6.59
30.00	8.95	4.92	0.10
35.00	8.95	4.92	0.00
40.00	8.95	4.92	0.00
45.00	8.95	4.92	0.00
50.00	8.95	4.92	0.00
55.00	8.95	4.92	0.00
60.00	8.95	4.92	0.00
65.00	8.95	4.92	0.00
70.00	8.95	4.92	0.00
75.00	8.95	4.92	0.00
80.00	8.95	4.92	0.00
85.00	8.95	4.92	0.00
90.00	8.95	4.92	0.00
95.00	8.95	4.92	0.00
100.00	8.95	4.92	0.00
105.00	8.95	4.92	0.00
110.00	8.95	4.92	0.00
115.00	8.95	4.92	0.00
120.00	8.95	4.92	0.00
125.00	8.95	4.92	0.00
130.00	8.95	4.92	0.00
135.00	8.95	4.92	0.00
140.00	8.95	4.92	0.00
145.00	8.95	4.92	0.00
150.00	8.95	4.92	0.00
155.00	8.95	4.92	0.00
160.00	8.95	4.92	0.00
165.00	8.95	4.92	0.00
170.00	8.95	4.92	0.00
175.00	8.95	4.92	0.00
180.00	8.95	4.92	0.00
185.00	8.95	4.92	0.00
190.00	8.95	4.92	0.00
195.00	8.95	4.92	0.00
200.00	8.95	4.92	0.00
205.00	8.95	4.92	0.00
210.00	8.95	4.92	0.00
215.00	8.95	4.92	0.00
220.00	8.95	4.92	0.00
225.00	8.95	4.92	0.00
230.00	8.95	4.92	0.00
235.00	8.95	4.92	0.00
240.00	8.95	4.92	0.00
245.00	8.95	4.92	0.00
250.00	8.95	4.92	0.00
255.00	8.95	4.92	0.00
260.00	8.95	4.92	0.00
265.00	8.95	4.92	0.00
270.00	8.95	4.92	0.00
275.00	8.95	4.92	0.00
280.00	8.95	4.92	0.00
285.00	8.95	4.92	0.00
290.00	8.95	4.92	0.00
295.00	8.95	4.92	0.00
300.00	8.95	4.92	0.00
305.00	8.95	4.92	0.00
310.00	8.95	4.92	0.00
315.00	8.95	4.92	0.00
320.00	8.95	4.92	0.00
325.00	8.95	4.92	0.00
330.00	8.95	4.92	0.00
335.00	8.95	4.92	0.00
340.00	8.95	4.92	0.00
345.00	8.95	4.92	0.00
350.00	8.95	4.92	0.00
355.00	8.95	4.92	0.00
360.00	8.95	4.92	0.00
365.00	8.95	4.92	0.00
370.00	8.95	4.92	0.00
375.00	8.95	4.92	0.00
380.00	8.95	4.92	0.00
385.00	8.95	4.92	0.00
390.00	8.95	4.92	0.00
395.00	8.95	4.92	0.00
400.00	8.95	4.92	0.00
405.00	8.95	4.92	0.00
410.00	8.95	4.92	0.00
415.00	8.95	4.92	0.00
420.00	8.95	4.92	0.00
425.00	8.95	4.92	0.00
430.00	8.95	4.92	0.00
435.00	8.95	4.92	0.00
440.00	8.95	4.92	0.00
445.00	8.95	4.92	0.00
450.00	8.95	4.92	0.00
455.00	8.95	4.92	0.00
460.00	8.95	4.92	0.00
465.00	8.95	4.92	0.00
470.00	8.95	4.92	0.00
475.00	8.95	4.92	0.00
480.00	8.95	4.92	0.00
485.00	8.95	4.92	0.00
490.00	8.95	4.92	0.00
495.00	8.95	4.92	0.00
500.00	8.95	4.92	0.00

Summary for Link 34L: POST-DEVELOPMENT PEAK FLOW - NO POND

Inflow Area = 195.730 ac, 0.00% Impervious, Inflow Depth = 8.00" for 25-YR, 24-HR event
Inflow = 598.11 cfs @ 12.46 hrs, Volume= 130.464 af
Primary = 598.11 cfs @ 12.46 hrs, Volume= 130.464 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs

Link 34L: POST-DEVELOPMENT PEAK FLOW - NO POND



Hydrograph for Link 34L: POST-DEVELOPMENT PEAK FLOW - NO POND

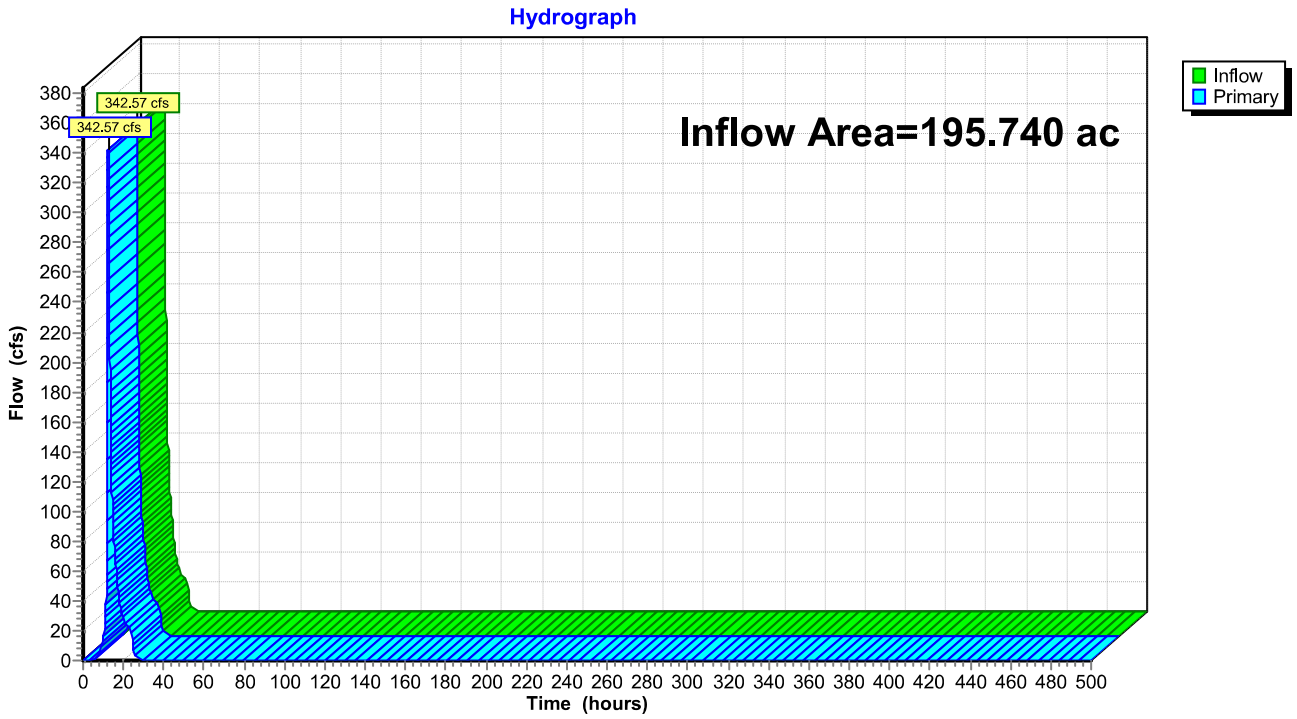
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	**0.00**	0.00
5.00	15.32	0.00	15.32
10.00	**50.63**	0.00	**50.63**
15.00	**75.81**	0.00	**75.81**
20.00	30.39	0.00	30.39
25.00	4.08	0.00	4.08
30.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00
255.00	0.00	0.00	0.00
260.00	0.00	0.00	0.00
265.00	0.00	0.00	0.00
270.00	0.00	0.00	0.00
275.00	0.00	0.00	0.00
280.00	0.00	0.00	0.00
285.00	0.00	0.00	0.00
290.00	0.00	0.00	0.00
295.00	0.00	0.00	0.00
300.00	0.00	0.00	0.00
305.00	0.00	0.00	0.00
310.00	0.00	0.00	0.00
315.00	0.00	0.00	0.00
320.00	0.00	0.00	0.00
325.00	0.00	0.00	0.00
330.00	0.00	0.00	0.00
335.00	0.00	0.00	0.00
340.00	0.00	0.00	0.00
345.00	0.00	0.00	0.00
350.00	0.00	0.00	0.00
355.00	0.00	0.00	0.00
360.00	0.00	0.00	0.00
365.00	0.00	0.00	0.00
370.00	0.00	0.00	0.00
375.00	0.00	0.00	0.00
380.00	0.00	0.00	0.00
385.00	0.00	0.00	0.00
390.00	0.00	0.00	0.00
395.00	0.00	0.00	0.00
400.00	0.00	0.00	0.00
405.00	0.00	0.00	0.00
410.00	0.00	0.00	0.00
415.00	0.00	0.00	0.00
420.00	0.00	0.00	0.00
425.00	0.00	0.00	0.00
430.00	0.00	0.00	0.00
435.00	0.00	0.00	0.00
440.00	0.00	0.00	0.00
445.00	0.00	0.00	0.00
450.00	0.00	0.00	0.00
455.00	0.00	0.00	0.00
460.00	0.00	0.00	0.00
465.00	0.00	0.00	0.00
470.00	0.00	0.00	0.00
475.00	0.00	0.00	0.00
480.00	0.00	0.00	0.00
485.00	0.00	0.00	0.00
490.00	0.00	0.00	0.00
495.00	0.00	0.00	0.00
500.00	0.00	0.00	0.00

Summary for Link 65L: PRE-DEVELOPMENT PEAK DISCHARGE

Inflow Area = 195.740 ac, 0.00% Impervious, Inflow Depth = 5.43" for 25-YR, 24-HR event
Inflow = 342.57 cfs @ 12.44 hrs, Volume= 88.629 af
Primary = 342.57 cfs @ 12.44 hrs, Volume= 88.629 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs

Link 65L: PRE-DEVELOPMENT PEAK DISCHARGE



Hydrograph for Link 65L: PRE-DEVELOPMENT PEAK DISCHARGE

Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)	Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	**0.00**	0.00	260.00	0.00	0.00	0.00
5.00	0.10	0.00	0.10	265.00	0.00	0.00	0.00
10.00	**15.26**	0.00	**15.26**	270.00	0.00	0.00	0.00
15.00	**87.96**	0.00	**87.96**	275.00	0.00	0.00	0.00
20.00	28.84	0.00	28.84	280.00	0.00	0.00	0.00
25.00	7.16	0.00	7.16	285.00	0.00	0.00	0.00
30.00	0.10	0.00	0.10	290.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00	295.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00	305.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00	310.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00	315.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00	320.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00	325.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00	330.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00	335.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00	340.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00	345.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00	350.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00	355.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00	360.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00	365.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00	370.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00	375.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00	380.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00	385.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00	390.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00	395.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00	400.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00	405.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00	410.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00	415.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00	420.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00	425.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00	430.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00	435.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00	440.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00	445.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00	450.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00	455.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00	460.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00	465.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00	470.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00	475.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00	480.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00	485.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00	490.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00	495.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00	500.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00				
250.00	0.00	0.00	0.00				
255.00	0.00	0.00	0.00				

Time span=0.00-500.00 hrs, dt=0.05 hrs, 10001 points
Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment B-01_: B-01 DRAINAGE Runoff Area=111.250 ac 0.00% Impervious Runoff Depth=4.42"
Tc=28.0 min CN=95 Runoff=178.89 cfs 40.973 af

Subcatchment B-02_: B-02 DRAINAGE Runoff Area=56.440 ac 0.00% Impervious Runoff Depth=4.31"
Tc=19.8 min CN=94 Runoff=102.34 cfs 20.262 af

Subcatchment B-03_: B-03 DRAINAGE Runoff Area=28.040 ac 0.00% Impervious Runoff Depth=2.62"
Tc=8.0 min CN=77 Runoff=41.92 cfs 6.129 af

Subcatchment POND OVERFLOW: POND Runoff Area=0.730 ac 0.00% Impervious Runoff Depth=4.65"
Tc=5.0 min CN=97 Runoff=1.92 cfs 0.283 af

Subcatchment PR-2: PR-2 Runoff Area=47.980 ac 0.00% Impervious Runoff Depth=2.62"
Tc=17.6 min CN=77 Runoff=57.58 cfs 10.488 af

Subcatchment PR-3: PR-3 Runoff Area=34.870 ac 0.00% Impervious Runoff Depth=2.04"
Tc=13.0 min CN=70 Runoff=35.03 cfs 5.917 af

Subcatchment PR-4: PR-4 Runoff Area=20.790 ac 0.00% Impervious Runoff Depth=2.62"
Tc=9.4 min CN=77 Runoff=30.00 cfs 4.544 af

Subcatchment PR-6: PR-6 Runoff Area=91.370 ac 0.00% Impervious Runoff Depth=1.80"
Tc=70.2 min CN=67 Runoff=36.06 cfs 13.729 af

Link 34L: POST-DEVELOPMENT PEAK FLOW - NO POND Inflow=315.88 cfs 67.364 af
Primary=315.88 cfs 67.364 af

Link 65L: PRE-DEVELOPMENT PEAK DISCHARGE Inflow=135.19 cfs 34.960 af
Primary=135.19 cfs 34.960 af

Total Runoff Area = 391.470 ac Runoff Volume = 102.324 af Average Runoff Depth = 3.14"
100.00% Pervious = 391.470 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment B-01_: B-01 DRAINAGE AREA

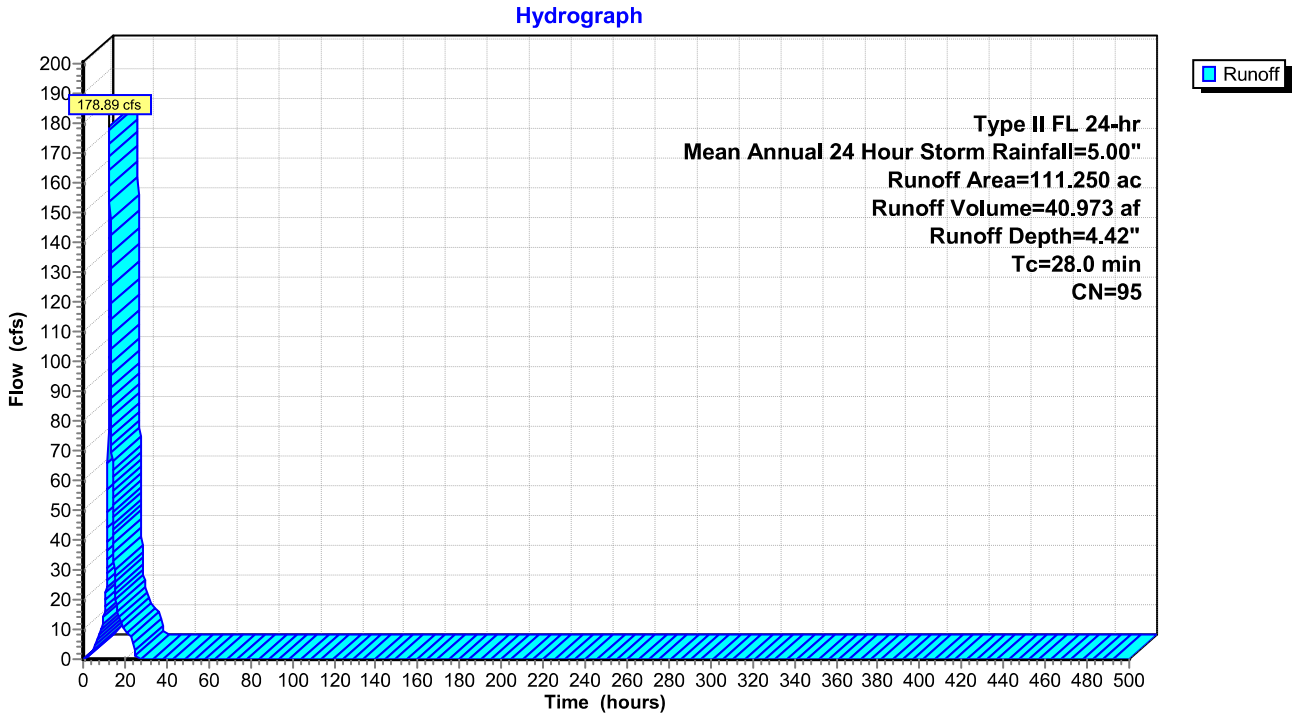
Runoff = 178.89 cfs @ 12.55 hrs, Volume= 40.973 af, Depth= 4.42"
Routed to Link 34L : POST-DEVELOPMENT PEAK FLOW - NO POND

Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Type II FL 24-hr Mean Annual 24 Hour Storm Rainfall=5.00"

	Area (ac)	CN	Description
*	111.250	95	
	111.250		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
28.0					**Direct Entry,**

Subcatchment B-01_: B-01 DRAINAGE AREA



Hydrograph for Subcatchment B-01_: B-01 DRAINAGE AREA

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
5.00	0.33	0.07	3.65
10.00	0.96	0.53	**15.14**
15.00	4.18	3.61	**26.46**
20.00	**4.73**	**4.15**	9.79
25.00	**5.00**	**4.42**	1.80
30.00	5.00	4.42	0.00
35.00	5.00	4.42	0.00
40.00	5.00	4.42	0.00
45.00	5.00	4.42	0.00
50.00	5.00	4.42	0.00
55.00	5.00	4.42	0.00
60.00	5.00	4.42	0.00
65.00	5.00	4.42	0.00
70.00	5.00	4.42	0.00
75.00	5.00	4.42	0.00
80.00	5.00	4.42	0.00
85.00	5.00	4.42	0.00
90.00	5.00	4.42	0.00
95.00	5.00	4.42	0.00
100.00	5.00	4.42	0.00
105.00	5.00	4.42	0.00
110.00	5.00	4.42	0.00
115.00	5.00	4.42	0.00
120.00	5.00	4.42	0.00
125.00	5.00	4.42	0.00
130.00	5.00	4.42	0.00
135.00	5.00	4.42	0.00
140.00	5.00	4.42	0.00
145.00	5.00	4.42	0.00
150.00	5.00	4.42	0.00
155.00	5.00	4.42	0.00
160.00	5.00	4.42	0.00
165.00	5.00	4.42	0.00
170.00	5.00	4.42	0.00
175.00	5.00	4.42	0.00
180.00	5.00	4.42	0.00
185.00	5.00	4.42	0.00
190.00	5.00	4.42	0.00
195.00	5.00	4.42	0.00
200.00	5.00	4.42	0.00
205.00	5.00	4.42	0.00
210.00	5.00	4.42	0.00
215.00	5.00	4.42	0.00
220.00	5.00	4.42	0.00
225.00	5.00	4.42	0.00
230.00	5.00	4.42	0.00
235.00	5.00	4.42	0.00
240.00	5.00	4.42	0.00
245.00	5.00	4.42	0.00
250.00	5.00	4.42	0.00
255.00	5.00	4.42	0.00
260.00	5.00	4.42	0.00
265.00	5.00	4.42	0.00
270.00	5.00	4.42	0.00
275.00	5.00	4.42	0.00
280.00	5.00	4.42	0.00
285.00	5.00	4.42	0.00
290.00	5.00	4.42	0.00
295.00	5.00	4.42	0.00
300.00	5.00	4.42	0.00
305.00	5.00	4.42	0.00
310.00	5.00	4.42	0.00
315.00	5.00	4.42	0.00
320.00	5.00	4.42	0.00
325.00	5.00	4.42	0.00
330.00	5.00	4.42	0.00
335.00	5.00	4.42	0.00
340.00	5.00	4.42	0.00
345.00	5.00	4.42	0.00
350.00	5.00	4.42	0.00
355.00	5.00	4.42	0.00
360.00	5.00	4.42	0.00
365.00	5.00	4.42	0.00
370.00	5.00	4.42	0.00
375.00	5.00	4.42	0.00
380.00	5.00	4.42	0.00
385.00	5.00	4.42	0.00
390.00	5.00	4.42	0.00
395.00	5.00	4.42	0.00
400.00	5.00	4.42	0.00
405.00	5.00	4.42	0.00
410.00	5.00	4.42	0.00
415.00	5.00	4.42	0.00
420.00	5.00	4.42	0.00
425.00	5.00	4.42	0.00
430.00	5.00	4.42	0.00
435.00	5.00	4.42	0.00
440.00	5.00	4.42	0.00
445.00	5.00	4.42	0.00
450.00	5.00	4.42	0.00
455.00	5.00	4.42	0.00
460.00	5.00	4.42	0.00
465.00	5.00	4.42	0.00
470.00	5.00	4.42	0.00
475.00	5.00	4.42	0.00
480.00	5.00	4.42	0.00
485.00	5.00	4.42	0.00
490.00	5.00	4.42	0.00
495.00	5.00	4.42	0.00
500.00	5.00	4.42	0.00

Summary for Subcatchment B-02_: B-02 DRAINAGE AREA

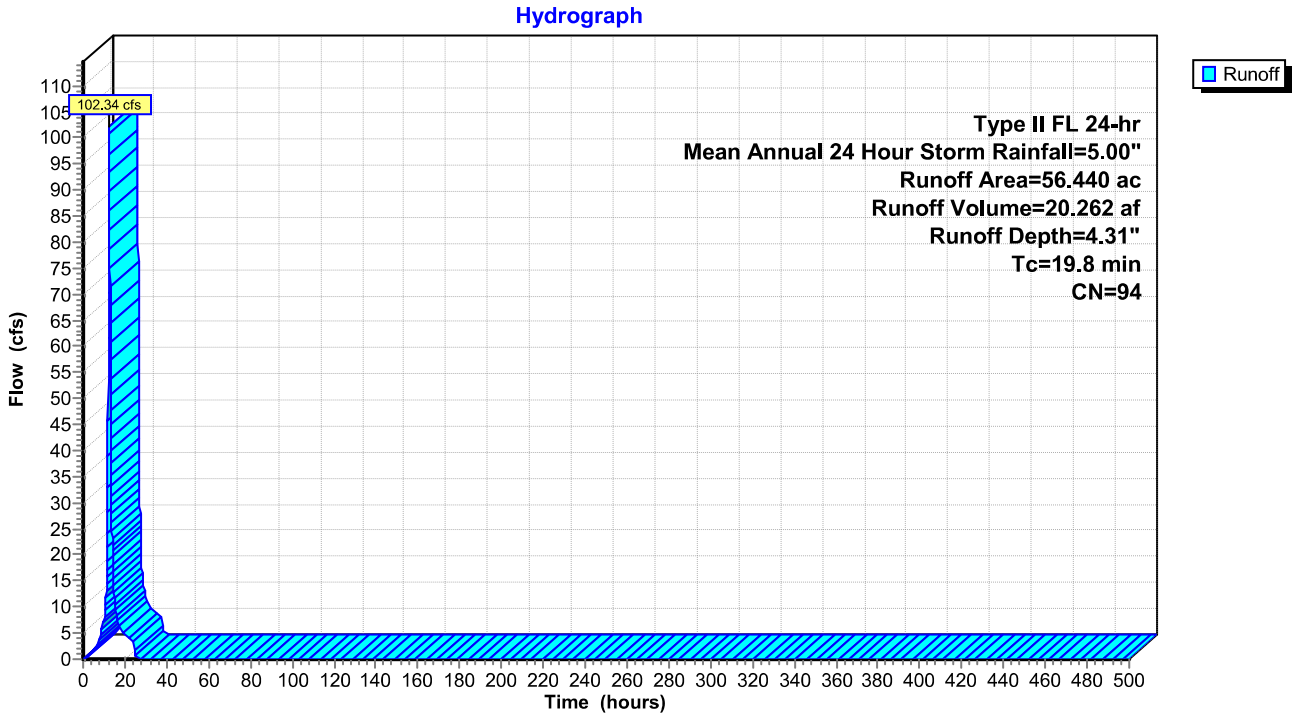
Runoff = 102.34 cfs @ 12.43 hrs, Volume= 20.262 af, Depth= 4.31"
Routed to Link 34L : POST-DEVELOPMENT PEAK FLOW - NO POND

Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Type II FL 24-hr Mean Annual 24 Hour Storm Rainfall=5.00"

	Area (ac)	CN	Description
*	56.440	94	
	56.440		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					**Direct Entry,**

Subcatchment B-02_: B-02 DRAINAGE AREA



Hydrograph for Subcatchment B-02_: B-02 DRAINAGE AREA

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
5.00	0.33	0.05	1.65
10.00	0.96	0.47	**7.70**
15.00	4.18	3.50	**11.02**
20.00	**4.73**	**4.04**	4.86
25.00	**5.00**	**4.31**	0.47
30.00	5.00	4.31	0.00
35.00	5.00	4.31	0.00
40.00	5.00	4.31	0.00
45.00	5.00	4.31	0.00
50.00	5.00	4.31	0.00
55.00	5.00	4.31	0.00
60.00	5.00	4.31	0.00
65.00	5.00	4.31	0.00
70.00	5.00	4.31	0.00
75.00	5.00	4.31	0.00
80.00	5.00	4.31	0.00
85.00	5.00	4.31	0.00
90.00	5.00	4.31	0.00
95.00	5.00	4.31	0.00
100.00	5.00	4.31	0.00
105.00	5.00	4.31	0.00
110.00	5.00	4.31	0.00
115.00	5.00	4.31	0.00
120.00	5.00	4.31	0.00
125.00	5.00	4.31	0.00
130.00	5.00	4.31	0.00
135.00	5.00	4.31	0.00
140.00	5.00	4.31	0.00
145.00	5.00	4.31	0.00
150.00	5.00	4.31	0.00
155.00	5.00	4.31	0.00
160.00	5.00	4.31	0.00
165.00	5.00	4.31	0.00
170.00	5.00	4.31	0.00
175.00	5.00	4.31	0.00
180.00	5.00	4.31	0.00
185.00	5.00	4.31	0.00
190.00	5.00	4.31	0.00
195.00	5.00	4.31	0.00
200.00	5.00	4.31	0.00
205.00	5.00	4.31	0.00
210.00	5.00	4.31	0.00
215.00	5.00	4.31	0.00
220.00	5.00	4.31	0.00
225.00	5.00	4.31	0.00
230.00	5.00	4.31	0.00
235.00	5.00	4.31	0.00
240.00	5.00	4.31	0.00
245.00	5.00	4.31	0.00
250.00	5.00	4.31	0.00
255.00	5.00	4.31	0.00
260.00	5.00	4.31	0.00
265.00	5.00	4.31	0.00
270.00	5.00	4.31	0.00
275.00	5.00	4.31	0.00
280.00	5.00	4.31	0.00
285.00	5.00	4.31	0.00
290.00	5.00	4.31	0.00
295.00	5.00	4.31	0.00
300.00	5.00	4.31	0.00
305.00	5.00	4.31	0.00
310.00	5.00	4.31	0.00
315.00	5.00	4.31	0.00
320.00	5.00	4.31	0.00
325.00	5.00	4.31	0.00
330.00	5.00	4.31	0.00
335.00	5.00	4.31	0.00
340.00	5.00	4.31	0.00
345.00	5.00	4.31	0.00
350.00	5.00	4.31	0.00
355.00	5.00	4.31	0.00
360.00	5.00	4.31	0.00
365.00	5.00	4.31	0.00
370.00	5.00	4.31	0.00
375.00	5.00	4.31	0.00
380.00	5.00	4.31	0.00
385.00	5.00	4.31	0.00
390.00	5.00	4.31	0.00
395.00	5.00	4.31	0.00
400.00	5.00	4.31	0.00
405.00	5.00	4.31	0.00
410.00	5.00	4.31	0.00
415.00	5.00	4.31	0.00
420.00	5.00	4.31	0.00
425.00	5.00	4.31	0.00
430.00	5.00	4.31	0.00
435.00	5.00	4.31	0.00
440.00	5.00	4.31	0.00
445.00	5.00	4.31	0.00
450.00	5.00	4.31	0.00
455.00	5.00	4.31	0.00
460.00	5.00	4.31	0.00
465.00	5.00	4.31	0.00
470.00	5.00	4.31	0.00
475.00	5.00	4.31	0.00
480.00	5.00	4.31	0.00
485.00	5.00	4.31	0.00
490.00	5.00	4.31	0.00
495.00	5.00	4.31	0.00
500.00	5.00	4.31	0.00

Summary for Subcatchment B-03_: B-03 DRAINAGE AREA

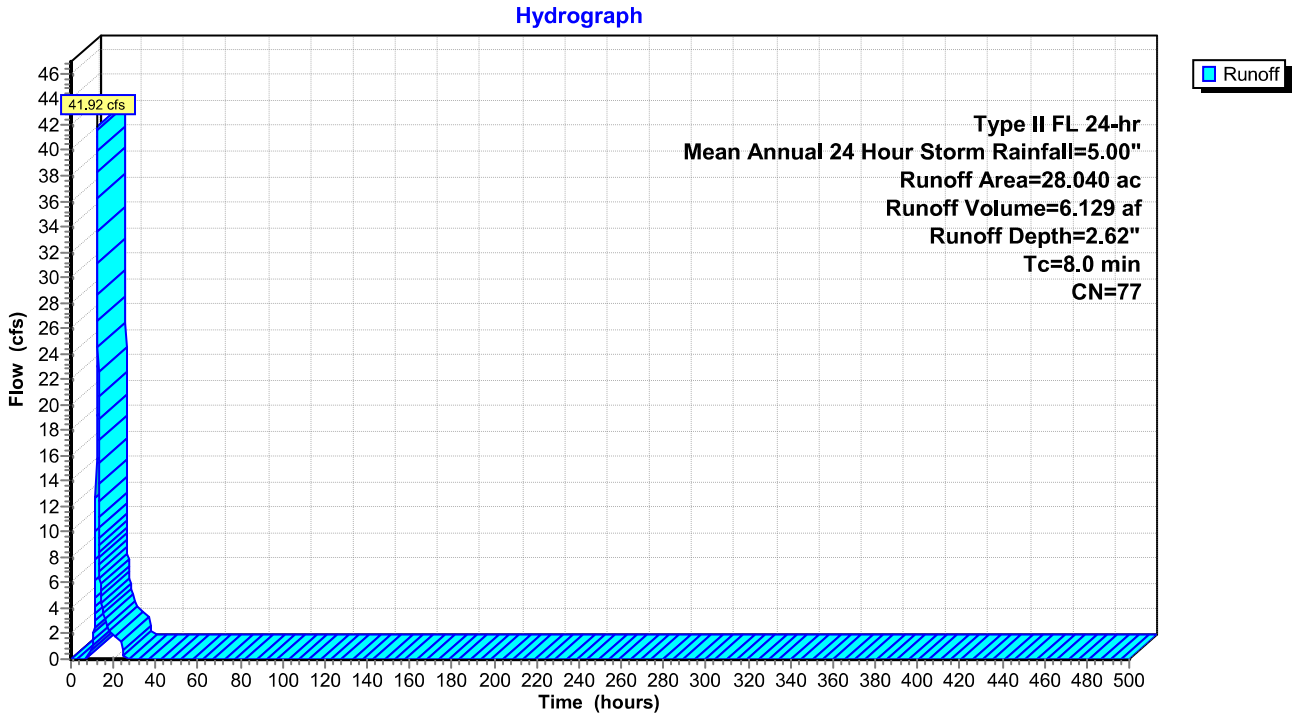
Runoff = 41.92 cfs @ 12.28 hrs, Volume= 6.129 af, Depth= 2.62"
Routed to Link 34L : POST-DEVELOPMENT PEAK FLOW - NO POND

Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Type II FL 24-hr Mean Annual 24 Hour Storm Rainfall=5.00"

	Area (ac)	CN	Description
*	28.040	77	
	28.040		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.0					**Direct Entry,**

Subcatchment B-03_: B-03 DRAINAGE AREA



Hydrograph for Subcatchment B-03_: B-03 DRAINAGE AREA

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
5.00	0.33	0.00	0.00
10.00	0.96	0.04	**0.97**
15.00	4.18	1.95	**3.89**
20.00	**4.73**	**2.40**	1.97
25.00	**5.00**	**2.62**	0.00
30.00	5.00	2.62	0.00
35.00	5.00	2.62	0.00
40.00	5.00	2.62	0.00
45.00	5.00	2.62	0.00
50.00	5.00	2.62	0.00
55.00	5.00	2.62	0.00
60.00	5.00	2.62	0.00
65.00	5.00	2.62	0.00
70.00	5.00	2.62	0.00
75.00	5.00	2.62	0.00
80.00	5.00	2.62	0.00
85.00	5.00	2.62	0.00
90.00	5.00	2.62	0.00
95.00	5.00	2.62	0.00
100.00	5.00	2.62	0.00
105.00	5.00	2.62	0.00
110.00	5.00	2.62	0.00
115.00	5.00	2.62	0.00
120.00	5.00	2.62	0.00
125.00	5.00	2.62	0.00
130.00	5.00	2.62	0.00
135.00	5.00	2.62	0.00
140.00	5.00	2.62	0.00
145.00	5.00	2.62	0.00
150.00	5.00	2.62	0.00
155.00	5.00	2.62	0.00
160.00	5.00	2.62	0.00
165.00	5.00	2.62	0.00
170.00	5.00	2.62	0.00
175.00	5.00	2.62	0.00
180.00	5.00	2.62	0.00
185.00	5.00	2.62	0.00
190.00	5.00	2.62	0.00
195.00	5.00	2.62	0.00
200.00	5.00	2.62	0.00
205.00	5.00	2.62	0.00
210.00	5.00	2.62	0.00
215.00	5.00	2.62	0.00
220.00	5.00	2.62	0.00
225.00	5.00	2.62	0.00
230.00	5.00	2.62	0.00
235.00	5.00	2.62	0.00
240.00	5.00	2.62	0.00
245.00	5.00	2.62	0.00
250.00	5.00	2.62	0.00
255.00	5.00	2.62	0.00
260.00	5.00	2.62	0.00
265.00	5.00	2.62	0.00
270.00	5.00	2.62	0.00
275.00	5.00	2.62	0.00
280.00	5.00	2.62	0.00
285.00	5.00	2.62	0.00
290.00	5.00	2.62	0.00
295.00	5.00	2.62	0.00
300.00	5.00	2.62	0.00
305.00	5.00	2.62	0.00
310.00	5.00	2.62	0.00
315.00	5.00	2.62	0.00
320.00	5.00	2.62	0.00
325.00	5.00	2.62	0.00
330.00	5.00	2.62	0.00
335.00	5.00	2.62	0.00
340.00	5.00	2.62	0.00
345.00	5.00	2.62	0.00
350.00	5.00	2.62	0.00
355.00	5.00	2.62	0.00
360.00	5.00	2.62	0.00
365.00	5.00	2.62	0.00
370.00	5.00	2.62	0.00
375.00	5.00	2.62	0.00
380.00	5.00	2.62	0.00
385.00	5.00	2.62	0.00
390.00	5.00	2.62	0.00
395.00	5.00	2.62	0.00
400.00	5.00	2.62	0.00
405.00	5.00	2.62	0.00
410.00	5.00	2.62	0.00
415.00	5.00	2.62	0.00
420.00	5.00	2.62	0.00
425.00	5.00	2.62	0.00
430.00	5.00	2.62	0.00
435.00	5.00	2.62	0.00
440.00	5.00	2.62	0.00
445.00	5.00	2.62	0.00
450.00	5.00	2.62	0.00
455.00	5.00	2.62	0.00
460.00	5.00	2.62	0.00
465.00	5.00	2.62	0.00
470.00	5.00	2.62	0.00
475.00	5.00	2.62	0.00
480.00	5.00	2.62	0.00
485.00	5.00	2.62	0.00
490.00	5.00	2.62	0.00
495.00	5.00	2.62	0.00
500.00	5.00	2.62	0.00

Summary for Subcatchment POND OVERFLOW: POND OVERFLOW

[49] Hint: Tc<2dt may require smaller dt

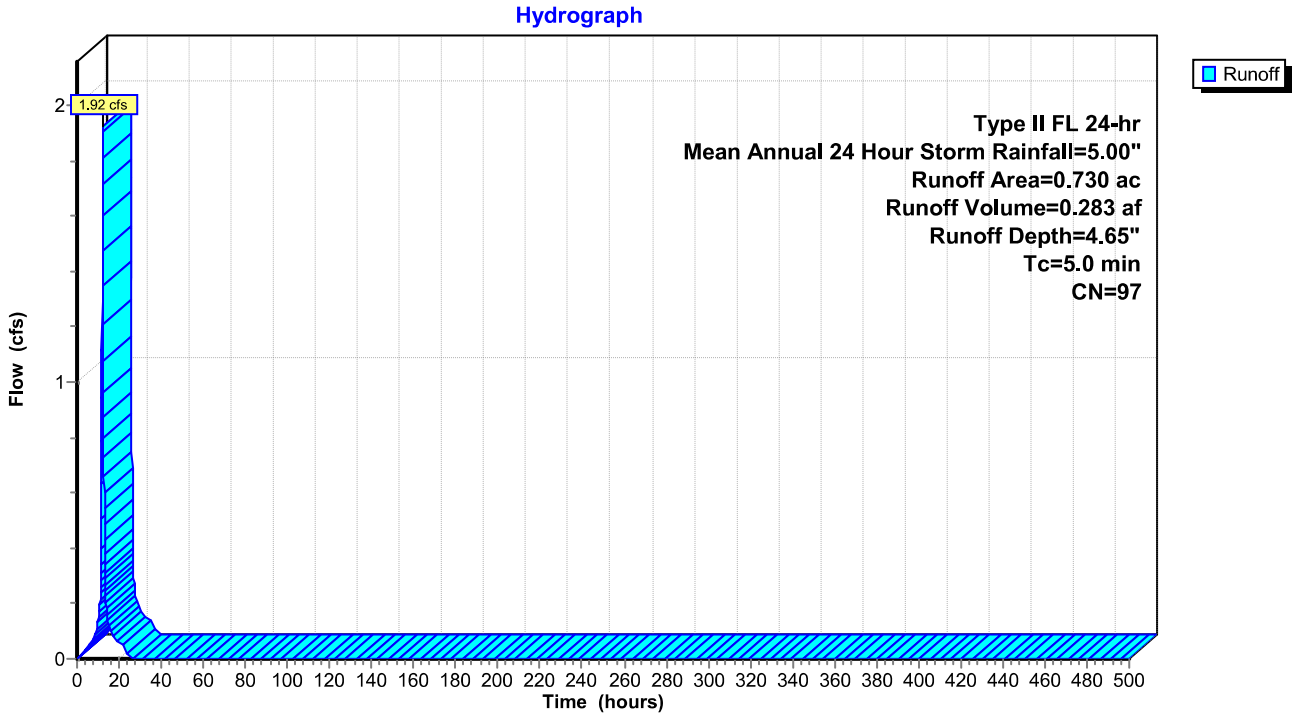
Runoff = 1.92 cfs @ 12.13 hrs, Volume= 0.283 af, Depth= 4.65"
Routed to Link 65L : PRE-DEVELOPMENT PEAK DISCHARGE

Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Type II FL 24-hr Mean Annual 24 Hour Storm Rainfall=5.00"

	Area (ac)	CN	Description
*	0.730	97	
	0.730		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment POND OVERFLOW: POND OVERFLOW



Hydrograph for Subcatchment POND OVERFLOW: POND OVERFLOW

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
5.00	0.33	0.13	0.05
10.00	0.96	0.67	**0.13**
15.00	4.18	3.83	**0.12**
20.00	**4.73**	**4.38**	0.06
25.00	**5.00**	**4.65**	0.00
30.00	5.00	4.65	0.00
35.00	5.00	4.65	0.00
40.00	5.00	4.65	0.00
45.00	5.00	4.65	0.00
50.00	5.00	4.65	0.00
55.00	5.00	4.65	0.00
60.00	5.00	4.65	0.00
65.00	5.00	4.65	0.00
70.00	5.00	4.65	0.00
75.00	5.00	4.65	0.00
80.00	5.00	4.65	0.00
85.00	5.00	4.65	0.00
90.00	5.00	4.65	0.00
95.00	5.00	4.65	0.00
100.00	5.00	4.65	0.00
105.00	5.00	4.65	0.00
110.00	5.00	4.65	0.00
115.00	5.00	4.65	0.00
120.00	5.00	4.65	0.00
125.00	5.00	4.65	0.00
130.00	5.00	4.65	0.00
135.00	5.00	4.65	0.00
140.00	5.00	4.65	0.00
145.00	5.00	4.65	0.00
150.00	5.00	4.65	0.00
155.00	5.00	4.65	0.00
160.00	5.00	4.65	0.00
165.00	5.00	4.65	0.00
170.00	5.00	4.65	0.00
175.00	5.00	4.65	0.00
180.00	5.00	4.65	0.00
185.00	5.00	4.65	0.00
190.00	5.00	4.65	0.00
195.00	5.00	4.65	0.00
200.00	5.00	4.65	0.00
205.00	5.00	4.65	0.00
210.00	5.00	4.65	0.00
215.00	5.00	4.65	0.00
220.00	5.00	4.65	0.00
225.00	5.00	4.65	0.00
230.00	5.00	4.65	0.00
235.00	5.00	4.65	0.00
240.00	5.00	4.65	0.00
245.00	5.00	4.65	0.00
250.00	5.00	4.65	0.00
255.00	5.00	4.65	0.00
260.00	5.00	4.65	0.00
265.00	5.00	4.65	0.00
270.00	5.00	4.65	0.00
275.00	5.00	4.65	0.00
280.00	5.00	4.65	0.00
285.00	5.00	4.65	0.00
290.00	5.00	4.65	0.00
295.00	5.00	4.65	0.00
300.00	5.00	4.65	0.00
305.00	5.00	4.65	0.00
310.00	5.00	4.65	0.00
315.00	5.00	4.65	0.00
320.00	5.00	4.65	0.00
325.00	5.00	4.65	0.00
330.00	5.00	4.65	0.00
335.00	5.00	4.65	0.00
340.00	5.00	4.65	0.00
345.00	5.00	4.65	0.00
350.00	5.00	4.65	0.00
355.00	5.00	4.65	0.00
360.00	5.00	4.65	0.00
365.00	5.00	4.65	0.00
370.00	5.00	4.65	0.00
375.00	5.00	4.65	0.00
380.00	5.00	4.65	0.00
385.00	5.00	4.65	0.00
390.00	5.00	4.65	0.00
395.00	5.00	4.65	0.00
400.00	5.00	4.65	0.00
405.00	5.00	4.65	0.00
410.00	5.00	4.65	0.00
415.00	5.00	4.65	0.00
420.00	5.00	4.65	0.00
425.00	5.00	4.65	0.00
430.00	5.00	4.65	0.00
435.00	5.00	4.65	0.00
440.00	5.00	4.65	0.00
445.00	5.00	4.65	0.00
450.00	5.00	4.65	0.00
455.00	5.00	4.65	0.00
460.00	5.00	4.65	0.00
465.00	5.00	4.65	0.00
470.00	5.00	4.65	0.00
475.00	5.00	4.65	0.00
480.00	5.00	4.65	0.00
485.00	5.00	4.65	0.00
490.00	5.00	4.65	0.00
495.00	5.00	4.65	0.00
500.00	5.00	4.65	0.00

Summary for Subcatchment PR-2: PR-2

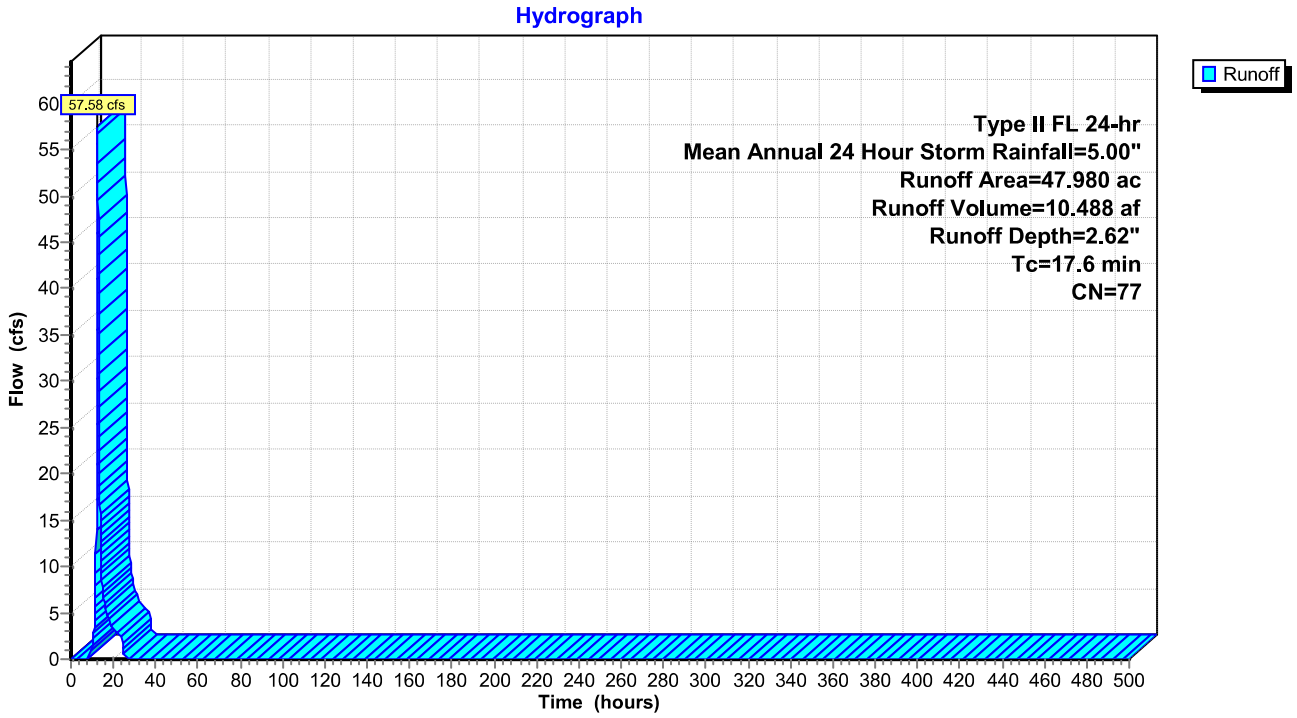
Runoff = 57.58 cfs @ 12.46 hrs, Volume= 10.488 af, Depth= 2.62"
Routed to Link 65L : PRE-DEVELOPMENT PEAK DISCHARGE

Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Type II FL 24-hr Mean Annual 24 Hour Storm Rainfall=5.00"

	Area (ac)	CN	Description
*	47.980	77	
	47.980		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.6					**Direct Entry,**

Subcatchment PR-2: PR-2



Hydrograph for Subcatchment PR-2: PR-2

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
5.00	0.33	0.00	0.00
10.00	0.96	0.04	**1.36**
15.00	4.18	1.95	**7.32**
20.00	**4.73**	**2.40**	3.43
25.00	**5.00**	**2.62**	0.24
30.00	5.00	2.62	0.00
35.00	5.00	2.62	0.00
40.00	5.00	2.62	0.00
45.00	5.00	2.62	0.00
50.00	5.00	2.62	0.00
55.00	5.00	2.62	0.00
60.00	5.00	2.62	0.00
65.00	5.00	2.62	0.00
70.00	5.00	2.62	0.00
75.00	5.00	2.62	0.00
80.00	5.00	2.62	0.00
85.00	5.00	2.62	0.00
90.00	5.00	2.62	0.00
95.00	5.00	2.62	0.00
100.00	5.00	2.62	0.00
105.00	5.00	2.62	0.00
110.00	5.00	2.62	0.00
115.00	5.00	2.62	0.00
120.00	5.00	2.62	0.00
125.00	5.00	2.62	0.00
130.00	5.00	2.62	0.00
135.00	5.00	2.62	0.00
140.00	5.00	2.62	0.00
145.00	5.00	2.62	0.00
150.00	5.00	2.62	0.00
155.00	5.00	2.62	0.00
160.00	5.00	2.62	0.00
165.00	5.00	2.62	0.00
170.00	5.00	2.62	0.00
175.00	5.00	2.62	0.00
180.00	5.00	2.62	0.00
185.00	5.00	2.62	0.00
190.00	5.00	2.62	0.00
195.00	5.00	2.62	0.00
200.00	5.00	2.62	0.00
205.00	5.00	2.62	0.00
210.00	5.00	2.62	0.00
215.00	5.00	2.62	0.00
220.00	5.00	2.62	0.00
225.00	5.00	2.62	0.00
230.00	5.00	2.62	0.00
235.00	5.00	2.62	0.00
240.00	5.00	2.62	0.00
245.00	5.00	2.62	0.00
250.00	5.00	2.62	0.00
255.00	5.00	2.62	0.00
260.00	5.00	2.62	0.00
265.00	5.00	2.62	0.00
270.00	5.00	2.62	0.00
275.00	5.00	2.62	0.00
280.00	5.00	2.62	0.00
285.00	5.00	2.62	0.00
290.00	5.00	2.62	0.00
295.00	5.00	2.62	0.00
300.00	5.00	2.62	0.00
305.00	5.00	2.62	0.00
310.00	5.00	2.62	0.00
315.00	5.00	2.62	0.00
320.00	5.00	2.62	0.00
325.00	5.00	2.62	0.00
330.00	5.00	2.62	0.00
335.00	5.00	2.62	0.00
340.00	5.00	2.62	0.00
345.00	5.00	2.62	0.00
350.00	5.00	2.62	0.00
355.00	5.00	2.62	0.00
360.00	5.00	2.62	0.00
365.00	5.00	2.62	0.00
370.00	5.00	2.62	0.00
375.00	5.00	2.62	0.00
380.00	5.00	2.62	0.00
385.00	5.00	2.62	0.00
390.00	5.00	2.62	0.00
395.00	5.00	2.62	0.00
400.00	5.00	2.62	0.00
405.00	5.00	2.62	0.00
410.00	5.00	2.62	0.00
415.00	5.00	2.62	0.00
420.00	5.00	2.62	0.00
425.00	5.00	2.62	0.00
430.00	5.00	2.62	0.00
435.00	5.00	2.62	0.00
440.00	5.00	2.62	0.00
445.00	5.00	2.62	0.00
450.00	5.00	2.62	0.00
455.00	5.00	2.62	0.00
460.00	5.00	2.62	0.00
465.00	5.00	2.62	0.00
470.00	5.00	2.62	0.00
475.00	5.00	2.62	0.00
480.00	5.00	2.62	0.00
485.00	5.00	2.62	0.00
490.00	5.00	2.62	0.00
495.00	5.00	2.62	0.00
500.00	5.00	2.62	0.00

Summary for Subcatchment PR-3: PR-3

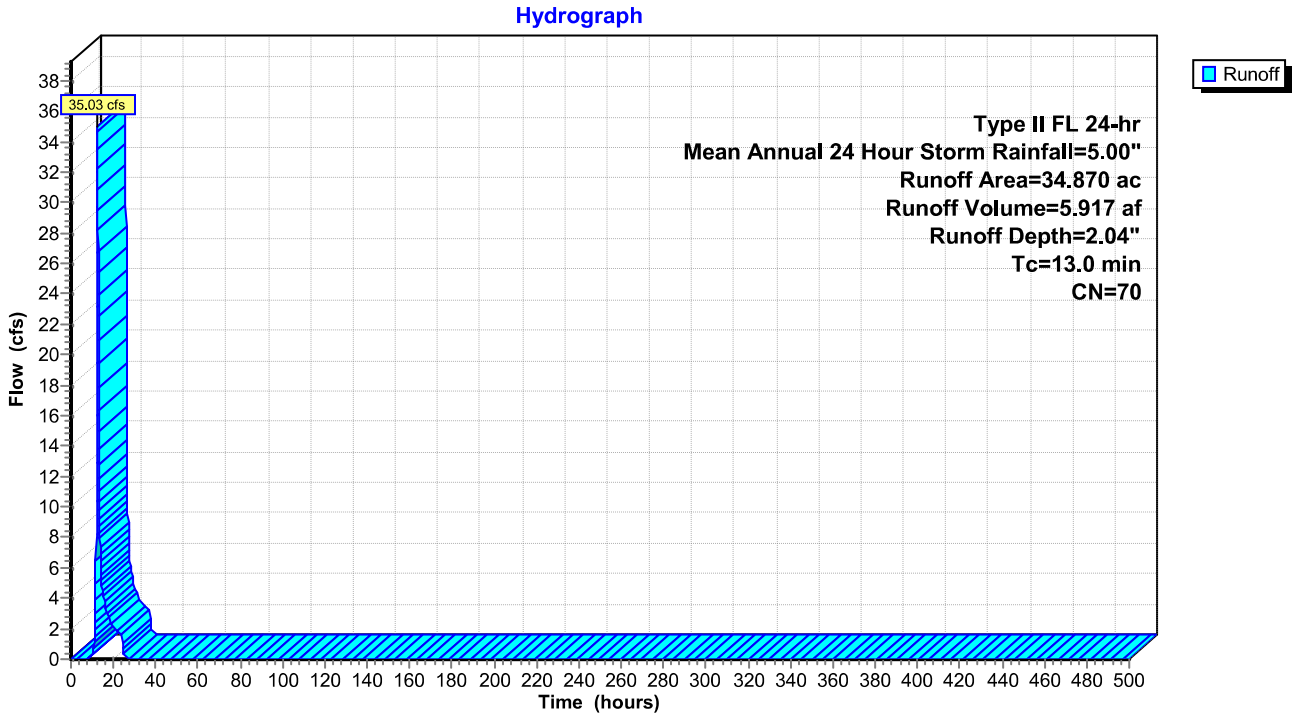
Runoff = 35.03 cfs @ 12.42 hrs, Volume= 5.917 af, Depth= 2.04"
Routed to Link 65L : PRE-DEVELOPMENT PEAK DISCHARGE

Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Type II FL 24-hr Mean Annual 24 Hour Storm Rainfall=5.00"

	Area (ac)	CN	Description
*	34.870	70	
	34.870		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.0					**Direct Entry,**

Subcatchment PR-3: PR-3



Hydrograph for Subcatchment PR-3: PR-3

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
5.00	0.33	0.00	0.00
10.00	0.96	0.00	**0.12**
15.00	4.18	1.45	**4.35**
20.00	**4.73**	**1.84**	2.17
25.00	**5.00**	**2.04**	0.04
30.00	5.00	2.04	0.00
35.00	5.00	2.04	0.00
40.00	5.00	2.04	0.00
45.00	5.00	2.04	0.00
50.00	5.00	2.04	0.00
55.00	5.00	2.04	0.00
60.00	5.00	2.04	0.00
65.00	5.00	2.04	0.00
70.00	5.00	2.04	0.00
75.00	5.00	2.04	0.00
80.00	5.00	2.04	0.00
85.00	5.00	2.04	0.00
90.00	5.00	2.04	0.00
95.00	5.00	2.04	0.00
100.00	5.00	2.04	0.00
105.00	5.00	2.04	0.00
110.00	5.00	2.04	0.00
115.00	5.00	2.04	0.00
120.00	5.00	2.04	0.00
125.00	5.00	2.04	0.00
130.00	5.00	2.04	0.00
135.00	5.00	2.04	0.00
140.00	5.00	2.04	0.00
145.00	5.00	2.04	0.00
150.00	5.00	2.04	0.00
155.00	5.00	2.04	0.00
160.00	5.00	2.04	0.00
165.00	5.00	2.04	0.00
170.00	5.00	2.04	0.00
175.00	5.00	2.04	0.00
180.00	5.00	2.04	0.00
185.00	5.00	2.04	0.00
190.00	5.00	2.04	0.00
195.00	5.00	2.04	0.00
200.00	5.00	2.04	0.00
205.00	5.00	2.04	0.00
210.00	5.00	2.04	0.00
215.00	5.00	2.04	0.00
220.00	5.00	2.04	0.00
225.00	5.00	2.04	0.00
230.00	5.00	2.04	0.00
235.00	5.00	2.04	0.00
240.00	5.00	2.04	0.00
245.00	5.00	2.04	0.00
250.00	5.00	2.04	0.00
255.00	5.00	2.04	0.00
260.00	5.00	2.04	0.00
265.00	5.00	2.04	0.00
270.00	5.00	2.04	0.00
275.00	5.00	2.04	0.00
280.00	5.00	2.04	0.00
285.00	5.00	2.04	0.00
290.00	5.00	2.04	0.00
295.00	5.00	2.04	0.00
300.00	5.00	2.04	0.00
305.00	5.00	2.04	0.00
310.00	5.00	2.04	0.00
315.00	5.00	2.04	0.00
320.00	5.00	2.04	0.00
325.00	5.00	2.04	0.00
330.00	5.00	2.04	0.00
335.00	5.00	2.04	0.00
340.00	5.00	2.04	0.00
345.00	5.00	2.04	0.00
350.00	5.00	2.04	0.00
355.00	5.00	2.04	0.00
360.00	5.00	2.04	0.00
365.00	5.00	2.04	0.00
370.00	5.00	2.04	0.00
375.00	5.00	2.04	0.00
380.00	5.00	2.04	0.00
385.00	5.00	2.04	0.00
390.00	5.00	2.04	0.00
395.00	5.00	2.04	0.00
400.00	5.00	2.04	0.00
405.00	5.00	2.04	0.00
410.00	5.00	2.04	0.00
415.00	5.00	2.04	0.00
420.00	5.00	2.04	0.00
425.00	5.00	2.04	0.00
430.00	5.00	2.04	0.00
435.00	5.00	2.04	0.00
440.00	5.00	2.04	0.00
445.00	5.00	2.04	0.00
450.00	5.00	2.04	0.00
455.00	5.00	2.04	0.00
460.00	5.00	2.04	0.00
465.00	5.00	2.04	0.00
470.00	5.00	2.04	0.00
475.00	5.00	2.04	0.00
480.00	5.00	2.04	0.00
485.00	5.00	2.04	0.00
490.00	5.00	2.04	0.00
495.00	5.00	2.04	0.00
500.00	5.00	2.04	0.00

Summary for Subcatchment PR-4: PR-4

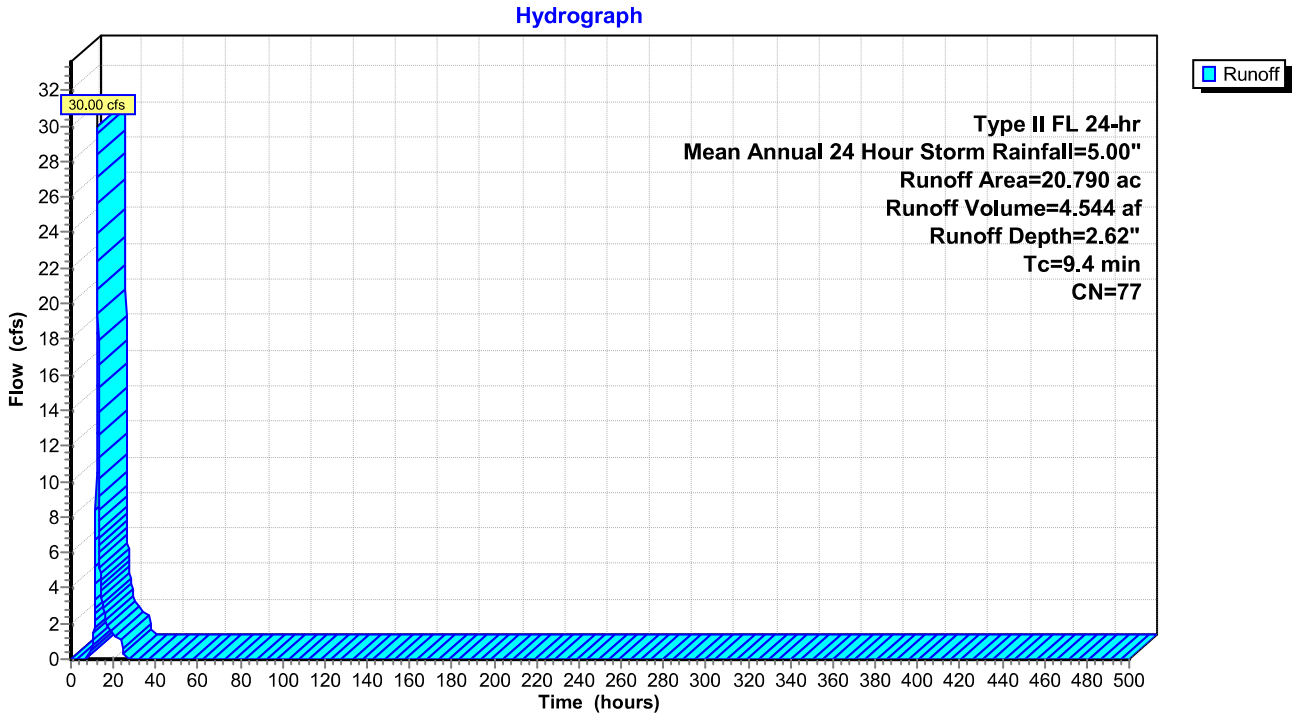
Runoff = 30.00 cfs @ 12.31 hrs, Volume= 4.544 af, Depth= 2.62"
Routed to Link 65L : PRE-DEVELOPMENT PEAK DISCHARGE

Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Type II FL 24-hr Mean Annual 24 Hour Storm Rainfall=5.00"

	Area (ac)	CN	Description
*	20.790	77	
	20.790		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.4					**Direct Entry,**

Subcatchment PR-4: PR-4



Hydrograph for Subcatchment PR-4: PR-4

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
5.00	0.33	0.00	0.00
10.00	0.96	0.04	**0.70**
15.00	4.18	1.95	**2.92**
20.00	**4.73**	**2.40**	1.46
25.00	**5.00**	**2.62**	0.00
30.00	5.00	2.62	0.00
35.00	5.00	2.62	0.00
40.00	5.00	2.62	0.00
45.00	5.00	2.62	0.00
50.00	5.00	2.62	0.00
55.00	5.00	2.62	0.00
60.00	5.00	2.62	0.00
65.00	5.00	2.62	0.00
70.00	5.00	2.62	0.00
75.00	5.00	2.62	0.00
80.00	5.00	2.62	0.00
85.00	5.00	2.62	0.00
90.00	5.00	2.62	0.00
95.00	5.00	2.62	0.00
100.00	5.00	2.62	0.00
105.00	5.00	2.62	0.00
110.00	5.00	2.62	0.00
115.00	5.00	2.62	0.00
120.00	5.00	2.62	0.00
125.00	5.00	2.62	0.00
130.00	5.00	2.62	0.00
135.00	5.00	2.62	0.00
140.00	5.00	2.62	0.00
145.00	5.00	2.62	0.00
150.00	5.00	2.62	0.00
155.00	5.00	2.62	0.00
160.00	5.00	2.62	0.00
165.00	5.00	2.62	0.00
170.00	5.00	2.62	0.00
175.00	5.00	2.62	0.00
180.00	5.00	2.62	0.00
185.00	5.00	2.62	0.00
190.00	5.00	2.62	0.00
195.00	5.00	2.62	0.00
200.00	5.00	2.62	0.00
205.00	5.00	2.62	0.00
210.00	5.00	2.62	0.00
215.00	5.00	2.62	0.00
220.00	5.00	2.62	0.00
225.00	5.00	2.62	0.00
230.00	5.00	2.62	0.00
235.00	5.00	2.62	0.00
240.00	5.00	2.62	0.00
245.00	5.00	2.62	0.00
250.00	5.00	2.62	0.00
255.00	5.00	2.62	0.00
260.00	5.00	2.62	0.00
265.00	5.00	2.62	0.00
270.00	5.00	2.62	0.00
275.00	5.00	2.62	0.00
280.00	5.00	2.62	0.00
285.00	5.00	2.62	0.00
290.00	5.00	2.62	0.00
295.00	5.00	2.62	0.00
300.00	5.00	2.62	0.00
305.00	5.00	2.62	0.00
310.00	5.00	2.62	0.00
315.00	5.00	2.62	0.00
320.00	5.00	2.62	0.00
325.00	5.00	2.62	0.00
330.00	5.00	2.62	0.00
335.00	5.00	2.62	0.00
340.00	5.00	2.62	0.00
345.00	5.00	2.62	0.00
350.00	5.00	2.62	0.00
355.00	5.00	2.62	0.00
360.00	5.00	2.62	0.00
365.00	5.00	2.62	0.00
370.00	5.00	2.62	0.00
375.00	5.00	2.62	0.00
380.00	5.00	2.62	0.00
385.00	5.00	2.62	0.00
390.00	5.00	2.62	0.00
395.00	5.00	2.62	0.00
400.00	5.00	2.62	0.00
405.00	5.00	2.62	0.00
410.00	5.00	2.62	0.00
415.00	5.00	2.62	0.00
420.00	5.00	2.62	0.00
425.00	5.00	2.62	0.00
430.00	5.00	2.62	0.00
435.00	5.00	2.62	0.00
440.00	5.00	2.62	0.00
445.00	5.00	2.62	0.00
450.00	5.00	2.62	0.00
455.00	5.00	2.62	0.00
460.00	5.00	2.62	0.00
465.00	5.00	2.62	0.00
470.00	5.00	2.62	0.00
475.00	5.00	2.62	0.00
480.00	5.00	2.62	0.00
485.00	5.00	2.62	0.00
490.00	5.00	2.62	0.00
495.00	5.00	2.62	0.00
500.00	5.00	2.62	0.00

Summary for Subcatchment PR-6: PR-6

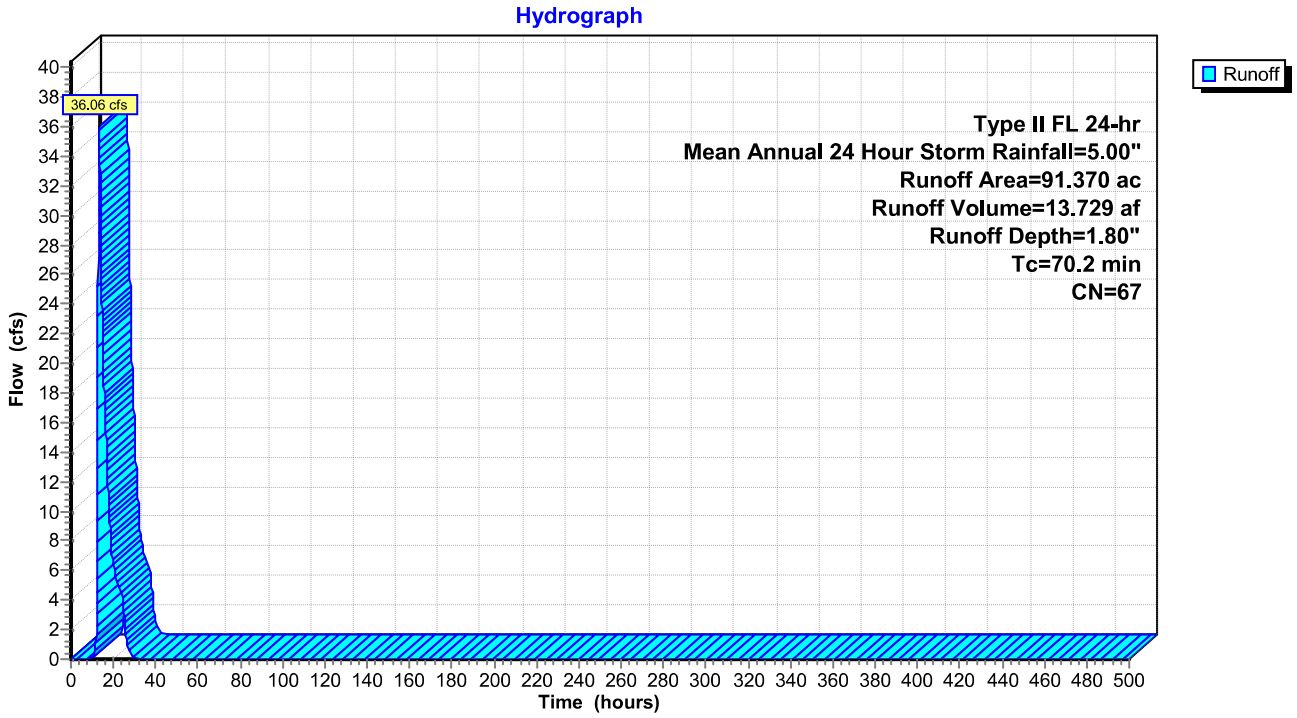
Runoff = 36.06 cfs @ 13.30 hrs, Volume= 13.729 af, Depth= 1.80"
Routed to Link 65L : PRE-DEVELOPMENT PEAK DISCHARGE

Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Type II FL 24-hr Mean Annual 24 Hour Storm Rainfall=5.00"

	Area (ac)	CN	Description
*	91.370	67	
	91.370		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
70.2					**Direct Entry,**

Subcatchment PR-6: PR-6



Hydrograph for Subcatchment PR-6: PR-6

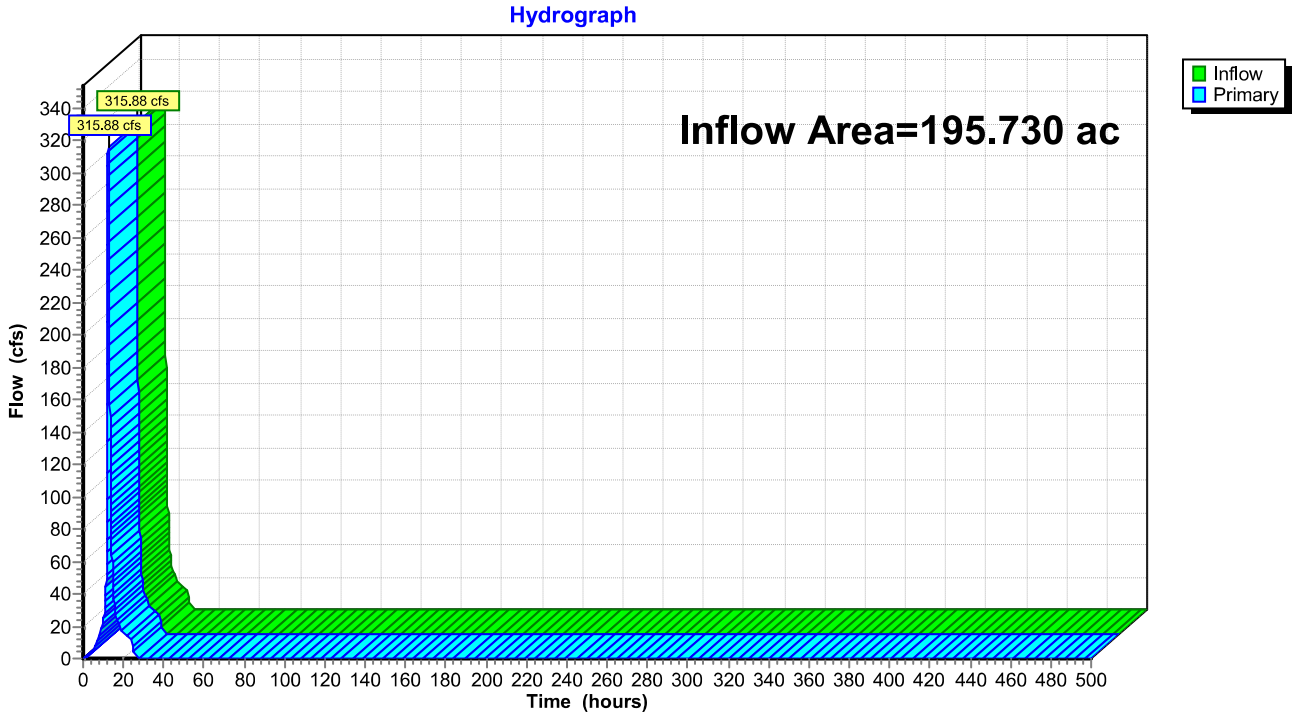
Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
5.00	0.33	0.00	0.00
10.00	0.96	0.00	**0.00**
15.00	4.18	1.26	**21.40**
20.00	**4.73**	**1.62**	6.30
25.00	**5.00**	**1.80**	2.99
30.00	5.00	1.80	0.05
35.00	5.00	1.80	0.00
40.00	5.00	1.80	0.00
45.00	5.00	1.80	0.00
50.00	5.00	1.80	0.00
55.00	5.00	1.80	0.00
60.00	5.00	1.80	0.00
65.00	5.00	1.80	0.00
70.00	5.00	1.80	0.00
75.00	5.00	1.80	0.00
80.00	5.00	1.80	0.00
85.00	5.00	1.80	0.00
90.00	5.00	1.80	0.00
95.00	5.00	1.80	0.00
100.00	5.00	1.80	0.00
105.00	5.00	1.80	0.00
110.00	5.00	1.80	0.00
115.00	5.00	1.80	0.00
120.00	5.00	1.80	0.00
125.00	5.00	1.80	0.00
130.00	5.00	1.80	0.00
135.00	5.00	1.80	0.00
140.00	5.00	1.80	0.00
145.00	5.00	1.80	0.00
150.00	5.00	1.80	0.00
155.00	5.00	1.80	0.00
160.00	5.00	1.80	0.00
165.00	5.00	1.80	0.00
170.00	5.00	1.80	0.00
175.00	5.00	1.80	0.00
180.00	5.00	1.80	0.00
185.00	5.00	1.80	0.00
190.00	5.00	1.80	0.00
195.00	5.00	1.80	0.00
200.00	5.00	1.80	0.00
205.00	5.00	1.80	0.00
210.00	5.00	1.80	0.00
215.00	5.00	1.80	0.00
220.00	5.00	1.80	0.00
225.00	5.00	1.80	0.00
230.00	5.00	1.80	0.00
235.00	5.00	1.80	0.00
240.00	5.00	1.80	0.00
245.00	5.00	1.80	0.00
250.00	5.00	1.80	0.00
255.00	5.00	1.80	0.00
260.00	5.00	1.80	0.00
265.00	5.00	1.80	0.00
270.00	5.00	1.80	0.00
275.00	5.00	1.80	0.00
280.00	5.00	1.80	0.00
285.00	5.00	1.80	0.00
290.00	5.00	1.80	0.00
295.00	5.00	1.80	0.00
300.00	5.00	1.80	0.00
305.00	5.00	1.80	0.00
310.00	5.00	1.80	0.00
315.00	5.00	1.80	0.00
320.00	5.00	1.80	0.00
325.00	5.00	1.80	0.00
330.00	5.00	1.80	0.00
335.00	5.00	1.80	0.00
340.00	5.00	1.80	0.00
345.00	5.00	1.80	0.00
350.00	5.00	1.80	0.00
355.00	5.00	1.80	0.00
360.00	5.00	1.80	0.00
365.00	5.00	1.80	0.00
370.00	5.00	1.80	0.00
375.00	5.00	1.80	0.00
380.00	5.00	1.80	0.00
385.00	5.00	1.80	0.00
390.00	5.00	1.80	0.00
395.00	5.00	1.80	0.00
400.00	5.00	1.80	0.00
405.00	5.00	1.80	0.00
410.00	5.00	1.80	0.00
415.00	5.00	1.80	0.00
420.00	5.00	1.80	0.00
425.00	5.00	1.80	0.00
430.00	5.00	1.80	0.00
435.00	5.00	1.80	0.00
440.00	5.00	1.80	0.00
445.00	5.00	1.80	0.00
450.00	5.00	1.80	0.00
455.00	5.00	1.80	0.00
460.00	5.00	1.80	0.00
465.00	5.00	1.80	0.00
470.00	5.00	1.80	0.00
475.00	5.00	1.80	0.00
480.00	5.00	1.80	0.00
485.00	5.00	1.80	0.00
490.00	5.00	1.80	0.00
495.00	5.00	1.80	0.00
500.00	5.00	1.80	0.00

Summary for Link 34L: POST-DEVELOPMENT PEAK FLOW - NO POND

Inflow Area = 195.730 ac, 0.00% Impervious, Inflow Depth = 4.13" for Mean Annual 24 Hour Storm event
Inflow = 315.88 cfs @ 12.47 hrs, Volume= 67.364 af
Primary = 315.88 cfs @ 12.47 hrs, Volume= 67.364 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs

Link 34L: POST-DEVELOPMENT PEAK FLOW - NO POND



Hydrograph for Link 34L: POST-DEVELOPMENT PEAK FLOW - NO POND

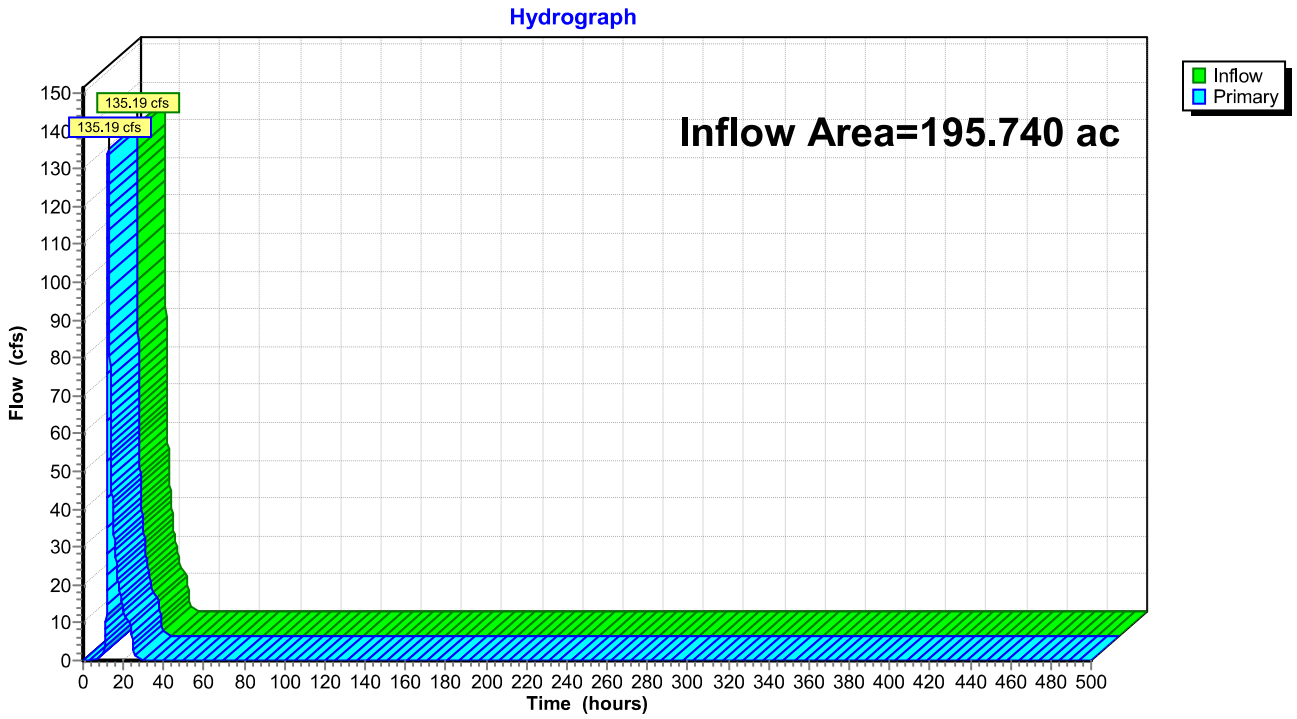
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	**0.00**	0.00
5.00	5.29	0.00	5.29
10.00	**23.81**	0.00	**23.81**
15.00	**41.38**	0.00	**41.38**
20.00	16.62	0.00	16.62
25.00	2.26	0.00	2.26
30.00	0.00	0.00	0.00
35.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00
255.00	0.00	0.00	0.00
260.00	0.00	0.00	0.00
265.00	0.00	0.00	0.00
270.00	0.00	0.00	0.00
275.00	0.00	0.00	0.00
280.00	0.00	0.00	0.00
285.00	0.00	0.00	0.00
290.00	0.00	0.00	0.00
295.00	0.00	0.00	0.00
300.00	0.00	0.00	0.00
305.00	0.00	0.00	0.00
310.00	0.00	0.00	0.00
315.00	0.00	0.00	0.00
320.00	0.00	0.00	0.00
325.00	0.00	0.00	0.00
330.00	0.00	0.00	0.00
335.00	0.00	0.00	0.00
340.00	0.00	0.00	0.00
345.00	0.00	0.00	0.00
350.00	0.00	0.00	0.00
355.00	0.00	0.00	0.00
360.00	0.00	0.00	0.00
365.00	0.00	0.00	0.00
370.00	0.00	0.00	0.00
375.00	0.00	0.00	0.00
380.00	0.00	0.00	0.00
385.00	0.00	0.00	0.00
390.00	0.00	0.00	0.00
395.00	0.00	0.00	0.00
400.00	0.00	0.00	0.00
405.00	0.00	0.00	0.00
410.00	0.00	0.00	0.00
415.00	0.00	0.00	0.00
420.00	0.00	0.00	0.00
425.00	0.00	0.00	0.00
430.00	0.00	0.00	0.00
435.00	0.00	0.00	0.00
440.00	0.00	0.00	0.00
445.00	0.00	0.00	0.00
450.00	0.00	0.00	0.00
455.00	0.00	0.00	0.00
460.00	0.00	0.00	0.00
465.00	0.00	0.00	0.00
470.00	0.00	0.00	0.00
475.00	0.00	0.00	0.00
480.00	0.00	0.00	0.00
485.00	0.00	0.00	0.00
490.00	0.00	0.00	0.00
495.00	0.00	0.00	0.00
500.00	0.00	0.00	0.00

Summary for Link 65L: PRE-DEVELOPMENT PEAK DISCHARGE

Inflow Area = 195.740 ac, 0.00% Impervious, Inflow Depth = 2.14" for Mean Annual 24 Hour Storm event
Inflow = 135.19 cfs @ 12.47 hrs, Volume= 34.960 af
Primary = 135.19 cfs @ 12.47 hrs, Volume= 34.960 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs

Link 65L: PRE-DEVELOPMENT PEAK DISCHARGE

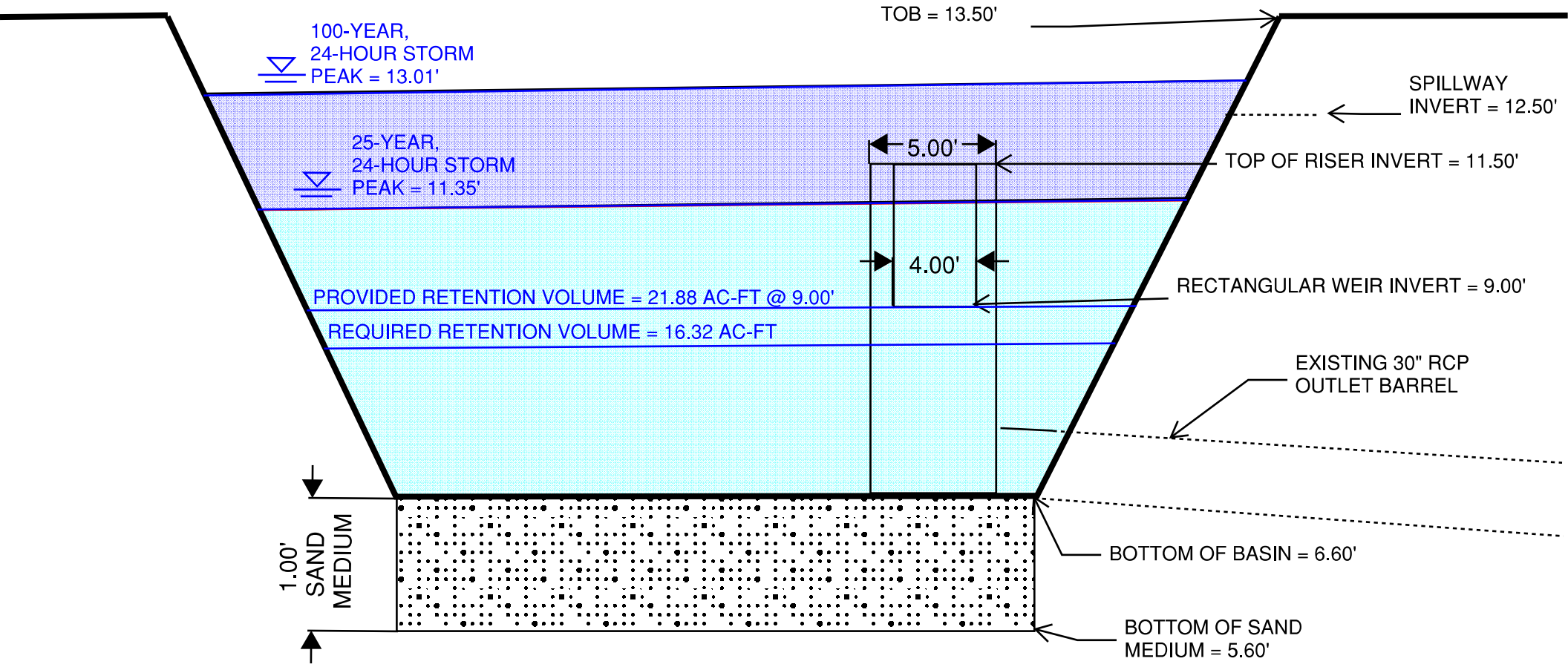


Hydrograph for Link 65L: PRE-DEVELOPMENT PEAK DISCHARGE

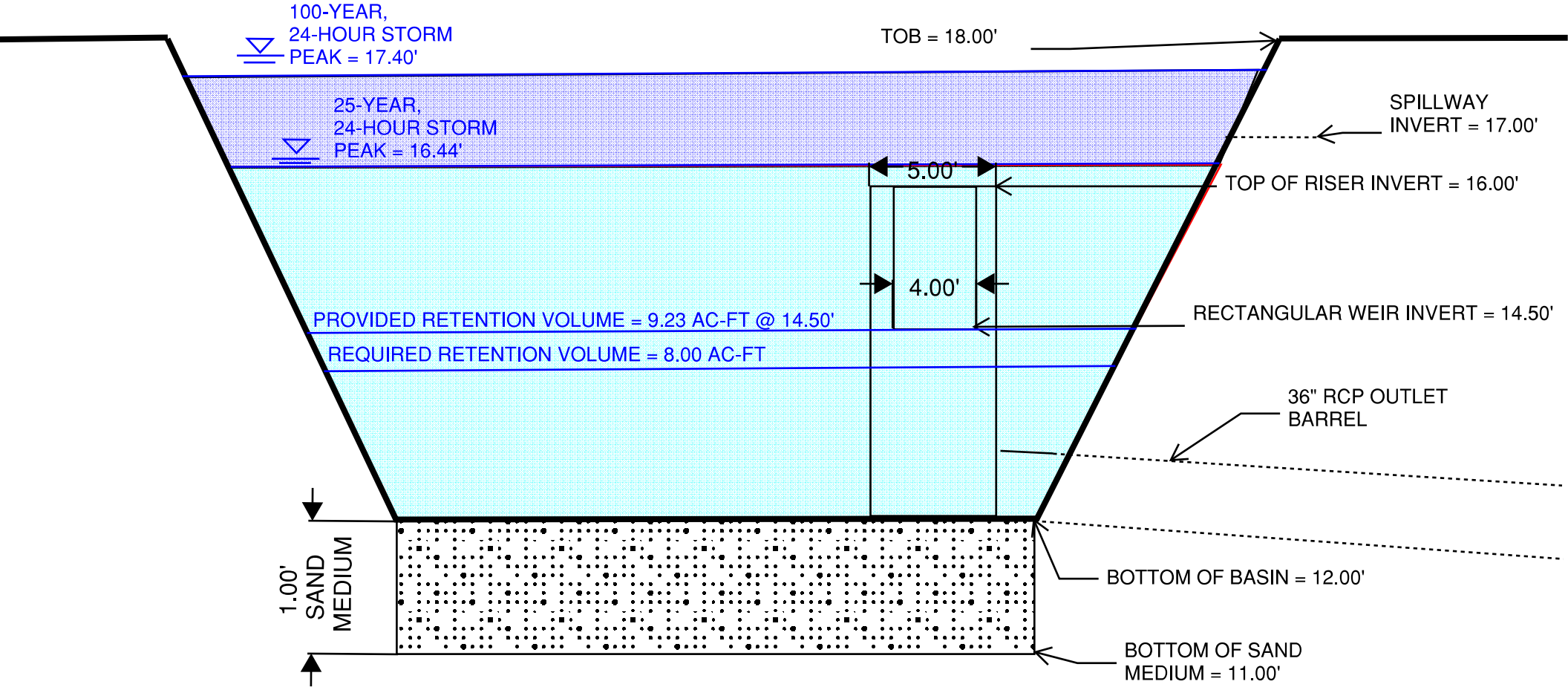
Time (hours)	Inflow (cfs)	Elevation (feet)	Primary (cfs)
0.00	0.00	**0.00**	0.00
5.00	0.05	0.00	0.05
10.00	**2.31**	0.00	**2.31**
15.00	**36.12**	0.00	**36.12**
20.00	13.42	0.00	13.42
25.00	3.27	0.00	3.27
30.00	0.05	0.00	0.05
35.00	0.00	0.00	0.00
40.00	0.00	0.00	0.00
45.00	0.00	0.00	0.00
50.00	0.00	0.00	0.00
55.00	0.00	0.00	0.00
60.00	0.00	0.00	0.00
65.00	0.00	0.00	0.00
70.00	0.00	0.00	0.00
75.00	0.00	0.00	0.00
80.00	0.00	0.00	0.00
85.00	0.00	0.00	0.00
90.00	0.00	0.00	0.00
95.00	0.00	0.00	0.00
100.00	0.00	0.00	0.00
105.00	0.00	0.00	0.00
110.00	0.00	0.00	0.00
115.00	0.00	0.00	0.00
120.00	0.00	0.00	0.00
125.00	0.00	0.00	0.00
130.00	0.00	0.00	0.00
135.00	0.00	0.00	0.00
140.00	0.00	0.00	0.00
145.00	0.00	0.00	0.00
150.00	0.00	0.00	0.00
155.00	0.00	0.00	0.00
160.00	0.00	0.00	0.00
165.00	0.00	0.00	0.00
170.00	0.00	0.00	0.00
175.00	0.00	0.00	0.00
180.00	0.00	0.00	0.00
185.00	0.00	0.00	0.00
190.00	0.00	0.00	0.00
195.00	0.00	0.00	0.00
200.00	0.00	0.00	0.00
205.00	0.00	0.00	0.00
210.00	0.00	0.00	0.00
215.00	0.00	0.00	0.00
220.00	0.00	0.00	0.00
225.00	0.00	0.00	0.00
230.00	0.00	0.00	0.00
235.00	0.00	0.00	0.00
240.00	0.00	0.00	0.00
245.00	0.00	0.00	0.00
250.00	0.00	0.00	0.00
255.00	0.00	0.00	0.00
260.00	0.00	0.00	0.00
265.00	0.00	0.00	0.00
270.00	0.00	0.00	0.00
275.00	0.00	0.00	0.00
280.00	0.00	0.00	0.00
285.00	0.00	0.00	0.00
290.00	0.00	0.00	0.00
295.00	0.00	0.00	0.00
300.00	0.00	0.00	0.00
305.00	0.00	0.00	0.00
310.00	0.00	0.00	0.00
315.00	0.00	0.00	0.00
320.00	0.00	0.00	0.00
325.00	0.00	0.00	0.00
330.00	0.00	0.00	0.00
335.00	0.00	0.00	0.00
340.00	0.00	0.00	0.00
345.00	0.00	0.00	0.00
350.00	0.00	0.00	0.00
355.00	0.00	0.00	0.00
360.00	0.00	0.00	0.00
365.00	0.00	0.00	0.00
370.00	0.00	0.00	0.00
375.00	0.00	0.00	0.00
380.00	0.00	0.00	0.00
385.00	0.00	0.00	0.00
390.00	0.00	0.00	0.00
395.00	0.00	0.00	0.00
400.00	0.00	0.00	0.00
405.00	0.00	0.00	0.00
410.00	0.00	0.00	0.00
415.00	0.00	0.00	0.00
420.00	0.00	0.00	0.00
425.00	0.00	0.00	0.00
430.00	0.00	0.00	0.00
435.00	0.00	0.00	0.00
440.00	0.00	0.00	0.00
445.00	0.00	0.00	0.00
450.00	0.00	0.00	0.00
455.00	0.00	0.00	0.00
460.00	0.00	0.00	0.00
465.00	0.00	0.00	0.00
470.00	0.00	0.00	0.00
475.00	0.00	0.00	0.00
480.00	0.00	0.00	0.00
485.00	0.00	0.00	0.00
490.00	0.00	0.00	0.00
495.00	0.00	0.00	0.00
500.00	0.00	0.00	0.00

Appendix I. HydroCAD Retention Basin Report

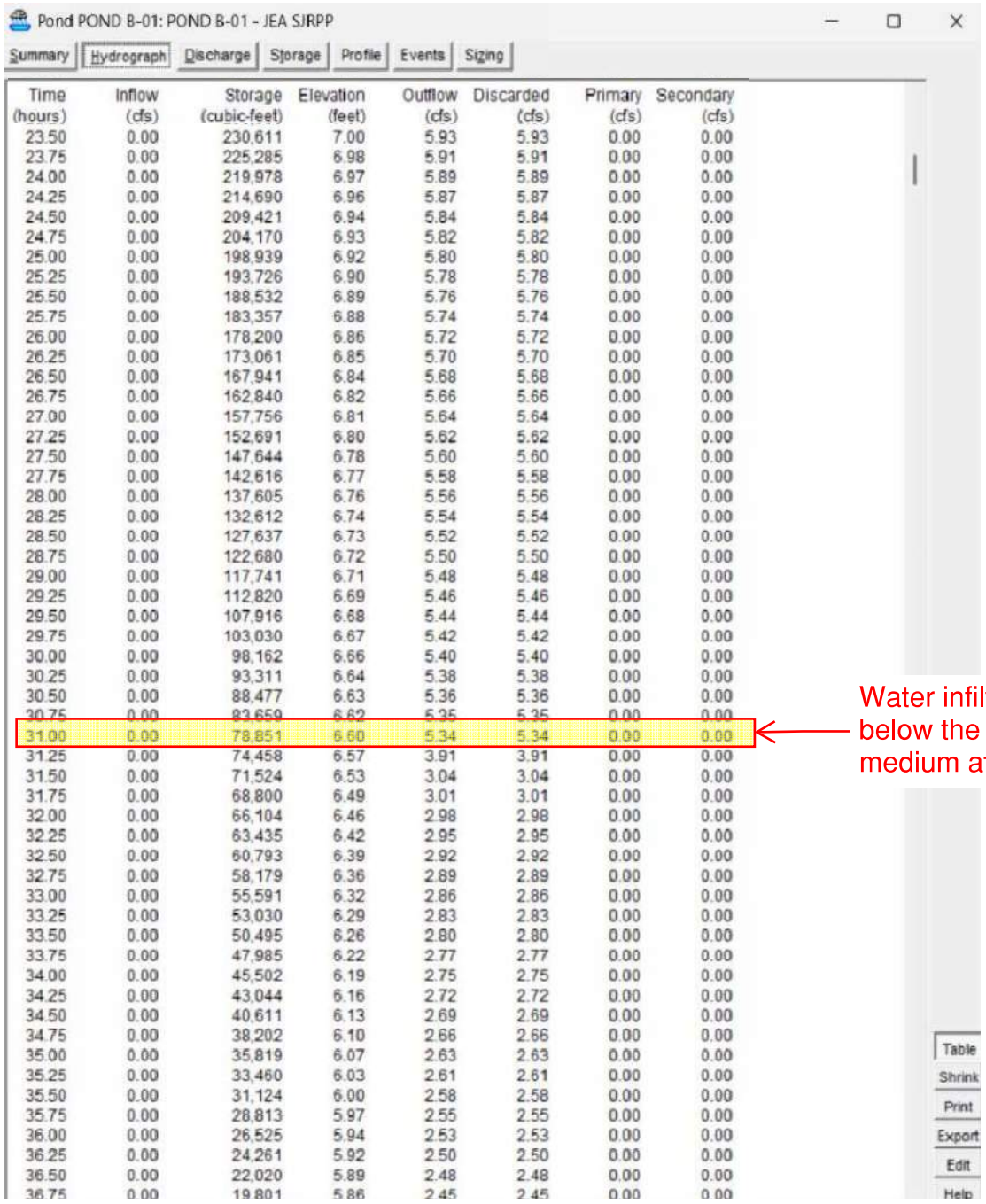
B-01 PROFILE


TOB = 13.50'
100-YEAR,
24-HOUR STORM
PEAK = 13.01'
SPILLWAY
INVERT = 12.50'
25-YEAR,
24-HOUR STORM
PEAK = 11.35'
5.00'
TOP OF RISER INVERT = 11.50'
4.00'
RECTANGULAR WEIR INVERT = 9.00'
PROVIDED RETENTION VOLUME = 21.88 AC-FT @ 9.00'
REQUIRED RETENTION VOLUME = 16.32 AC-FT
EXISTING 30" RCP
OUTLET BARREL
1.00'
SAND
MEDIUM
BOTTOM OF BASIN = 6.60'
BOTTOM OF SAND
MEDIUM = 5.60'

B-02 PROFILE


100-YEAR,
24-HOUR STORM
PEAK = 17.40'
TOB = 18.00'
25-YEAR,
24-HOUR STORM
PEAK = 16.44'
SPILLWAY
INVERT = 17.00'
5.00'
TOP OF RISER INVERT = 16.00'
4.00'
PROVIDED RETENTION VOLUME = 9.23 AC-FT @ 14.50'
RECTANGULAR WEIR INVERT = 14.50'
REQUIRED RETENTION VOLUME = 8.00 AC-FT
36" RCP OUTLET
BARREL
1.00'
SAND
MEDIUM
BOTTOM OF BASIN = 12.00'
BOTTOM OF SAND
MEDIUM = 11.00'

POND B-01 DRAWDOWN TIME



Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Discarded (cfs)	Primary (cfs)	Secondary (cfs)
23.50	0.00	230,611	7.00	5.93	5.93	0.00	0.00
23.75	0.00	225,285	6.98	5.91	5.91	0.00	0.00
24.00	0.00	219,978	6.97	5.89	5.89	0.00	0.00
24.25	0.00	214,690	6.96	5.87	5.87	0.00	0.00
24.50	0.00	209,421	6.94	5.84	5.84	0.00	0.00
24.75	0.00	204,170	6.93	5.82	5.82	0.00	0.00
25.00	0.00	198,939	6.92	5.80	5.80	0.00	0.00
25.25	0.00	193,726	6.90	5.78	5.78	0.00	0.00
25.50	0.00	188,532	6.89	5.76	5.76	0.00	0.00
25.75	0.00	183,357	6.88	5.74	5.74	0.00	0.00
26.00	0.00	178,200	6.86	5.72	5.72	0.00	0.00
26.25	0.00	173,061	6.85	5.70	5.70	0.00	0.00
26.50	0.00	167,941	6.84	5.68	5.68	0.00	0.00
26.75	0.00	162,840	6.82	5.66	5.66	0.00	0.00
27.00	0.00	157,756	6.81	5.64	5.64	0.00	0.00
27.25	0.00	152,691	6.80	5.62	5.62	0.00	0.00
27.50	0.00	147,644	6.78	5.60	5.60	0.00	0.00
27.75	0.00	142,616	6.77	5.58	5.58	0.00	0.00
28.00	0.00	137,605	6.76	5.56	5.56	0.00	0.00
28.25	0.00	132,612	6.74	5.54	5.54	0.00	0.00
28.50	0.00	127,637	6.73	5.52	5.52	0.00	0.00
28.75	0.00	122,680	6.72	5.50	5.50	0.00	0.00
29.00	0.00	117,741	6.71	5.48	5.48	0.00	0.00
29.25	0.00	112,820	6.69	5.46	5.46	0.00	0.00
29.50	0.00	107,916	6.68	5.44	5.44	0.00	0.00
29.75	0.00	103,030	6.67	5.42	5.42	0.00	0.00
30.00	0.00	98,162	6.66	5.40	5.40	0.00	0.00
30.25	0.00	93,311	6.64	5.38	5.38	0.00	0.00
30.50	0.00	88,477	6.63	5.36	5.36	0.00	0.00
30.75	0.00	83,659	6.62	5.35	5.35	0.00	0.00
31.00	0.00	78,851	6.60	5.34	5.34	0.00	0.00
31.25	0.00	74,458	6.57	3.91	3.91	0.00	0.00
31.50	0.00	71,524	6.53	3.04	3.04	0.00	0.00
31.75	0.00	68,800	6.49	3.01	3.01	0.00	0.00
32.00	0.00	66,104	6.46	2.98	2.98	0.00	0.00
32.25	0.00	63,435	6.42	2.95	2.95	0.00	0.00
32.50	0.00	60,793	6.39	2.92	2.92	0.00	0.00
32.75	0.00	58,179	6.36	2.89	2.89	0.00	0.00
33.00	0.00	55,591	6.32	2.86	2.86	0.00	0.00
33.25	0.00	53,030	6.29	2.83	2.83	0.00	0.00
33.50	0.00	50,495	6.26	2.80	2.80	0.00	0.00
33.75	0.00	47,985	6.22	2.77	2.77	0.00	0.00
34.00	0.00	45,502	6.19	2.75	2.75	0.00	0.00
34.25	0.00	43,044	6.16	2.72	2.72	0.00	0.00
34.50	0.00	40,611	6.13	2.69	2.69	0.00	0.00
34.75	0.00	38,202	6.10	2.66	2.66	0.00	0.00
35.00	0.00	35,819	6.07	2.63	2.63	0.00	0.00
35.25	0.00	33,460	6.03	2.61	2.61	0.00	0.00
35.50	0.00	31,124	6.00	2.58	2.58	0.00	0.00
35.75	0.00	28,813	5.97	2.55	2.55	0.00	0.00
36.00	0.00	26,525	5.94	2.53	2.53	0.00	0.00
36.25	0.00	24,261	5.92	2.50	2.50	0.00	0.00
36.50	0.00	22,020	5.89	2.48	2.48	0.00	0.00
36.75	0.00	19,801	5.86	2.45	2.45	0.00	0.00

Water infiltrates below the sand medium at 31-hours.

POND B-02 DRAWDOWN TIME

Pond POND B-02: POND B-02 - JEA SJRPP

Summary | Hydrograph | Discharge | Storage | Profile | Events | Sizing

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Discarded (cfs)	Primary (cfs)	Secondary (cfs)
0.00	**0.00**	**431,425**	**14.50**	**12.64**	**12.64**	**0.00**	**0.00**
0.25	0.00	420,119	14.44	12.48	12.48	0.00	0.00
0.50	0.00	408,955	14.37	12.33	12.33	0.00	0.00
0.75	0.00	397,932	14.31	12.17	12.17	0.00	0.00
1.00	0.00	387,047	14.25	12.02	12.02	0.00	0.00
1.25	0.00	376,300	14.18	11.86	11.86	0.00	0.00
1.50	0.00	365,690	14.12	11.71	11.71	0.00	0.00
1.75	0.00	355,214	14.06	11.56	11.56	0.00	0.00
2.00	0.00	344,872	14.00	11.42	11.42	0.00	0.00
2.25	0.00	334,663	13.94	11.27	11.27	0.00	0.00
2.50	0.00	324,585	13.88	11.13	11.13	0.00	0.00
2.75	0.00	314,638	13.82	10.98	10.98	0.00	0.00
3.00	0.00	304,819	13.76	10.84	10.84	0.00	0.00
3.25	0.00	295,127	13.70	10.70	10.70	0.00	0.00
3.50	0.00	285,562	13.64	10.56	10.56	0.00	0.00
3.75	0.00	276,122	13.59	10.42	10.42	0.00	0.00
4.00	0.00	266,805	13.53	10.28	10.28	0.00	0.00
4.25	0.00	257,611	13.47	10.15	10.15	0.00	0.00
4.50	0.00	248,538	13.42	10.01	10.01	0.00	0.00
4.75	0.00	239,584	13.36	9.88	9.88	0.00	0.00
5.00	0.00	230,749	13.31	9.75	9.75	0.00	0.00
5.25	0.00	222,031	13.26	9.62	9.62	0.00	0.00
5.50	0.00	213,430	13.20	9.49	9.49	0.00	0.00
5.75	0.00	204,943	13.15	9.37	9.37	0.00	0.00
6.00	0.00	196,570	13.10	9.24	9.24	0.00	0.00
6.25	0.00	188,309	13.04	9.12	9.12	0.00	0.00
6.50	0.00	180,159	12.99	8.99	8.99	0.00	0.00
6.75	0.00	172,119	12.94	8.87	8.87	0.00	0.00
7.00	0.00	164,188	12.89	8.75	8.75	0.00	0.00
7.25	0.00	156,364	12.84	8.63	8.63	0.00	0.00
7.50	0.00	148,647	12.79	8.52	8.52	0.00	0.00
7.75	0.00	141,036	12.74	8.40	8.40	0.00	0.00
8.00	0.00	133,528	12.69	8.28	8.28	0.00	0.00
8.25	0.00	126,124	12.65	8.17	8.17	0.00	0.00
8.50	0.00	118,821	12.60	8.06	8.06	0.00	0.00
8.75	0.00	111,619	12.55	7.95	7.95	0.00	0.00
9.00	0.00	104,516	12.50	7.84	7.84	0.00	0.00
9.25	0.00	97,512	12.46	7.73	7.73	0.00	0.00
9.50	0.00	90,605	12.41	7.62	7.62	0.00	0.00
9.75	0.00	83,793	12.37	7.52	7.52	0.00	0.00
10.00	0.00	77,077	12.32	7.41	7.41	0.00	0.00
10.25	0.00	70,454	12.28	7.31	7.31	0.00	0.00
10.50	0.00	63,924	12.23	7.20	7.20	0.00	0.00
10.75	0.00	57,486	12.19	7.10	7.10	0.00	0.00
11.00	0.00	51,137	12.15	7.00	7.00	0.00	0.00
11.25	0.00	44,879	12.11	6.91	6.91	0.00	0.00
11.50	0.00	38,708	12.06	6.81	6.81	0.00	0.00
11.75	0.00	32,618	12.02	6.73	6.73	0.00	0.00
12.00	0.00	27,478	11.94	3.91	3.91	0.00	0.00
12.25	0.00	24,025	11.82	3.76	3.76	0.00	0.00
12.50	0.00	20,705	11.71	3.62	3.62	0.00	0.00
12.75	0.00	17,514	11.60	3.48	3.48	0.00	0.00
13.00	0.00	14,447	11.49	3.34	3.34	0.00	0.00

Water infiltrates below the sand medium at 12-hours.

FDEP Quality Manual Appendix D
Recommended Dry Retention Depths:

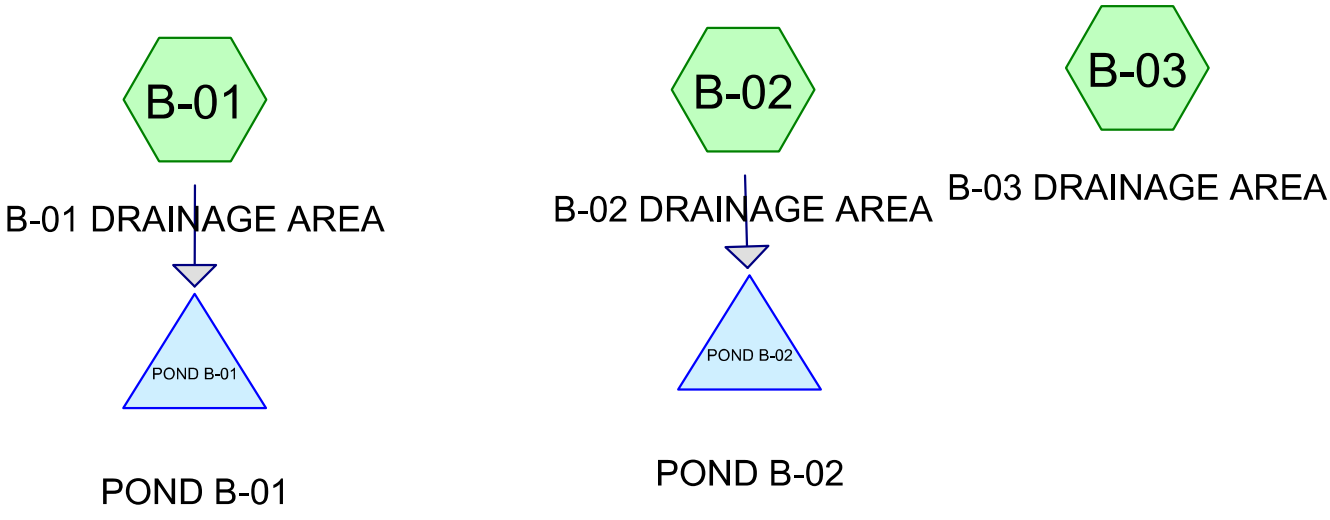
Calculated Dry Retention Depth
For an Annual Mass Removal Efficiency of 85 Percent
Coastal (Zone 4)

NDCIA	Percent DCIA																		
CN	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
30	0.25	0.36	0.45	0.51	0.62	0.71	0.79	0.90	0.98	1.08	1.17	1.26	1.36	1.45	1.54	1.64	1.73	1.82	1.91
35	0.28	0.39	0.46	0.54	0.64	0.72	0.81	0.91	0.99	1.09	1.18	1.27	1.36	1.45	1.54	1.64	1.73	1.82	1.91
40	0.35	0.43	0.48	0.57	0.66	0.74	0.83	0.92	1.01	1.10	1.19	1.28	1.37	1.46	1.55	1.64	1.73	1.82	1.91
45	0.45	0.47	0.53	0.61	0.69	0.77	0.86	0.94	1.03	1.12	1.21	1.29	1.38	1.47	1.56	1.65	1.74	1.83	1.91
50	0.58	0.55	0.59	0.66	0.73	0.81	0.89	0.97	1.05	1.14	1.22	1.31	1.40	1.48	1.57	1.66	1.74	1.83	1.91
55	0.74	0.67	0.69	0.73	0.79	0.86	0.94	1.01	1.09	1.17	1.25	1.33	1.42	1.50	1.58	1.66	1.75	1.83	1.91
60	0.92	0.82	0.80	0.82	0.87	0.93	0.99	1.06	1.13	1.21	1.28	1.36	1.44	1.51	1.59				
65	1.10	0.99	0.95	0.95	0.97	1.0					1.32	1.39	1.46	1.54	1.61				
70	1.28	1.16	1.10	1.09	1.09	1.1					1.37	1.44	1.50	1.57	1.64				
75	1.45	1.34	1.27	1.24	1.24	1.2					1.44	1.49	1.55	1.61	1.67	1.73	1.79	1.85	1.91
80	1.60	1.50	1.44	1.41	1.39	1.39	1.41	1.43	1.45	1.48	1.52	1.56	1.61	1.65	1.70	1.75	1.81	1.86	1.91
85	1.73	1.66	1.61	1.59	1.56	1.55	1.55	1.56	1.57	1.59	1.62	1.65	1.68	1.71	1.75	1.79	1.83	1.87	1.91
90	1.84	1.79	1.76	1.73	1.72	1.71	1.70	1.70	1.71	1.72	1.73	1.74	1.76	1.78	1.81	1.83	1.86	1.89	1.91
95	1.91	1.89	1.88	1.87	1.86	1.85	1.85	1.84	1.84	1.85	1.85	1.85	1.86	1.86	1.87	1.88	1.89	1.90	1.91
98	1.91	1.91	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.91	1.91	1.91	1.91

B-01 MINIMUM RETENTION DEPTH = 1.76 IN

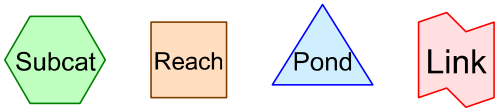
B-02 MINIMUM RETENTION DEPTH = 1.71 IN

POST-DEVELOPMENT
- WITH PONDS - 25 YR
TAILWATER = 1.08'



POND B-01

POND B-02



Routing Diagram for JEA SJRPP
Prepared by Black & Veatch, Printed 4/15/2026
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Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	25-YR, 24-HR	Type II FL 24-hr		Default	24.00	1	8.95	2

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
111.250	95	(B-01)
56.440	94	(B-02)
28.040	77	(B-03)
195.730	**92**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
195.730	Other	B-01, B-02, B-03
195.730		**TOTAL AREA**

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.000	195.730	195.730		B-01, B-02, B-03
0.000	**0.000**	**0.000**	**0.000**	**195.730**	**195.730**	**TOTAL AREA**	

Pipe Listing (selected nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Nod Nam
1	POND B-01	6.60	2.85	163.1	0.0230	0.011	0.0	30.0	0.0	
2	POND B-02	12.00	4.22	144.8	0.0537	0.011	0.0	36.0	0.0	

Time span=0.00-500.00 hrs, dt=0.05 hrs, 10001 points
Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment B-01: B-01 DRAINAGE Runoff Area=111.250 ac 0.00% Impervious Runoff Depth=8.35"
Tc=28.0 min CN=95 Runoff=328.85 cfs 77.393 af

Subcatchment B-02: B-02 DRAINAGE AREA Runoff Area=56.440 ac 0.00% Impervious Runoff Depth=8.23"
Tc=19.8 min CN=94 Runoff=189.74 cfs 38.695 af

Subcatchment B-03: B-03 DRAINAGE AREA Runoff Area=28.040 ac 0.00% Impervious Runoff Depth=6.15"
Tc=8.0 min CN=77 Runoff=98.27 cfs 14.376 af

Pond POND B-01: POND B-01 Peak Elev=11.35' Storage=2,020,449 cf Inflow=328.85 cfs 77.393 af
Discarded=12.79 cfs 41.321 af Primary=53.88 cfs 36.071 af Secondary=0.00 cfs 0.000 af Outflow=66.68 cfs 77.393 af

Pond POND B-02: POND B-02 Peak Elev=16.44' Storage=794,607 cf Inflow=189.74 cfs 38.695 af
Discarded=17.47 cfs 27.782 af Primary=51.02 cfs 10.913 af Secondary=0.00 cfs 0.000 af Outflow=68.50 cfs 38.695 af

Total Runoff Area = 195.730 ac Runoff Volume = 130.464 af Average Runoff Depth = 8.00"
100.00% Pervious = 195.730 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment B-01: B-01 DRAINAGE AREA

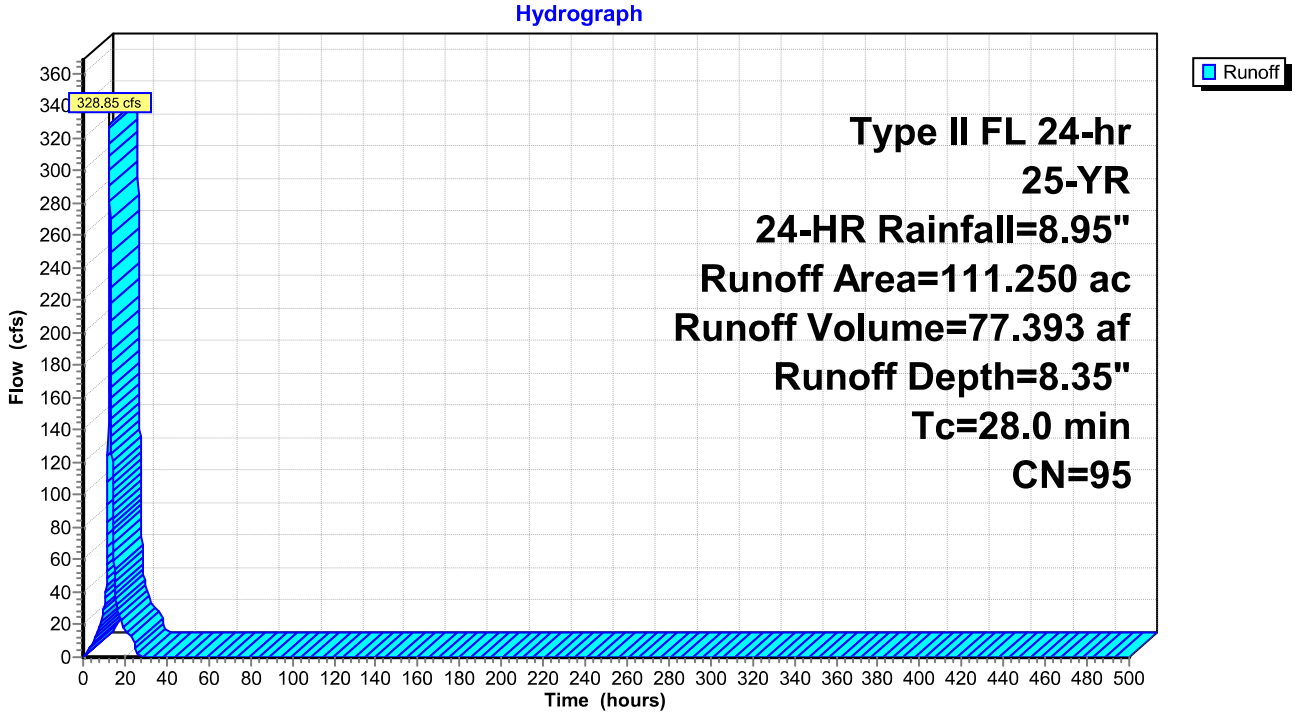
Runoff = 328.85 cfs @ 12.55 hrs, Volume= 77.393 af, Depth= 8.35"
Routed to Pond POND B-01 : POND B-01

Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Type II FL 24-hr 25-YR, 24-HR Rainfall=8.95"

	Area (ac)	CN	Description
*	111.250	95	
	111.250		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
28.0					**Direct Entry,**

Subcatchment B-01: B-01 DRAINAGE AREA



Hydrograph for Subcatchment B-01: B-01 DRAINAGE AREA

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
5.00	0.60	0.24	10.31
10.00	1.71	1.21	**30.47**
15.00	7.48	6.89	**47.84**
20.00	**8.47**	**7.87**	17.65
25.00	**8.95**	**8.35**	3.23
30.00	8.95	8.35	0.00
35.00	8.95	8.35	0.00
40.00	8.95	8.35	0.00
45.00	8.95	8.35	0.00
50.00	8.95	8.35	0.00
55.00	8.95	8.35	0.00
60.00	8.95	8.35	0.00
65.00	8.95	8.35	0.00
70.00	8.95	8.35	0.00
75.00	8.95	8.35	0.00
80.00	8.95	8.35	0.00
85.00	8.95	8.35	0.00
90.00	8.95	8.35	0.00
95.00	8.95	8.35	0.00
100.00	8.95	8.35	0.00
105.00	8.95	8.35	0.00
110.00	8.95	8.35	0.00
115.00	8.95	8.35	0.00
120.00	8.95	8.35	0.00
125.00	8.95	8.35	0.00
130.00	8.95	8.35	0.00
135.00	8.95	8.35	0.00
140.00	8.95	8.35	0.00
145.00	8.95	8.35	0.00
150.00	8.95	8.35	0.00
155.00	8.95	8.35	0.00
160.00	8.95	8.35	0.00
165.00	8.95	8.35	0.00
170.00	8.95	8.35	0.00
175.00	8.95	8.35	0.00
180.00	8.95	8.35	0.00
185.00	8.95	8.35	0.00
190.00	8.95	8.35	0.00
195.00	8.95	8.35	0.00
200.00	8.95	8.35	0.00
205.00	8.95	8.35	0.00
210.00	8.95	8.35	0.00
215.00	8.95	8.35	0.00
220.00	8.95	8.35	0.00
225.00	8.95	8.35	0.00
230.00	8.95	8.35	0.00
235.00	8.95	8.35	0.00
240.00	8.95	8.35	0.00
245.00	8.95	8.35	0.00
250.00	8.95	8.35	0.00
255.00	8.95	8.35	0.00
260.00	8.95	8.35	0.00
265.00	8.95	8.35	0.00
270.00	8.95	8.35	0.00
275.00	8.95	8.35	0.00
280.00	8.95	8.35	0.00
285.00	8.95	8.35	0.00
290.00	8.95	8.35	0.00
295.00	8.95	8.35	0.00
300.00	8.95	8.35	0.00
305.00	8.95	8.35	0.00
310.00	8.95	8.35	0.00
315.00	8.95	8.35	0.00
320.00	8.95	8.35	0.00
325.00	8.95	8.35	0.00
330.00	8.95	8.35	0.00
335.00	8.95	8.35	0.00
340.00	8.95	8.35	0.00
345.00	8.95	8.35	0.00
350.00	8.95	8.35	0.00
355.00	8.95	8.35	0.00
360.00	8.95	8.35	0.00
365.00	8.95	8.35	0.00
370.00	8.95	8.35	0.00
375.00	8.95	8.35	0.00
380.00	8.95	8.35	0.00
385.00	8.95	8.35	0.00
390.00	8.95	8.35	0.00
395.00	8.95	8.35	0.00
400.00	8.95	8.35	0.00
405.00	8.95	8.35	0.00
410.00	8.95	8.35	0.00
415.00	8.95	8.35	0.00
420.00	8.95	8.35	0.00
425.00	8.95	8.35	0.00
430.00	8.95	8.35	0.00
435.00	8.95	8.35	0.00
440.00	8.95	8.35	0.00
445.00	8.95	8.35	0.00
450.00	8.95	8.35	0.00
455.00	8.95	8.35	0.00
460.00	8.95	8.35	0.00
465.00	8.95	8.35	0.00
470.00	8.95	8.35	0.00
475.00	8.95	8.35	0.00
480.00	8.95	8.35	0.00
485.00	8.95	8.35	0.00
490.00	8.95	8.35	0.00
495.00	8.95	8.35	0.00
500.00	8.95	8.35	0.00

Summary for Subcatchment B-02: B-02 DRAINAGE AREA

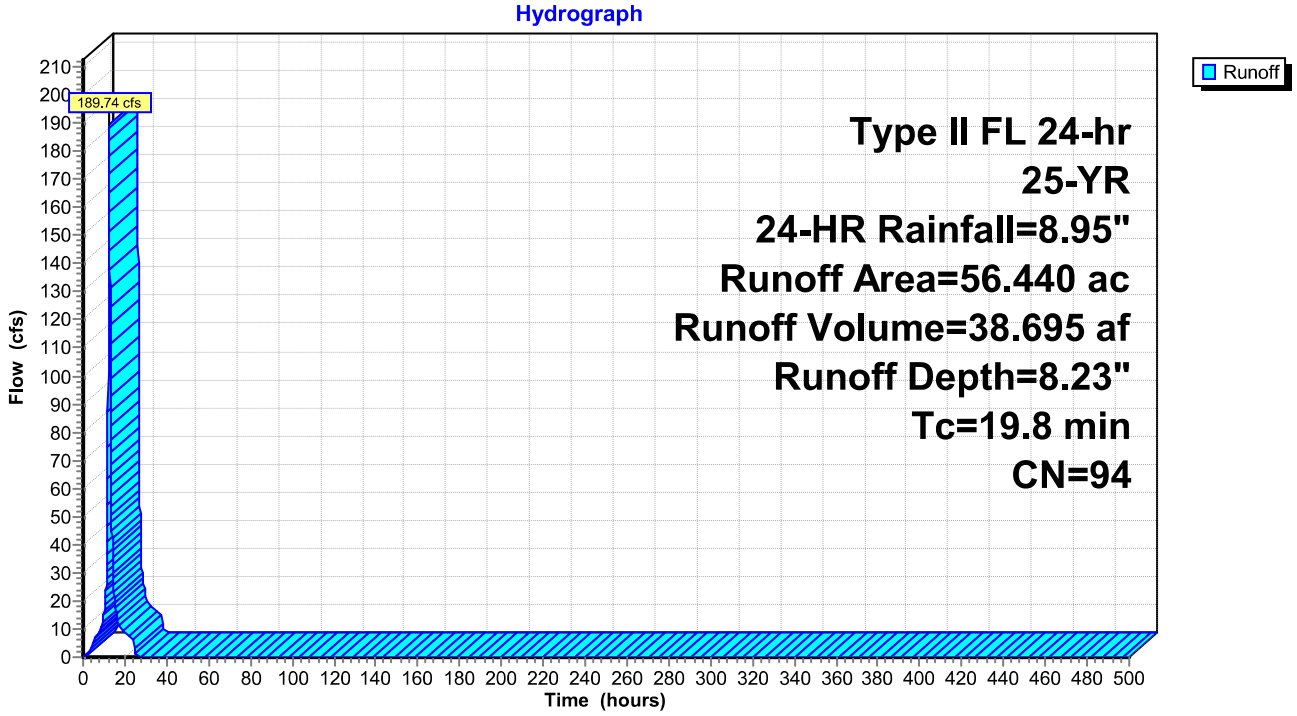
Runoff = 189.74 cfs @ 12.43 hrs, Volume= 38.695 af, Depth= 8.23"
Routed to Pond POND B-02 : POND B-02

Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Type II FL 24-hr 25-YR, 24-HR Rainfall=8.95"

	Area (ac)	CN	Description
*	56.440	94	
	56.440		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					**Direct Entry,**

Subcatchment B-02: B-02 DRAINAGE AREA



Hydrograph for Subcatchment B-02: B-02 DRAINAGE AREA

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
5.00	0.60	0.20	5.01
10.00	1.71	1.13	**15.90**
15.00	7.48	6.77	**19.98**
20.00	**8.47**	**7.75**	8.79
25.00	**8.95**	**8.23**	0.84
30.00	8.95	8.23	0.00
35.00	8.95	8.23	0.00
40.00	8.95	8.23	0.00
45.00	8.95	8.23	0.00
50.00	8.95	8.23	0.00
55.00	8.95	8.23	0.00
60.00	8.95	8.23	0.00
65.00	8.95	8.23	0.00
70.00	8.95	8.23	0.00
75.00	8.95	8.23	0.00
80.00	8.95	8.23	0.00
85.00	8.95	8.23	0.00
90.00	8.95	8.23	0.00
95.00	8.95	8.23	0.00
100.00	8.95	8.23	0.00
105.00	8.95	8.23	0.00
110.00	8.95	8.23	0.00
115.00	8.95	8.23	0.00
120.00	8.95	8.23	0.00
125.00	8.95	8.23	0.00
130.00	8.95	8.23	0.00
135.00	8.95	8.23	0.00
140.00	8.95	8.23	0.00
145.00	8.95	8.23	0.00
150.00	8.95	8.23	0.00
155.00	8.95	8.23	0.00
160.00	8.95	8.23	0.00
165.00	8.95	8.23	0.00
170.00	8.95	8.23	0.00
175.00	8.95	8.23	0.00
180.00	8.95	8.23	0.00
185.00	8.95	8.23	0.00
190.00	8.95	8.23	0.00
195.00	8.95	8.23	0.00
200.00	8.95	8.23	0.00
205.00	8.95	8.23	0.00
210.00	8.95	8.23	0.00
215.00	8.95	8.23	0.00
220.00	8.95	8.23	0.00
225.00	8.95	8.23	0.00
230.00	8.95	8.23	0.00
235.00	8.95	8.23	0.00
240.00	8.95	8.23	0.00
245.00	8.95	8.23	0.00
250.00	8.95	8.23	0.00
255.00	8.95	8.23	0.00
260.00	8.95	8.23	0.00
265.00	8.95	8.23	0.00
270.00	8.95	8.23	0.00
275.00	8.95	8.23	0.00
280.00	8.95	8.23	0.00
285.00	8.95	8.23	0.00
290.00	8.95	8.23	0.00
295.00	8.95	8.23	0.00
300.00	8.95	8.23	0.00
305.00	8.95	8.23	0.00
310.00	8.95	8.23	0.00
315.00	8.95	8.23	0.00
320.00	8.95	8.23	0.00
325.00	8.95	8.23	0.00
330.00	8.95	8.23	0.00
335.00	8.95	8.23	0.00
340.00	8.95	8.23	0.00
345.00	8.95	8.23	0.00
350.00	8.95	8.23	0.00
355.00	8.95	8.23	0.00
360.00	8.95	8.23	0.00
365.00	8.95	8.23	0.00
370.00	8.95	8.23	0.00
375.00	8.95	8.23	0.00
380.00	8.95	8.23	0.00
385.00	8.95	8.23	0.00
390.00	8.95	8.23	0.00
395.00	8.95	8.23	0.00
400.00	8.95	8.23	0.00
405.00	8.95	8.23	0.00
410.00	8.95	8.23	0.00
415.00	8.95	8.23	0.00
420.00	8.95	8.23	0.00
425.00	8.95	8.23	0.00
430.00	8.95	8.23	0.00
435.00	8.95	8.23	0.00
440.00	8.95	8.23	0.00
445.00	8.95	8.23	0.00
450.00	8.95	8.23	0.00
455.00	8.95	8.23	0.00
460.00	8.95	8.23	0.00
465.00	8.95	8.23	0.00
470.00	8.95	8.23	0.00
475.00	8.95	8.23	0.00
480.00	8.95	8.23	0.00
485.00	8.95	8.23	0.00
490.00	8.95	8.23	0.00
495.00	8.95	8.23	0.00
500.00	8.95	8.23	0.00

Summary for Subcatchment B-03: B-03 DRAINAGE AREA

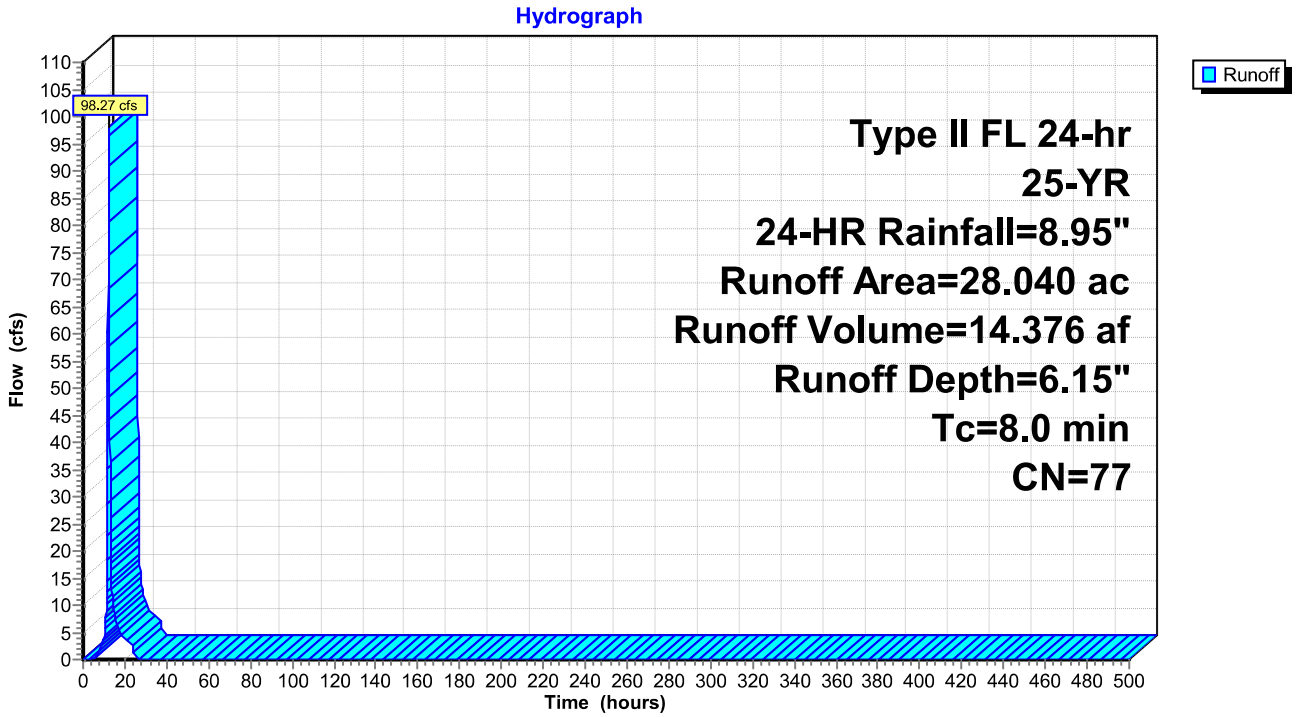
Runoff = 98.27 cfs @ 12.24 hrs, Volume= 14.376 af, Depth= 6.15"

Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Type II FL 24-hr 25-YR, 24-HR Rainfall=8.95"

	Area (ac)	CN	Description
*	28.040	77	
	28.040		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.0					**Direct Entry,**

Subcatchment B-03: B-03 DRAINAGE AREA



Hydrograph for Subcatchment B-03: B-03 DRAINAGE AREA

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
5.00	0.60	0.00	0.00
10.00	1.71	0.30	**4.26**
15.00	7.48	4.80	**7.99**
20.00	**8.47**	**5.71**	3.95
25.00	**8.95**	**6.15**	0.00
30.00	8.95	6.15	0.00
35.00	8.95	6.15	0.00
40.00	8.95	6.15	0.00
45.00	8.95	6.15	0.00
50.00	8.95	6.15	0.00
55.00	8.95	6.15	0.00
60.00	8.95	6.15	0.00
65.00	8.95	6.15	0.00
70.00	8.95	6.15	0.00
75.00	8.95	6.15	0.00
80.00	8.95	6.15	0.00
85.00	8.95	6.15	0.00
90.00	8.95	6.15	0.00
95.00	8.95	6.15	0.00
100.00	8.95	6.15	0.00
105.00	8.95	6.15	0.00
110.00	8.95	6.15	0.00
115.00	8.95	6.15	0.00
120.00	8.95	6.15	0.00
125.00	8.95	6.15	0.00
130.00	8.95	6.15	0.00
135.00	8.95	6.15	0.00
140.00	8.95	6.15	0.00
145.00	8.95	6.15	0.00
150.00	8.95	6.15	0.00
155.00	8.95	6.15	0.00
160.00	8.95	6.15	0.00
165.00	8.95	6.15	0.00
170.00	8.95	6.15	0.00
175.00	8.95	6.15	0.00
180.00	8.95	6.15	0.00
185.00	8.95	6.15	0.00
190.00	8.95	6.15	0.00
195.00	8.95	6.15	0.00
200.00	8.95	6.15	0.00
205.00	8.95	6.15	0.00
210.00	8.95	6.15	0.00
215.00	8.95	6.15	0.00
220.00	8.95	6.15	0.00
225.00	8.95	6.15	0.00
230.00	8.95	6.15	0.00
235.00	8.95	6.15	0.00
240.00	8.95	6.15	0.00
245.00	8.95	6.15	0.00
250.00	8.95	6.15	0.00
255.00	8.95	6.15	0.00
260.00	8.95	6.15	0.00
265.00	8.95	6.15	0.00
270.00	8.95	6.15	0.00
275.00	8.95	6.15	0.00
280.00	8.95	6.15	0.00
285.00	8.95	6.15	0.00
290.00	8.95	6.15	0.00
295.00	8.95	6.15	0.00
300.00	8.95	6.15	0.00
305.00	8.95	6.15	0.00
310.00	8.95	6.15	0.00
315.00	8.95	6.15	0.00
320.00	8.95	6.15	0.00
325.00	8.95	6.15	0.00
330.00	8.95	6.15	0.00
335.00	8.95	6.15	0.00
340.00	8.95	6.15	0.00
345.00	8.95	6.15	0.00
350.00	8.95	6.15	0.00
355.00	8.95	6.15	0.00
360.00	8.95	6.15	0.00
365.00	8.95	6.15	0.00
370.00	8.95	6.15	0.00
375.00	8.95	6.15	0.00
380.00	8.95	6.15	0.00
385.00	8.95	6.15	0.00
390.00	8.95	6.15	0.00
395.00	8.95	6.15	0.00
400.00	8.95	6.15	0.00
405.00	8.95	6.15	0.00
410.00	8.95	6.15	0.00
415.00	8.95	6.15	0.00
420.00	8.95	6.15	0.00
425.00	8.95	6.15	0.00
430.00	8.95	6.15	0.00
435.00	8.95	6.15	0.00
440.00	8.95	6.15	0.00
445.00	8.95	6.15	0.00
450.00	8.95	6.15	0.00
455.00	8.95	6.15	0.00
460.00	8.95	6.15	0.00
465.00	8.95	6.15	0.00
470.00	8.95	6.15	0.00
475.00	8.95	6.15	0.00
480.00	8.95	6.15	0.00
485.00	8.95	6.15	0.00
490.00	8.95	6.15	0.00
495.00	8.95	6.15	0.00
500.00	8.95	6.15	0.00

Summary for Pond POND B-01: POND B-01

Inflow Area = 111.250 ac, 0.00% Impervious, Inflow Depth = 8.35" for 25-YR, 24-HR event
Inflow = 328.85 cfs @ 12.55 hrs, Volume= 77.393 af
Outflow = 66.68 cfs @ 14.59 hrs, Volume= 77.393 af, Atten= 80%, Lag= 122.3 min
Discarded = 12.79 cfs @ 14.59 hrs, Volume= 41.321 af
Primary = 53.88 cfs @ 14.59 hrs, Volume= 36.071 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 11.35' @ 14.59 hrs Surf.Area= 819,487 sf Storage= 2,020,449 cf

Plug-Flow detention time= 794.9 min calculated for 77.393 af (100% of inflow)
Center-of-Mass det. time= 794.8 min (1,599.9 - 805.1)

Volume	Invert	Avail.Storage	Storage Description
#1	6.60'	2,904,364 cf	**Custom Stage Data (Conic)** Listed below (Recalc)
#2	5.60'	76,959 cf	**1.0' Drainage Medium (Conic)** Listed below (Recalc) 384,796 cf Overall x 20.0% Voids
		2,981,323 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
6.60	384,796	0	0	384,796
7.00	388,677	154,694	154,694	388,776
8.00	399,096	393,875	548,569	399,430
9.00	409,615	404,344	952,913	410,188
10.00	420,234	414,913	1,367,826	421,049
11.00	430,954	425,583	1,793,409	432,016
12.00	441,775	436,353	2,229,762	443,087
13.00	452,696	447,224	2,676,987	454,263
13.50	456,817	227,377	2,904,364	458,554

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
5.60	384,796	0	0	384,796
6.60	384,796	384,796	384,796	386,995

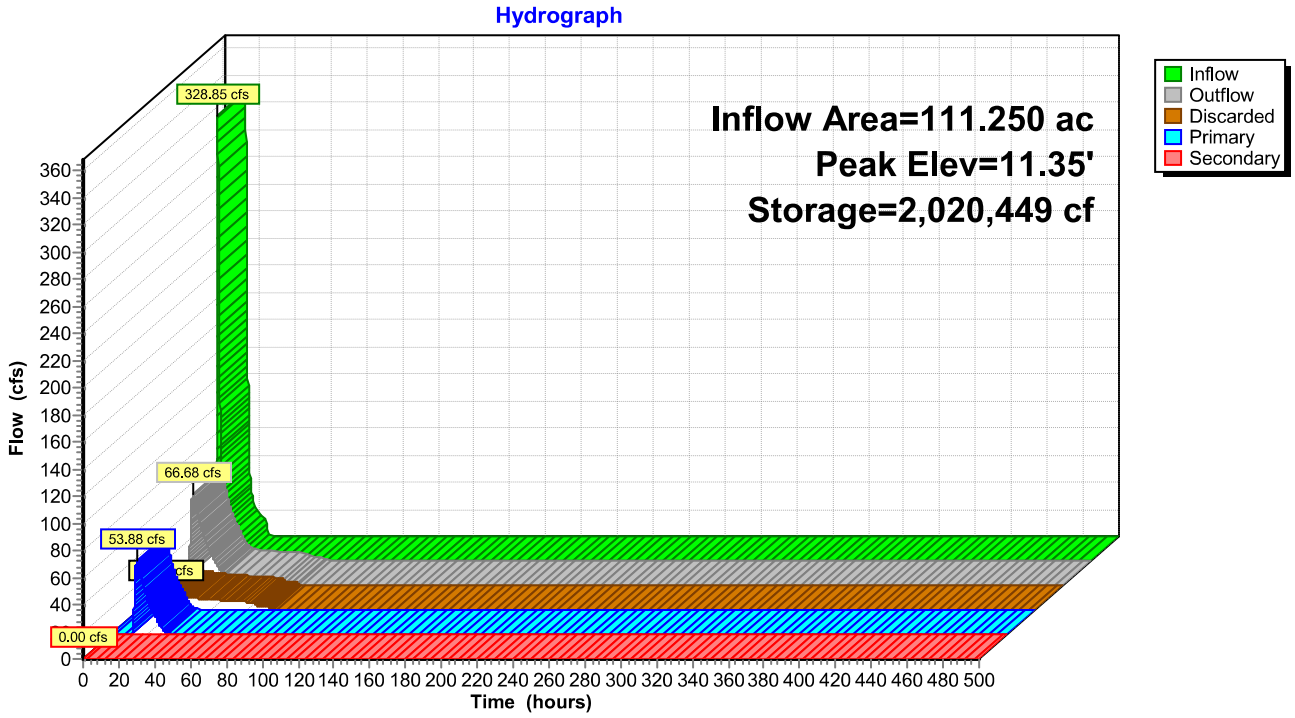
Device	Routing	Invert	Outlet Devices
#1	Discarded	5.60'	**0.250 in/hr Exfiltration over Wetted area** Conductivity to Groundwater Elevation = 3.02'
#2	Primary	6.60'	**30.0" Round Culvert - EXISTING** L= 163.1' RCP, groove end projecting, Ke= 0.200 Inlet / Outlet Invert= 6.60' / 2.85' S= 0.0230 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 4.91 sf
#3	Device 2	8.50'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 2	11.50'	**60.0" x 60.0" Horiz. Concrete Box Riser Structure with Grate** C= 0.600 Limited to weir flow at low heads
#5	Secondary	12.50'	**30.0' long + 10.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Discarded OutFlow Max=12.79 cfs @ 14.59 hrs HW=11.35' (Free Discharge)
└**1=Exfiltration** (Controls 12.79 cfs)

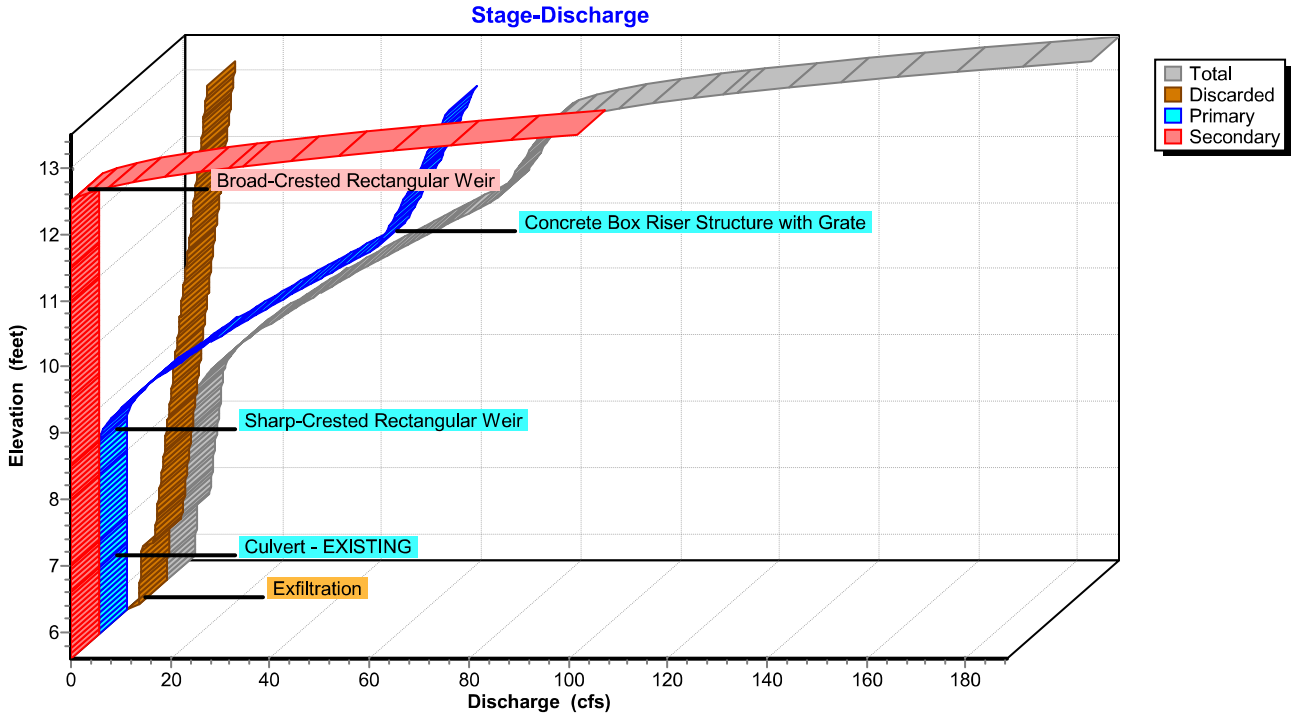
Primary OutFlow Max=53.88 cfs @ 14.59 hrs HW=11.35' TW=1.08' (Fixed TW Elev= 1.08')
└**2=Culvert - EXISTING** (Passes 53.88 cfs of 55.25 cfs potential flow)
  └**3=Sharp-Crested Rectangular Weir** (Weir Controls 53.88 cfs @ 5.52 fps)
  └**4=Concrete Box Riser Structure with Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=5.60' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond POND B-01: POND B-01



Pond POND B-01: POND B-01



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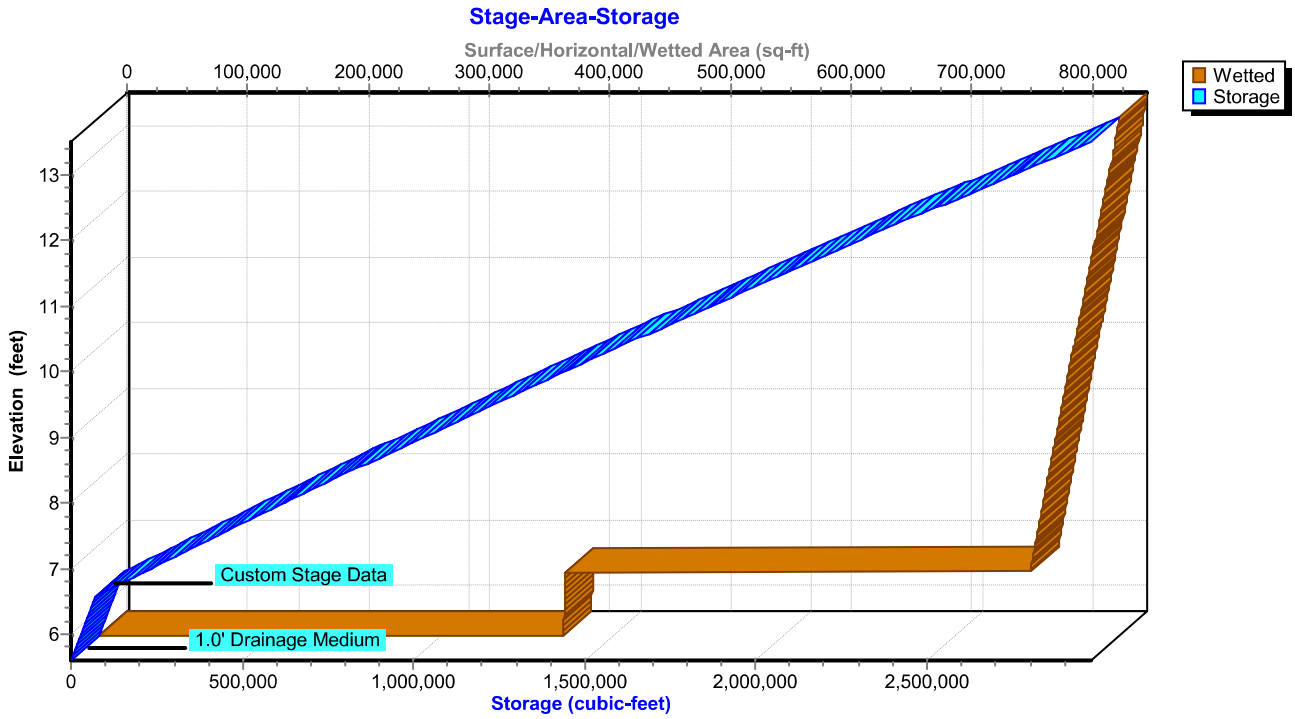


Hydrograph for Pond POND B-01: POND B-01

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Discarded (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	5.60	0.00	0.00	0.00	**0.00**
10.00	**30.47**	**283,441**	**7.13**	**6.14**	**6.14**	**0.00**	0.00
20.00	**17.65**	**1,544,701**	**10.24**	**38.37**	**11.02**	**27.35**	0.00
30.00	0.00	961,647	8.83	11.28	8.80	2.48	0.00
40.00	0.00	654,106	8.07	7.60	7.60	0.00	0.00
50.00	0.00	398,877	7.43	6.60	6.60	0.00	0.00
60.00	0.00	177,570	6.86	5.72	5.72	0.00	0.00
70.00	0.00	26,254	5.94	2.53	2.53	0.00	0.00
80.00	0.00	0	5.60	0.00	0.00	0.00	0.00
90.00	0.00	0	5.60	0.00	0.00	0.00	0.00
100.00	0.00	0	5.60	0.00	0.00	0.00	0.00
110.00	0.00	0	5.60	0.00	0.00	0.00	0.00
120.00	0.00	0	5.60	0.00	0.00	0.00	0.00
130.00	0.00	0	5.60	0.00	0.00	0.00	0.00
140.00	0.00	0	5.60	0.00	0.00	0.00	0.00
150.00	0.00	0	5.60	0.00	0.00	0.00	0.00
160.00	0.00	0	5.60	0.00	0.00	0.00	0.00
170.00	0.00	0	5.60	0.00	0.00	0.00	0.00
180.00	0.00	0	5.60	0.00	0.00	0.00	0.00
190.00	0.00	0	5.60	0.00	0.00	0.00	0.00
200.00	0.00	0	5.60	0.00	0.00	0.00	0.00
210.00	0.00	0	5.60	0.00	0.00	0.00	0.00
220.00	0.00	0	5.60	0.00	0.00	0.00	0.00
230.00	0.00	0	5.60	0.00	0.00	0.00	0.00
240.00	0.00	0	5.60	0.00	0.00	0.00	0.00
250.00	0.00	0	5.60	0.00	0.00	0.00	0.00
260.00	0.00	0	5.60	0.00	0.00	0.00	0.00
270.00	0.00	0	5.60	0.00	0.00	0.00	0.00
280.00	0.00	0	5.60	0.00	0.00	0.00	0.00
290.00	0.00	0	5.60	0.00	0.00	0.00	0.00
300.00	0.00	0	5.60	0.00	0.00	0.00	0.00
310.00	0.00	0	5.60	0.00	0.00	0.00	0.00
320.00	0.00	0	5.60	0.00	0.00	0.00	0.00
330.00	0.00	0	5.60	0.00	0.00	0.00	0.00
340.00	0.00	0	5.60	0.00	0.00	0.00	0.00
350.00	0.00	0	5.60	0.00	0.00	0.00	0.00
360.00	0.00	0	5.60	0.00	0.00	0.00	0.00
370.00	0.00	0	5.60	0.00	0.00	0.00	0.00
380.00	0.00	0	5.60	0.00	0.00	0.00	0.00
390.00	0.00	0	5.60	0.00	0.00	0.00	0.00
400.00	0.00	0	5.60	0.00	0.00	0.00	0.00
410.00	0.00	0	5.60	0.00	0.00	0.00	0.00
420.00	0.00	0	5.60	0.00	0.00	0.00	0.00
430.00	0.00	0	5.60	0.00	0.00	0.00	0.00
440.00	0.00	0	5.60	0.00	0.00	0.00	0.00
450.00	0.00	0	5.60	0.00	0.00	0.00	0.00
460.00	0.00	0	5.60	0.00	0.00	0.00	0.00
470.00	0.00	0	5.60	0.00	0.00	0.00	0.00
480.00	0.00	0	5.60	0.00	0.00	0.00	0.00
490.00	0.00	0	5.60	0.00	0.00	0.00	0.00
500.00	0.00	0	5.60	0.00	0.00	0.00	0.00

Stage-Discharge for Pond POND B-01: POND B-01

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Secondary (cfs)
5.60	0.00	0.00	0.00	0.00
5.80	2.40	2.40	0.00	0.00
6.00	2.58	2.58	0.00	0.00
6.20	2.75	2.75	0.00	0.00
6.40	2.93	2.93	0.00	0.00
6.60	5.33	5.33	0.00	0.00
6.80	5.62	5.62	0.00	0.00
7.00	5.93	5.93	0.00	0.00
7.20	6.24	6.24	0.00	0.00
7.40	6.55	6.55	0.00	0.00
7.60	6.87	6.87	0.00	0.00
7.80	7.18	7.18	0.00	0.00
8.00	7.49	7.49	0.00	0.00
8.20	7.80	7.80	0.00	0.00
8.40	8.12	8.12	0.00	0.00
8.60	8.84	8.43	0.41	0.00
8.80	10.87	8.75	2.12	0.00
9.00	13.57	9.06	4.51	0.00
9.20	16.77	9.38	7.39	0.00
9.40	20.36	9.70	10.67	0.00
9.60	24.27	10.01	14.26	0.00
9.80	28.46	10.33	18.13	0.00
10.00	32.87	10.65	22.23	0.00
10.20	37.49	10.96	26.53	0.00
10.40	42.28	11.28	31.00	0.00
10.60	47.23	11.60	35.63	0.00
10.80	52.30	11.92	40.38	0.00
11.00	57.48	12.24	45.24	0.00
11.20	62.75	12.56	50.20	0.00
11.40	68.11	12.88	55.23	0.00
11.60	70.41	13.20	57.21	0.00
11.80	72.24	13.52	58.72	0.00
12.00	74.03	13.84	60.19	0.00
12.20	75.78	14.16	61.62	0.00
12.40	77.50	14.48	63.02	0.00
12.60	81.62	14.81	64.39	2.43
12.80	94.30	15.13	65.73	13.44
13.00	114.11	15.45	67.05	31.61
13.20	140.30	15.77	68.34	56.19
13.40	**170.97**	**16.09**	**69.60**	**85.28**

Stage-Area-Storage for Pond POND B-01: POND B-01

Elevation (feet)	Wetted (sq-ft)	Storage (cubic-feet)
5.60	384,796	0
5.70	385,016	7,696
5.80	385,236	15,392
5.90	385,456	23,088
6.00	385,676	30,784
6.10	385,895	38,480
6.20	386,115	46,176
6.30	386,335	53,871
6.40	386,555	61,567
6.50	386,775	69,263
6.60	771,791	76,959
6.70	772,784	115,487
6.80	773,778	154,112
6.90	774,774	192,834
7.00	775,771	231,653
7.10	776,830	270,573
7.20	777,890	309,596
7.30	778,952	348,723
7.40	780,016	387,953
7.50	781,080	427,288
7.60	782,146	466,727
7.70	783,214	506,271
7.80	784,283	545,919
7.90	785,353	585,671
8.00	786,425	625,528
8.10	787,494	665,490
8.20	788,565	705,557
8.30	789,637	745,728
8.40	790,711	786,004
8.50	791,786	826,385
8.60	792,863	866,872
8.70	793,941	907,464
8.80	795,020	948,161
8.90	796,100	988,964
9.00	797,183	1,029,872
9.10	798,262	1,070,887
9.20	799,344	1,112,006
9.30	800,426	1,153,232
9.40	801,511	1,194,564
9.50	802,596	1,236,001
9.60	803,683	1,277,545
9.70	804,771	1,319,196
9.80	805,861	1,360,952
9.90	806,952	1,402,815
10.00	808,044	1,444,785
10.10	809,135	1,486,862
10.20	810,227	1,529,045
10.30	811,320	1,571,336
10.40	812,414	1,613,733
10.50	813,510	1,656,237
10.60	814,608	1,698,848
10.70	815,706	1,741,567
10.80	816,807	1,784,393
10.90	817,908	1,827,327
11.00	819,011	1,870,368
11.10	820,112	1,913,517
11.20	821,214	1,956,774
11.30	822,318	2,000,139
11.40	823,423	2,043,612
11.50	824,529	2,087,192
11.60	825,637	2,130,881
11.70	826,747	2,174,678
11.80	827,857	2,218,584
11.90	828,969	2,262,598
12.00	830,082	2,306,722
12.10	831,194	2,350,953
12.20	832,307	2,395,294
12.30	833,421	2,439,743
12.40	834,536	2,484,301
12.50	835,653	2,528,969
12.60	836,771	2,573,745
12.70	837,891	2,618,631
12.80	839,012	2,663,626
12.90	840,134	2,708,731
13.00	841,258	2,753,946
13.10	842,114	2,799,257
13.20	842,972	2,844,650
13.30	843,830	2,890,125
13.40	844,689	2,935,683
13.50	**845,549**	**2,981,323**

Summary for Pond POND B-02: POND B-02

Inflow Area = 56.440 ac, 0.00% Impervious, Inflow Depth = 8.23" for 25-YR, 24-HR event
Inflow = 189.74 cfs @ 12.43 hrs, Volume= 38.695 af
Outflow = 68.50 cfs @ 13.50 hrs, Volume= 38.695 af, Atten= 64%, Lag= 64.7 min
Discarded = 17.47 cfs @ 13.50 hrs, Volume= 27.782 af
Primary = 51.02 cfs @ 13.50 hrs, Volume= 10.913 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 16.44' @ 13.50 hrs Surf.Area= 345,120 sf Storage= 794,607 cf

Plug-Flow detention time= 335.4 min calculated for 38.695 af (100% of inflow)
Center-of-Mass det. time= 335.3 min (1,130.9 - 795.6)

Volume	Invert	Avail.Storage	Storage Description
#1	12.00'	1,090,434 cf	**Custom Stage Data (Conic)** Listed below (Recalc)
#2	11.00'	29,249 cf	**1' Drainage Medium (Conic)** Listed below (Recalc) 146,245 cf Overall x 20.0% Voids
		1,119,683 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
12.00	146,245	0	0	146,245
13.00	157,934	152,052	152,052	158,015
14.00	169,723	163,793	315,845	169,891
15.00	181,613	175,634	491,480	181,874
16.00	193,603	187,576	679,056	193,962
17.00	205,694	199,618	878,674	206,156
18.00	217,886	211,761	1,090,434	218,457

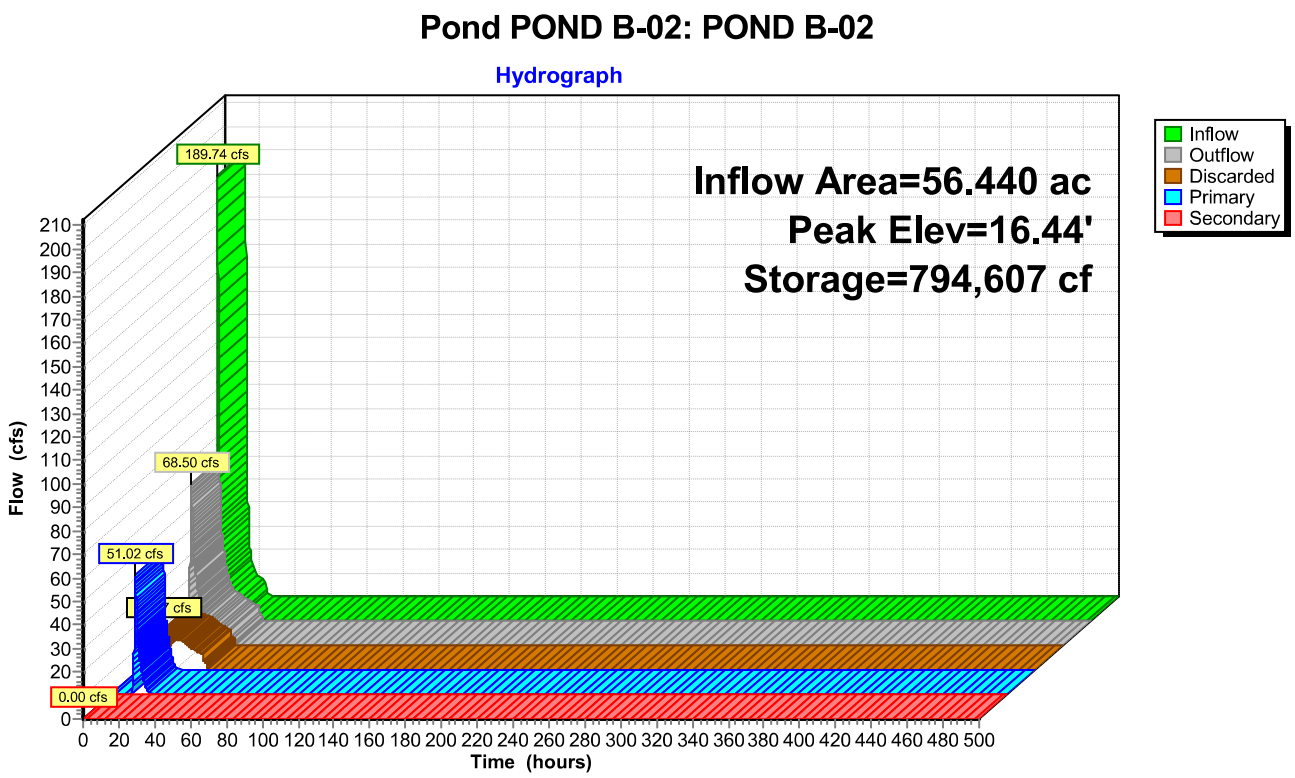
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
11.00	146,245	0	0	146,245
12.00	146,245	146,245	146,245	147,601

Device	Routing	Invert	Outlet Devices
#1	Discarded	11.00'	**0.800 in/hr Exfiltration over Wetted area** Conductivity to Groundwater Elevation = 8.84'
#2	Primary	12.00'	**36.0" Round Culvert** L= 144.8' RCP, groove end projecting, Ke= 0.200 Inlet / Outlet Invert= 12.00' / 4.22' S= 0.0537 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 7.07 sf
#3	Device 2	14.50'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 2	16.00'	**60.0" x 60.0" Horiz. Concrete Box Riser Structure with Grate** C= 0.600 Limited to weir flow at low heads
#5	Secondary	17.00'	**40.0' long + 10.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

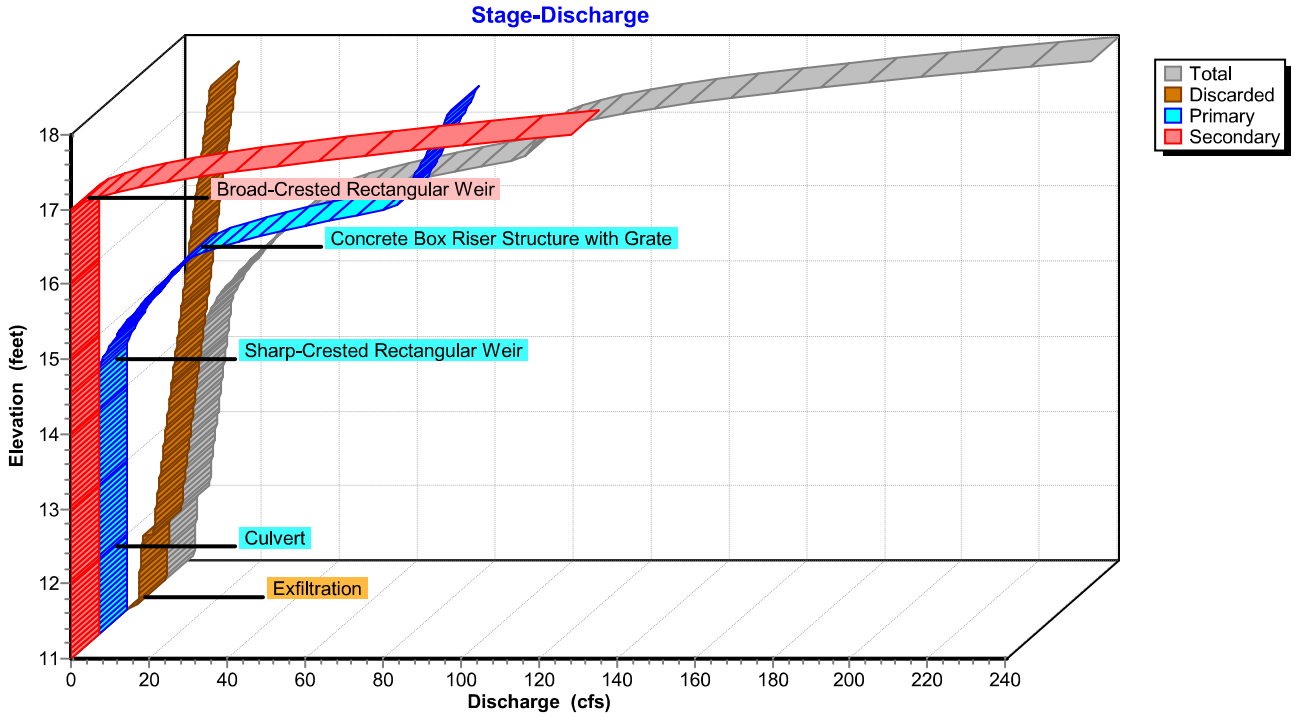
Discarded OutFlow Max=17.47 cfs @ 13.50 hrs HW=16.44' (Free Discharge)
└**1=Exfiltration** (Controls 17.47 cfs)

Primary OutFlow Max=50.97 cfs @ 13.50 hrs HW=16.44' TW=1.08' (Fixed TW Elev= 1.08')
└**2=Culvert** (Passes 50.97 cfs of 72.94 cfs potential flow)
  └**3=Sharp-Crested Rectangular Weir** (Weir Controls 31.91 cfs @ 4.55 fps)
  └**4=Concrete Box Riser Structure with Grate** (Weir Controls 19.07 cfs @ 2.17 fps)

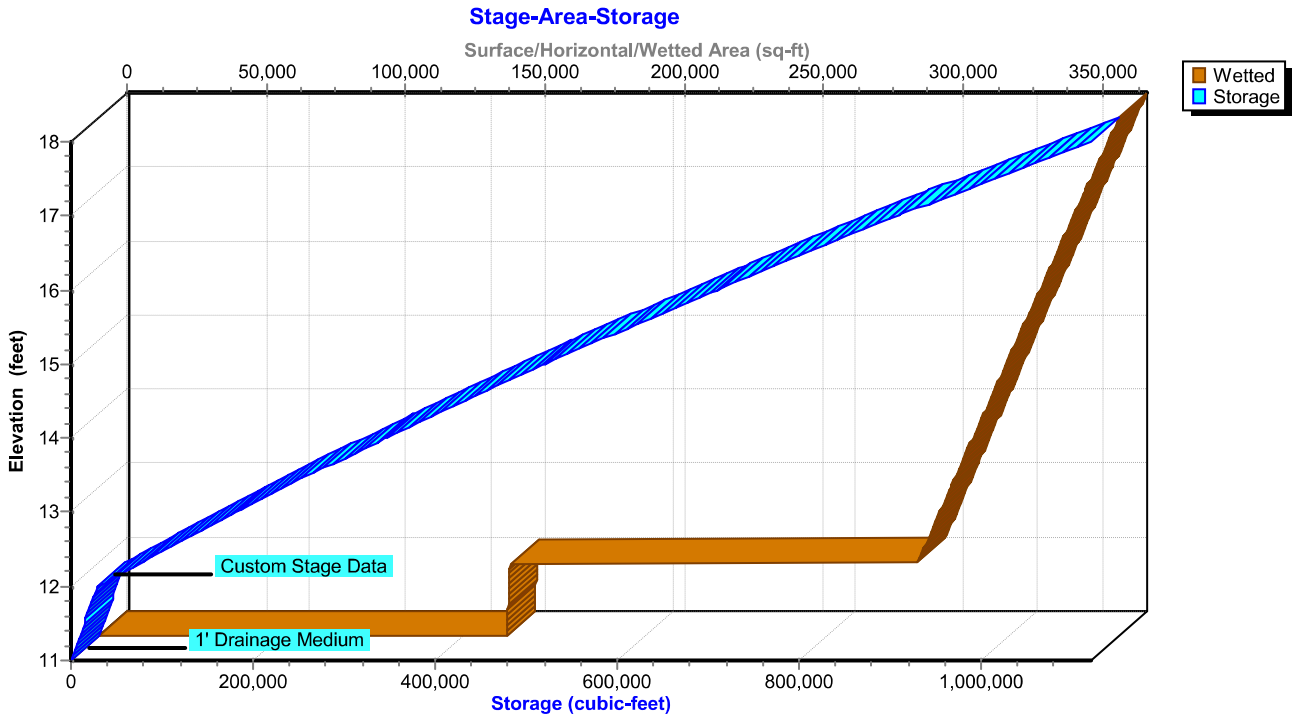
Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=11.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)



Pond POND B-02: POND B-02



Pond POND B-02: POND B-02



Hydrograph for Pond POND B-02: POND B-02

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Discarded (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	11.00	0.00	0.00	0.00	**0.00**
10.00	**15.90**	**75,984**	**12.32**	**7.39**	**7.39**	**0.00**	0.00
20.00	**8.79**	**487,555**	**14.82**	**15.72**	**13.42**	**2.30**	0.00
30.00	0.00	181,762	13.00	9.02	9.02	0.00	0.00
40.00	0.00	0	11.00	0.00	0.00	0.00	0.00
50.00	0.00	0	11.00	0.00	0.00	0.00	0.00
60.00	0.00	0	11.00	0.00	0.00	0.00	0.00
70.00	0.00	0	11.00	0.00	0.00	0.00	0.00
80.00	0.00	0	11.00	0.00	0.00	0.00	0.00
90.00	0.00	0	11.00	0.00	0.00	0.00	0.00
100.00	0.00	0	11.00	0.00	0.00	0.00	0.00
110.00	0.00	0	11.00	0.00	0.00	0.00	0.00
120.00	0.00	0	11.00	0.00	0.00	0.00	0.00
130.00	0.00	0	11.00	0.00	0.00	0.00	0.00
140.00	0.00	0	11.00	0.00	0.00	0.00	0.00
150.00	0.00	0	11.00	0.00	0.00	0.00	0.00
160.00	0.00	0	11.00	0.00	0.00	0.00	0.00
170.00	0.00	0	11.00	0.00	0.00	0.00	0.00
180.00	0.00	0	11.00	0.00	0.00	0.00	0.00
190.00	0.00	0	11.00	0.00	0.00	0.00	0.00
200.00	0.00	0	11.00	0.00	0.00	0.00	0.00
210.00	0.00	0	11.00	0.00	0.00	0.00	0.00
220.00	0.00	0	11.00	0.00	0.00	0.00	0.00
230.00	0.00	0	11.00	0.00	0.00	0.00	0.00
240.00	0.00	0	11.00	0.00	0.00	0.00	0.00
250.00	0.00	0	11.00	0.00	0.00	0.00	0.00
260.00	0.00	0	11.00	0.00	0.00	0.00	0.00
270.00	0.00	0	11.00	0.00	0.00	0.00	0.00
280.00	0.00	0	11.00	0.00	0.00	0.00	0.00
290.00	0.00	0	11.00	0.00	0.00	0.00	0.00
300.00	0.00	0	11.00	0.00	0.00	0.00	0.00
310.00	0.00	0	11.00	0.00	0.00	0.00	0.00
320.00	0.00	0	11.00	0.00	0.00	0.00	0.00
330.00	0.00	0	11.00	0.00	0.00	0.00	0.00
340.00	0.00	0	11.00	0.00	0.00	0.00	0.00
350.00	0.00	0	11.00	0.00	0.00	0.00	0.00
360.00	0.00	0	11.00	0.00	0.00	0.00	0.00
370.00	0.00	0	11.00	0.00	0.00	0.00	0.00
380.00	0.00	0	11.00	0.00	0.00	0.00	0.00
390.00	0.00	0	11.00	0.00	0.00	0.00	0.00
400.00	0.00	0	11.00	0.00	0.00	0.00	0.00
410.00	0.00	0	11.00	0.00	0.00	0.00	0.00
420.00	0.00	0	11.00	0.00	0.00	0.00	0.00
430.00	0.00	0	11.00	0.00	0.00	0.00	0.00
440.00	0.00	0	11.00	0.00	0.00	0.00	0.00
450.00	0.00	0	11.00	0.00	0.00	0.00	0.00
460.00	0.00	0	11.00	0.00	0.00	0.00	0.00
470.00	0.00	0	11.00	0.00	0.00	0.00	0.00
480.00	0.00	0	11.00	0.00	0.00	0.00	0.00
490.00	0.00	0	11.00	0.00	0.00	0.00	0.00
500.00	0.00	0	11.00	0.00	0.00	0.00	0.00

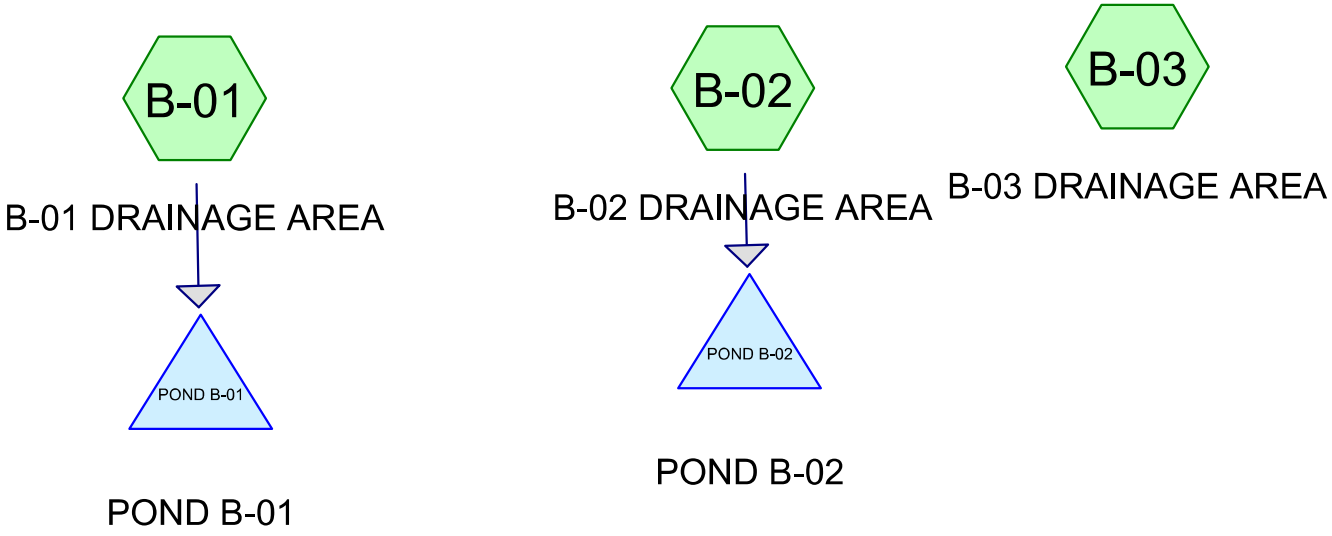
Stage-Discharge for Pond POND B-02: POND B-02

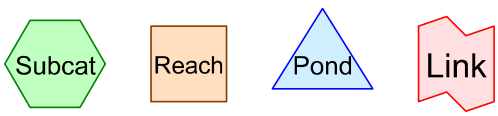
Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Secondary (cfs)
11.00	0.00	0.00	0.00	0.00
11.20	2.96	2.96	0.00	0.00
11.40	3.22	3.22	0.00	0.00
11.60	3.48	3.48	0.00	0.00
11.80	3.73	3.73	0.00	0.00
12.00	6.70	6.70	0.00	0.00
12.20	7.12	7.12	0.00	0.00
12.40	7.59	7.59	0.00	0.00
12.60	8.06	8.06	0.00	0.00
12.80	8.54	8.54	0.00	0.00
13.00	9.01	9.01	0.00	0.00
13.20	9.49	9.49	0.00	0.00
13.40	9.97	9.97	0.00	0.00
13.60	10.45	10.45	0.00	0.00
13.80	10.93	10.93	0.00	0.00
14.00	11.42	11.42	0.00	0.00
14.20	11.91	11.91	0.00	0.00
14.40	12.40	12.40	0.00	0.00
14.60	13.30	12.89	0.41	0.00
14.80	15.50	13.38	2.12	0.00
15.00	18.38	13.87	4.51	0.00
15.20	21.76	14.37	7.39	0.00
15.40	25.53	14.87	10.67	0.00
15.60	29.62	15.36	14.26	0.00
15.80	33.99	15.86	18.13	0.00
16.00	38.59	16.37	22.23	0.00
16.20	49.25	16.87	32.38	0.00
16.40	64.92	17.37	47.55	0.00
16.60	83.90	17.88	66.02	0.00
16.80	95.67	18.38	77.28	0.00
17.00	98.48	18.89	79.59	0.00
17.20	110.50	19.40	81.83	9.26
17.40	131.90	19.91	84.02	27.98
17.60	162.78	20.42	86.14	56.22
17.80	198.46	20.93	88.22	89.31
18.00	**240.34**	**21.45**	**90.25**	**128.64**

Stage-Area-Storage for Pond POND B-02: POND B-02

Elevation (feet)	Wetted (sq-ft)	Storage (cubic-feet)
11.00	146,245	0
11.10	146,381	2,925
11.20	146,516	5,850
11.30	146,652	8,775
11.40	146,787	11,700
11.50	146,923	14,625
11.60	147,058	17,549
11.70	147,194	20,474
11.80	147,330	23,399
11.90	147,465	26,324
12.00	293,846	29,249
12.10	295,002	43,931
12.20	296,164	58,728
12.30	297,329	73,640
12.40	298,500	88,669
12.50	299,674	103,814
12.60	300,854	119,076
12.70	302,037	134,455
12.80	303,226	149,952
12.90	304,419	165,567
13.00	305,616	181,301
13.10	306,784	197,152
13.20	307,957	213,120
13.30	309,134	229,204
13.40	310,315	245,405
13.50	311,501	261,724
13.60	312,690	278,161
13.70	313,884	294,715
13.80	315,083	311,389
13.90	316,285	328,182
14.00	317,492	345,094
14.10	318,672	362,125
14.20	319,856	379,273
14.30	321,044	396,539
14.40	322,236	413,923
14.50	323,433	431,425
14.60	324,633	449,046
14.70	325,837	466,787
14.80	327,046	484,647
14.90	328,258	502,628
15.00	329,474	520,729
15.10	330,666	538,949
15.20	331,861	557,288
15.30	333,060	575,745
15.40	334,263	594,322
15.50	335,470	613,018
15.60	336,681	631,834
15.70	337,895	650,770
15.80	339,114	669,827
15.90	340,336	689,005
16.00	341,562	708,305
16.10	342,765	727,725
16.20	343,972	747,264
16.30	345,182	766,923
16.40	346,396	786,702
16.50	347,613	806,602
16.60	348,835	826,623
16.70	350,060	846,765
16.80	351,288	867,029
16.90	352,521	887,415
17.00	353,757	907,923
17.10	354,971	928,552
17.20	356,188	949,302
17.30	357,410	970,173
17.40	358,634	991,165
17.50	359,863	1,012,279
17.60	361,095	1,033,515
17.70	362,330	1,054,873
17.80	363,569	1,076,353
17.90	364,811	1,097,957
18.00	**366,057**	**1,119,683**

POST-DEVELOPMENT
- MEAN ANNUAL
24-HOUR STORM -
TAILWATER = 1.08'





Routing Diagram for JEA SJRPP
Prepared by Black & Veatch, Printed 4/15/2026
HydroCAD® 10.20-5c s/n 02393 © 2023 HydroCAD Software Solutions LLC

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	Mean Annual 24 Hour Storm	Type II FL 24-hr		Default	24.00	1	5.00	2

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
111.250	95	(B-01)
56.440	94	(B-02)
28.040	77	(B-03)
195.730	**92**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
195.730	Other	B-01, B-02, B-03
195.730		**TOTAL AREA**

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.000	195.730	195.730		B-01, B-02, B-03
0.000	**0.000**	**0.000**	**0.000**	**195.730**	**195.730**	**TOTAL AREA**	

Pipe Listing (selected nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Nod Nam
1	POND B-01	6.60	2.85	163.1	0.0230	0.011	0.0	30.0	0.0	
2	POND B-02	12.00	4.22	144.8	0.0537	0.011	0.0	36.0	0.0	

Time span=0.00-500.00 hrs, dt=0.05 hrs, 10001 points
Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment B-01: B-01 DRAINAGE Runoff Area=111.250 ac 0.00% Impervious Runoff Depth=4.42"
Tc=28.0 min CN=95 Runoff=178.89 cfs 40.973 af

Subcatchment B-02: B-02 DRAINAGE AREA Runoff Area=56.440 ac 0.00% Impervious Runoff Depth=4.31"
Tc=19.8 min CN=94 Runoff=102.34 cfs 20.262 af

Subcatchment B-03: B-03 DRAINAGE AREA Runoff Area=28.040 ac 0.00% Impervious Runoff Depth=2.62"
Tc=8.0 min CN=77 Runoff=41.92 cfs 6.129 af

Pond POND B-01: POND B-01 Peak Elev=9.33' Storage=1,165,946 cf Inflow=178.89 cfs 40.973 af
Discarded=9.59 cfs 34.240 af Primary=9.50 cfs 6.733 af Secondary=0.00 cfs 0.000 af Outflow=19.08 cfs 40.973 af

Pond POND B-02: POND B-02 Peak Elev=14.69' Storage=465,790 cf Inflow=102.34 cfs 20.262 af
Discarded=13.12 cfs 20.086 af Primary=1.12 cfs 0.176 af Secondary=0.00 cfs 0.000 af Outflow=14.24 cfs 20.262 af

Total Runoff Area = 195.730 ac Runoff Volume = 67.364 af Average Runoff Depth = 4.13"
100.00% Pervious = 195.730 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment B-01: B-01 DRAINAGE AREA

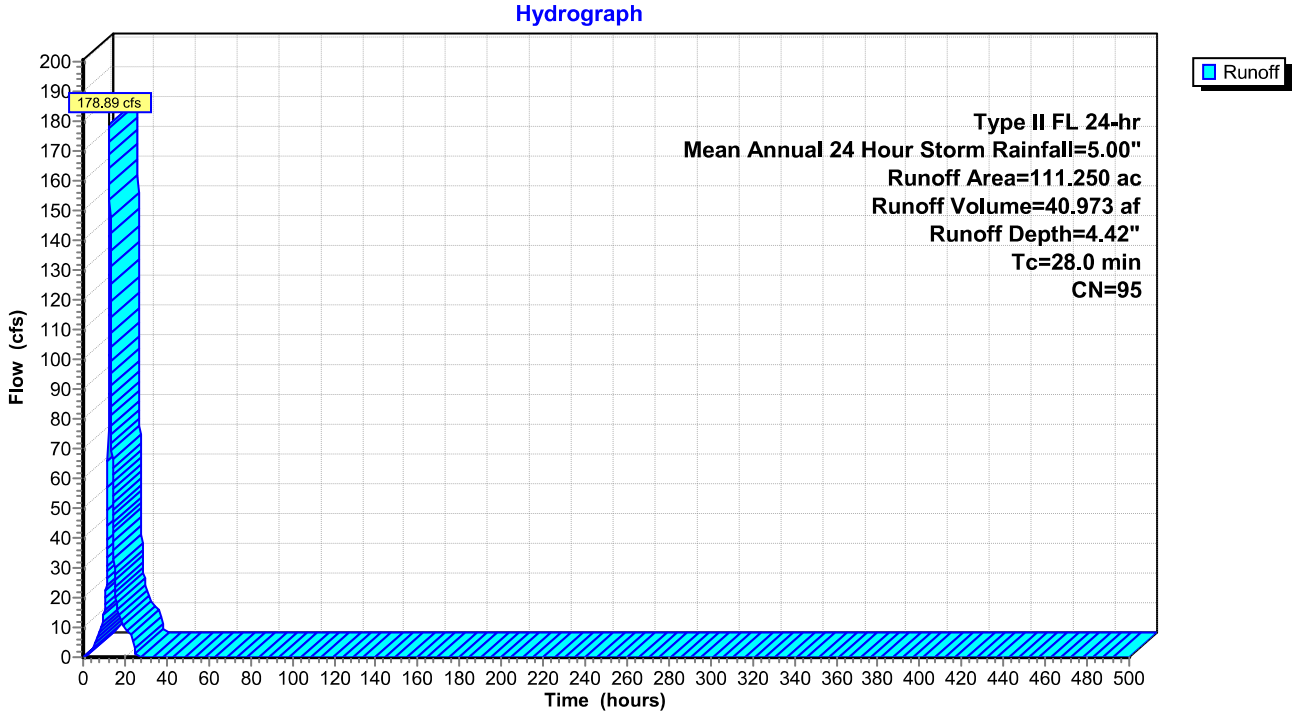
Runoff = 178.89 cfs @ 12.55 hrs, Volume= 40.973 af, Depth= 4.42"
Routed to Pond POND B-01 : POND B-01

Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Type II FL 24-hr Mean Annual 24 Hour Storm Rainfall=5.00"

	Area (ac)	CN	Description
*	111.250	95	
	111.250		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
28.0					**Direct Entry,**

Subcatchment B-01: B-01 DRAINAGE AREA



Hydrograph for Subcatchment B-01: B-01 DRAINAGE AREA

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
5.00	0.33	0.07	3.65
10.00	0.96	0.53	**15.14**
15.00	4.18	3.61	**26.46**
20.00	**4.73**	**4.15**	9.79
25.00	**5.00**	**4.42**	1.80
30.00	5.00	4.42	0.00
35.00	5.00	4.42	0.00
40.00	5.00	4.42	0.00
45.00	5.00	4.42	0.00
50.00	5.00	4.42	0.00
55.00	5.00	4.42	0.00
60.00	5.00	4.42	0.00
65.00	5.00	4.42	0.00
70.00	5.00	4.42	0.00
75.00	5.00	4.42	0.00
80.00	5.00	4.42	0.00
85.00	5.00	4.42	0.00
90.00	5.00	4.42	0.00
95.00	5.00	4.42	0.00
100.00	5.00	4.42	0.00
105.00	5.00	4.42	0.00
110.00	5.00	4.42	0.00
115.00	5.00	4.42	0.00
120.00	5.00	4.42	0.00
125.00	5.00	4.42	0.00
130.00	5.00	4.42	0.00
135.00	5.00	4.42	0.00
140.00	5.00	4.42	0.00
145.00	5.00	4.42	0.00
150.00	5.00	4.42	0.00
155.00	5.00	4.42	0.00
160.00	5.00	4.42	0.00
165.00	5.00	4.42	0.00
170.00	5.00	4.42	0.00
175.00	5.00	4.42	0.00
180.00	5.00	4.42	0.00
185.00	5.00	4.42	0.00
190.00	5.00	4.42	0.00
195.00	5.00	4.42	0.00
200.00	5.00	4.42	0.00
205.00	5.00	4.42	0.00
210.00	5.00	4.42	0.00
215.00	5.00	4.42	0.00
220.00	5.00	4.42	0.00
225.00	5.00	4.42	0.00
230.00	5.00	4.42	0.00
235.00	5.00	4.42	0.00
240.00	5.00	4.42	0.00
245.00	5.00	4.42	0.00
250.00	5.00	4.42	0.00
255.00	5.00	4.42	0.00
260.00	5.00	4.42	0.00
265.00	5.00	4.42	0.00
270.00	5.00	4.42	0.00
275.00	5.00	4.42	0.00
280.00	5.00	4.42	0.00
285.00	5.00	4.42	0.00
290.00	5.00	4.42	0.00
295.00	5.00	4.42	0.00
300.00	5.00	4.42	0.00
305.00	5.00	4.42	0.00
310.00	5.00	4.42	0.00
315.00	5.00	4.42	0.00
320.00	5.00	4.42	0.00
325.00	5.00	4.42	0.00
330.00	5.00	4.42	0.00
335.00	5.00	4.42	0.00
340.00	5.00	4.42	0.00
345.00	5.00	4.42	0.00
350.00	5.00	4.42	0.00
355.00	5.00	4.42	0.00
360.00	5.00	4.42	0.00
365.00	5.00	4.42	0.00
370.00	5.00	4.42	0.00
375.00	5.00	4.42	0.00
380.00	5.00	4.42	0.00
385.00	5.00	4.42	0.00
390.00	5.00	4.42	0.00
395.00	5.00	4.42	0.00
400.00	5.00	4.42	0.00
405.00	5.00	4.42	0.00
410.00	5.00	4.42	0.00
415.00	5.00	4.42	0.00
420.00	5.00	4.42	0.00
425.00	5.00	4.42	0.00
430.00	5.00	4.42	0.00
435.00	5.00	4.42	0.00
440.00	5.00	4.42	0.00
445.00	5.00	4.42	0.00
450.00	5.00	4.42	0.00
455.00	5.00	4.42	0.00
460.00	5.00	4.42	0.00
465.00	5.00	4.42	0.00
470.00	5.00	4.42	0.00
475.00	5.00	4.42	0.00
480.00	5.00	4.42	0.00
485.00	5.00	4.42	0.00
490.00	5.00	4.42	0.00
495.00	5.00	4.42	0.00
500.00	5.00	4.42	0.00

Summary for Subcatchment B-02: B-02 DRAINAGE AREA

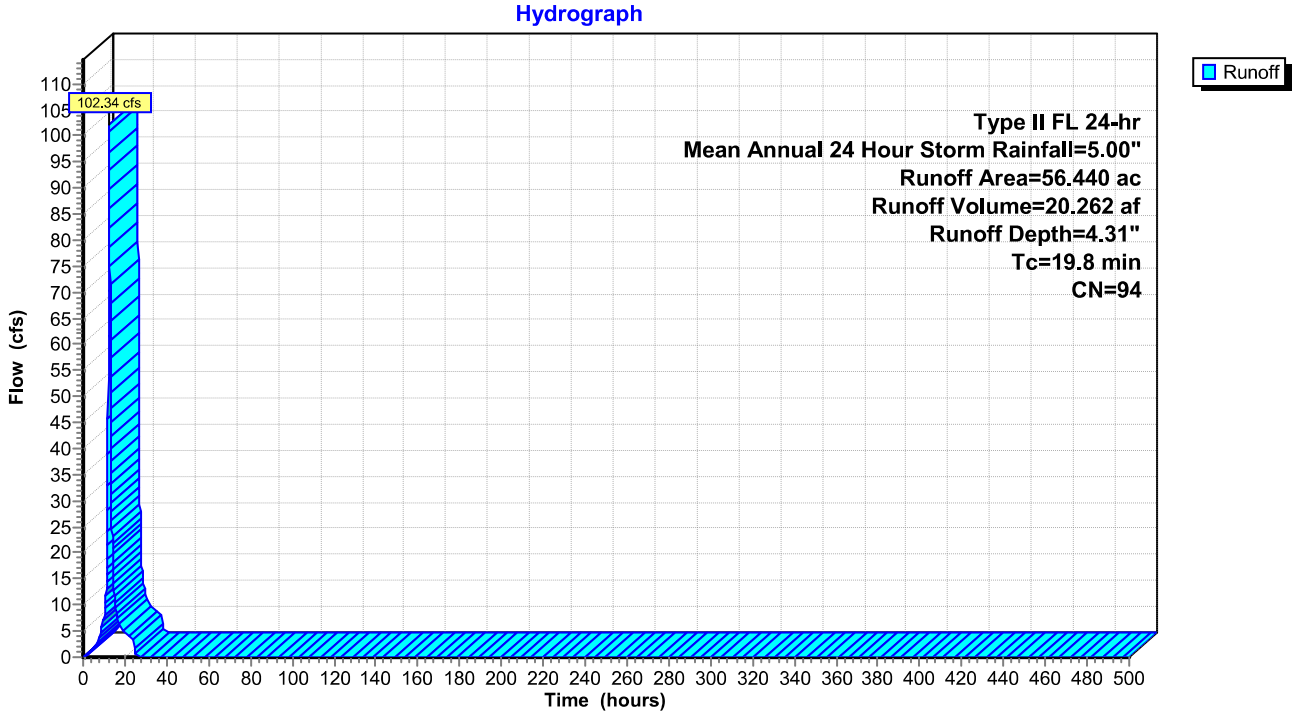
Runoff = 102.34 cfs @ 12.43 hrs, Volume= 20.262 af, Depth= 4.31"
Routed to Pond POND B-02 : POND B-02

Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Type II FL 24-hr Mean Annual 24 Hour Storm Rainfall=5.00"

	Area (ac)	CN	Description
*	56.440	94	
	56.440		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					**Direct Entry,**

Subcatchment B-02: B-02 DRAINAGE AREA



Hydrograph for Subcatchment B-02: B-02 DRAINAGE AREA

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
5.00	0.33	0.05	1.65
10.00	0.96	0.47	**7.70**
15.00	4.18	3.50	**11.02**
20.00	**4.73**	**4.04**	4.86
25.00	**5.00**	**4.31**	0.47
30.00	5.00	4.31	0.00
35.00	5.00	4.31	0.00
40.00	5.00	4.31	0.00
45.00	5.00	4.31	0.00
50.00	5.00	4.31	0.00
55.00	5.00	4.31	0.00
60.00	5.00	4.31	0.00
65.00	5.00	4.31	0.00
70.00	5.00	4.31	0.00
75.00	5.00	4.31	0.00
80.00	5.00	4.31	0.00
85.00	5.00	4.31	0.00
90.00	5.00	4.31	0.00
95.00	5.00	4.31	0.00
100.00	5.00	4.31	0.00
105.00	5.00	4.31	0.00
110.00	5.00	4.31	0.00
115.00	5.00	4.31	0.00
120.00	5.00	4.31	0.00
125.00	5.00	4.31	0.00
130.00	5.00	4.31	0.00
135.00	5.00	4.31	0.00
140.00	5.00	4.31	0.00
145.00	5.00	4.31	0.00
150.00	5.00	4.31	0.00
155.00	5.00	4.31	0.00
160.00	5.00	4.31	0.00
165.00	5.00	4.31	0.00
170.00	5.00	4.31	0.00
175.00	5.00	4.31	0.00
180.00	5.00	4.31	0.00
185.00	5.00	4.31	0.00
190.00	5.00	4.31	0.00
195.00	5.00	4.31	0.00
200.00	5.00	4.31	0.00
205.00	5.00	4.31	0.00
210.00	5.00	4.31	0.00
215.00	5.00	4.31	0.00
220.00	5.00	4.31	0.00
225.00	5.00	4.31	0.00
230.00	5.00	4.31	0.00
235.00	5.00	4.31	0.00
240.00	5.00	4.31	0.00
245.00	5.00	4.31	0.00
250.00	5.00	4.31	0.00
255.00	5.00	4.31	0.00
260.00	5.00	4.31	0.00
265.00	5.00	4.31	0.00
270.00	5.00	4.31	0.00
275.00	5.00	4.31	0.00
280.00	5.00	4.31	0.00
285.00	5.00	4.31	0.00
290.00	5.00	4.31	0.00
295.00	5.00	4.31	0.00
300.00	5.00	4.31	0.00
305.00	5.00	4.31	0.00
310.00	5.00	4.31	0.00
315.00	5.00	4.31	0.00
320.00	5.00	4.31	0.00
325.00	5.00	4.31	0.00
330.00	5.00	4.31	0.00
335.00	5.00	4.31	0.00
340.00	5.00	4.31	0.00
345.00	5.00	4.31	0.00
350.00	5.00	4.31	0.00
355.00	5.00	4.31	0.00
360.00	5.00	4.31	0.00
365.00	5.00	4.31	0.00
370.00	5.00	4.31	0.00
375.00	5.00	4.31	0.00
380.00	5.00	4.31	0.00
385.00	5.00	4.31	0.00
390.00	5.00	4.31	0.00
395.00	5.00	4.31	0.00
400.00	5.00	4.31	0.00
405.00	5.00	4.31	0.00
410.00	5.00	4.31	0.00
415.00	5.00	4.31	0.00
420.00	5.00	4.31	0.00
425.00	5.00	4.31	0.00
430.00	5.00	4.31	0.00
435.00	5.00	4.31	0.00
440.00	5.00	4.31	0.00
445.00	5.00	4.31	0.00
450.00	5.00	4.31	0.00
455.00	5.00	4.31	0.00
460.00	5.00	4.31	0.00
465.00	5.00	4.31	0.00
470.00	5.00	4.31	0.00
475.00	5.00	4.31	0.00
480.00	5.00	4.31	0.00
485.00	5.00	4.31	0.00
490.00	5.00	4.31	0.00
495.00	5.00	4.31	0.00
500.00	5.00	4.31	0.00

Summary for Subcatchment B-03: B-03 DRAINAGE AREA

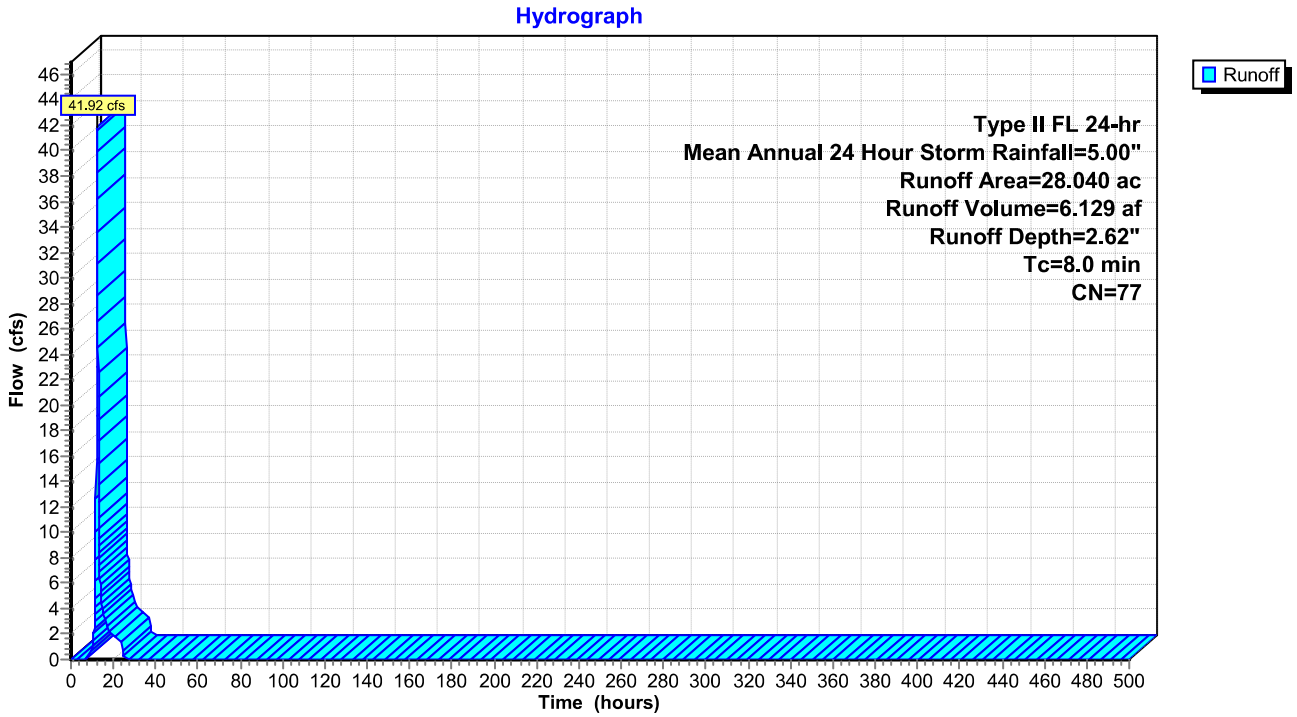
Runoff = 41.92 cfs @ 12.28 hrs, Volume= 6.129 af, Depth= 2.62"

Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Type II FL 24-hr Mean Annual 24 Hour Storm Rainfall=5.00"

	Area (ac)	CN	Description
*	28.040	77	
	28.040		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.0					**Direct Entry,**

Subcatchment B-03: B-03 DRAINAGE AREA



Hydrograph for Subcatchment B-03: B-03 DRAINAGE AREA

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
5.00	0.33	0.00	0.00
10.00	0.96	0.04	**0.97**
15.00	4.18	1.95	**3.89**
20.00	**4.73**	**2.40**	1.97
25.00	**5.00**	**2.62**	0.00
30.00	5.00	2.62	0.00
35.00	5.00	2.62	0.00
40.00	5.00	2.62	0.00
45.00	5.00	2.62	0.00
50.00	5.00	2.62	0.00
55.00	5.00	2.62	0.00
60.00	5.00	2.62	0.00
65.00	5.00	2.62	0.00
70.00	5.00	2.62	0.00
75.00	5.00	2.62	0.00
80.00	5.00	2.62	0.00
85.00	5.00	2.62	0.00
90.00	5.00	2.62	0.00
95.00	5.00	2.62	0.00
100.00	5.00	2.62	0.00
105.00	5.00	2.62	0.00
110.00	5.00	2.62	0.00
115.00	5.00	2.62	0.00
120.00	5.00	2.62	0.00
125.00	5.00	2.62	0.00
130.00	5.00	2.62	0.00
135.00	5.00	2.62	0.00
140.00	5.00	2.62	0.00
145.00	5.00	2.62	0.00
150.00	5.00	2.62	0.00
155.00	5.00	2.62	0.00
160.00	5.00	2.62	0.00
165.00	5.00	2.62	0.00
170.00	5.00	2.62	0.00
175.00	5.00	2.62	0.00
180.00	5.00	2.62	0.00
185.00	5.00	2.62	0.00
190.00	5.00	2.62	0.00
195.00	5.00	2.62	0.00
200.00	5.00	2.62	0.00
205.00	5.00	2.62	0.00
210.00	5.00	2.62	0.00
215.00	5.00	2.62	0.00
220.00	5.00	2.62	0.00
225.00	5.00	2.62	0.00
230.00	5.00	2.62	0.00
235.00	5.00	2.62	0.00
240.00	5.00	2.62	0.00
245.00	5.00	2.62	0.00
250.00	5.00	2.62	0.00
255.00	5.00	2.62	0.00
260.00	5.00	2.62	0.00
265.00	5.00	2.62	0.00
270.00	5.00	2.62	0.00
275.00	5.00	2.62	0.00
280.00	5.00	2.62	0.00
285.00	5.00	2.62	0.00
290.00	5.00	2.62	0.00
295.00	5.00	2.62	0.00
300.00	5.00	2.62	0.00
305.00	5.00	2.62	0.00
310.00	5.00	2.62	0.00
315.00	5.00	2.62	0.00
320.00	5.00	2.62	0.00
325.00	5.00	2.62	0.00
330.00	5.00	2.62	0.00
335.00	5.00	2.62	0.00
340.00	5.00	2.62	0.00
345.00	5.00	2.62	0.00
350.00	5.00	2.62	0.00
355.00	5.00	2.62	0.00
360.00	5.00	2.62	0.00
365.00	5.00	2.62	0.00
370.00	5.00	2.62	0.00
375.00	5.00	2.62	0.00
380.00	5.00	2.62	0.00
385.00	5.00	2.62	0.00
390.00	5.00	2.62	0.00
395.00	5.00	2.62	0.00
400.00	5.00	2.62	0.00
405.00	5.00	2.62	0.00
410.00	5.00	2.62	0.00
415.00	5.00	2.62	0.00
420.00	5.00	2.62	0.00
425.00	5.00	2.62	0.00
430.00	5.00	2.62	0.00
435.00	5.00	2.62	0.00
440.00	5.00	2.62	0.00
445.00	5.00	2.62	0.00
450.00	5.00	2.62	0.00
455.00	5.00	2.62	0.00
460.00	5.00	2.62	0.00
465.00	5.00	2.62	0.00
470.00	5.00	2.62	0.00
475.00	5.00	2.62	0.00
480.00	5.00	2.62	0.00
485.00	5.00	2.62	0.00
490.00	5.00	2.62	0.00
495.00	5.00	2.62	0.00
500.00	5.00	2.62	0.00

Summary for Pond POND B-01: POND B-01

Inflow Area = 111.250 ac, 0.00% Impervious, Inflow Depth = 4.42" for Mean Annual 24 Hour Storm event
Inflow = 178.89 cfs @ 12.55 hrs, Volume= 40.973 af
Outflow = 19.08 cfs @ 15.76 hrs, Volume= 40.973 af, Atten= 89%, Lag= 192.2 min
Discarded = 9.59 cfs @ 15.76 hrs, Volume= 34.240 af
Primary = 9.50 cfs @ 15.76 hrs, Volume= 6.733 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 9.33' @ 15.76 hrs Surf.Area= 797,909 sf Storage= 1,165,946 cf

Plug-Flow detention time= 1,054.8 min calculated for 40.969 af (100% of inflow)
Center-of-Mass det. time= 1,054.9 min (1,874.8 - 819.9)

Volume	Invert	Avail.Storage	Storage Description
#1	6.60'	2,904,364 cf	**Custom Stage Data (Conic)** Listed below (Recalc)
#2	5.60'	76,959 cf	**1.0' Drainage Medium (Conic)** Listed below (Recalc) 384,796 cf Overall x 20.0% Voids
		2,981,323 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
6.60	384,796	0	0	384,796
7.00	388,677	154,694	154,694	388,776
8.00	399,096	393,875	548,569	399,430
9.00	409,615	404,344	952,913	410,188
10.00	420,234	414,913	1,367,826	421,049
11.00	430,954	425,583	1,793,409	432,016
12.00	441,775	436,353	2,229,762	443,087
13.00	452,696	447,224	2,676,987	454,263
13.50	456,817	227,377	2,904,364	458,554

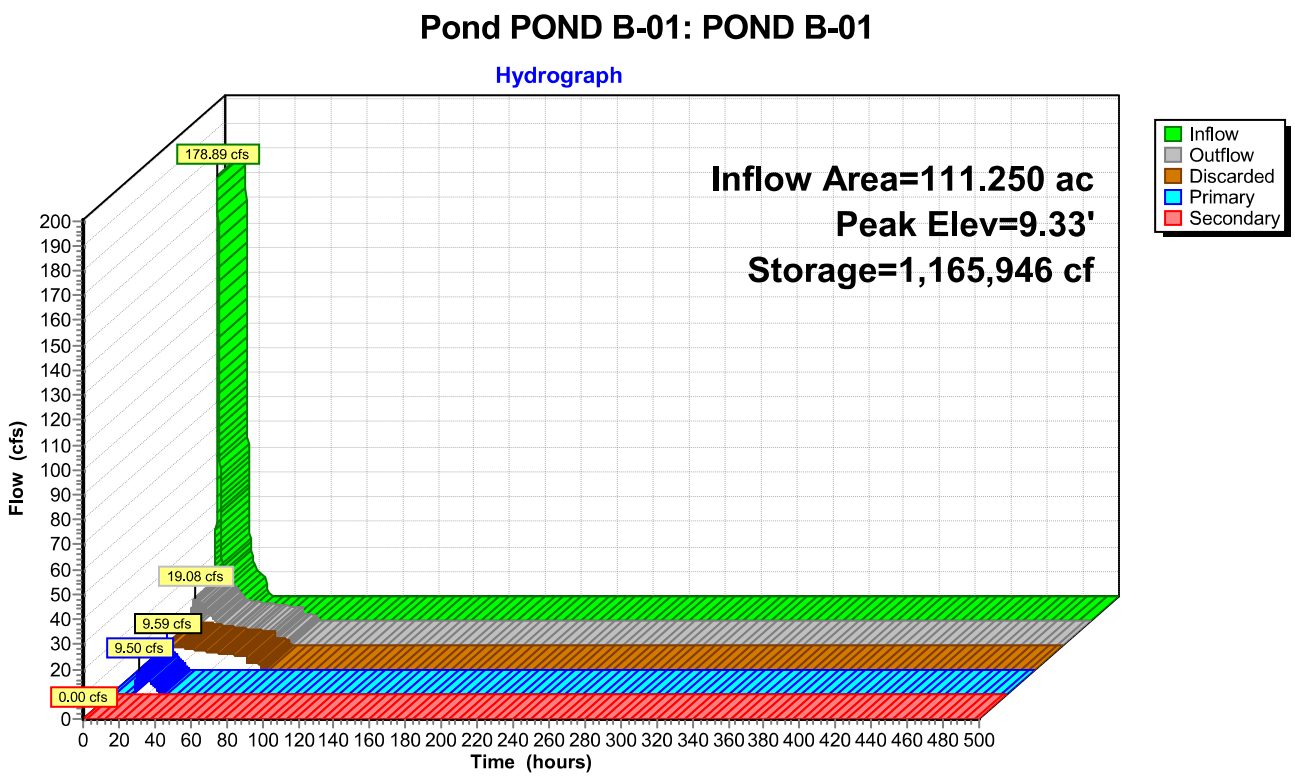
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
5.60	384,796	0	0	384,796
6.60	384,796	384,796	384,796	386,995

Device	Routing	Invert	Outlet Devices
#1	Discarded	5.60'	**0.250 in/hr Exfiltration over Wetted area** Conductivity to Groundwater Elevation = 3.02'
#2	Primary	6.60'	**30.0" Round Culvert - EXISTING** L= 163.1' RCP, groove end projecting, Ke= 0.200 Inlet / Outlet Invert= 6.60' / 2.85' S= 0.0230 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 4.91 sf
#3	Device 2	8.50'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 2	11.50'	**60.0" x 60.0" Horiz. Concrete Box Riser Structure with Grate** C= 0.600 Limited to weir flow at low heads
#5	Secondary	12.50'	**30.0' long + 10.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

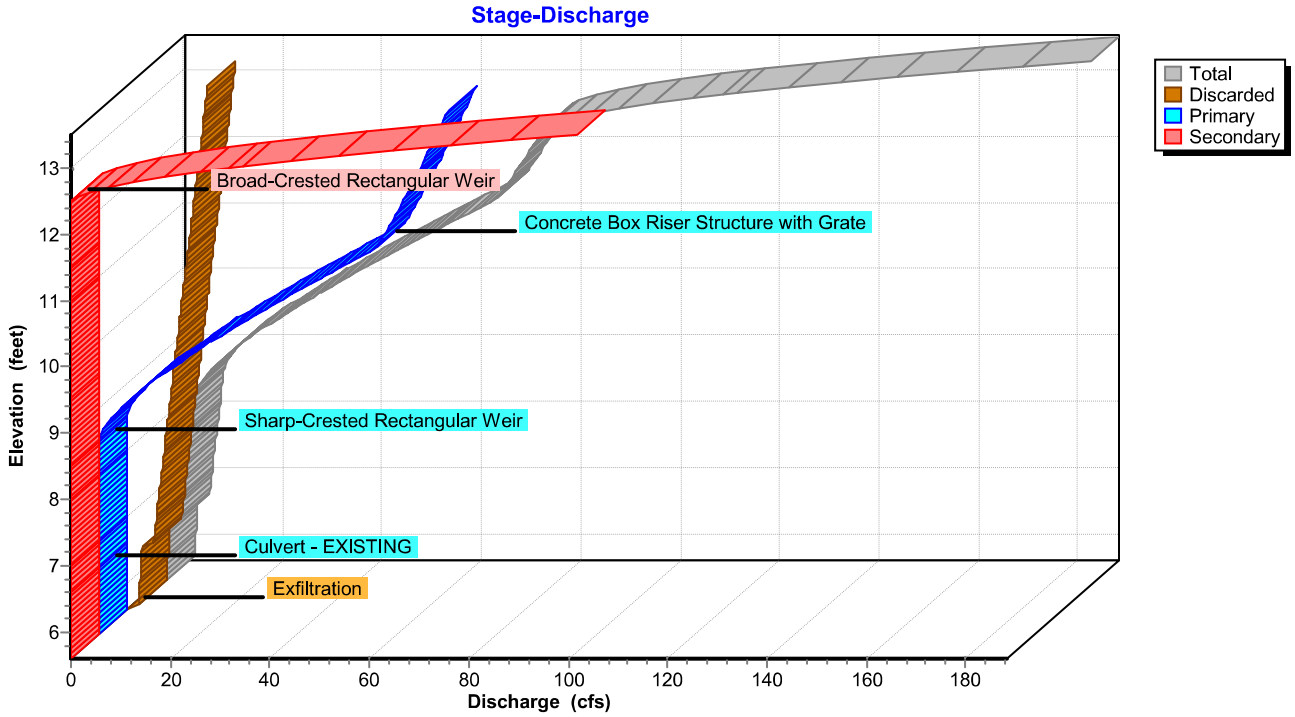
Discarded OutFlow Max=9.59 cfs @ 15.76 hrs HW=9.33' (Free Discharge)
└**1=Exfiltration** (Controls 9.59 cfs)

Primary OutFlow Max=9.49 cfs @ 15.76 hrs HW=9.33' TW=1.08' (Fixed TW Elev= 1.08')
└**2=Culvert - EXISTING** (Passes 9.49 cfs of 35.95 cfs potential flow)
  └**3=Sharp-Crested Rectangular Weir** (Weir Controls 9.49 cfs @ 2.98 fps)
  └**4=Concrete Box Riser Structure with Grate** (Controls 0.00 cfs)

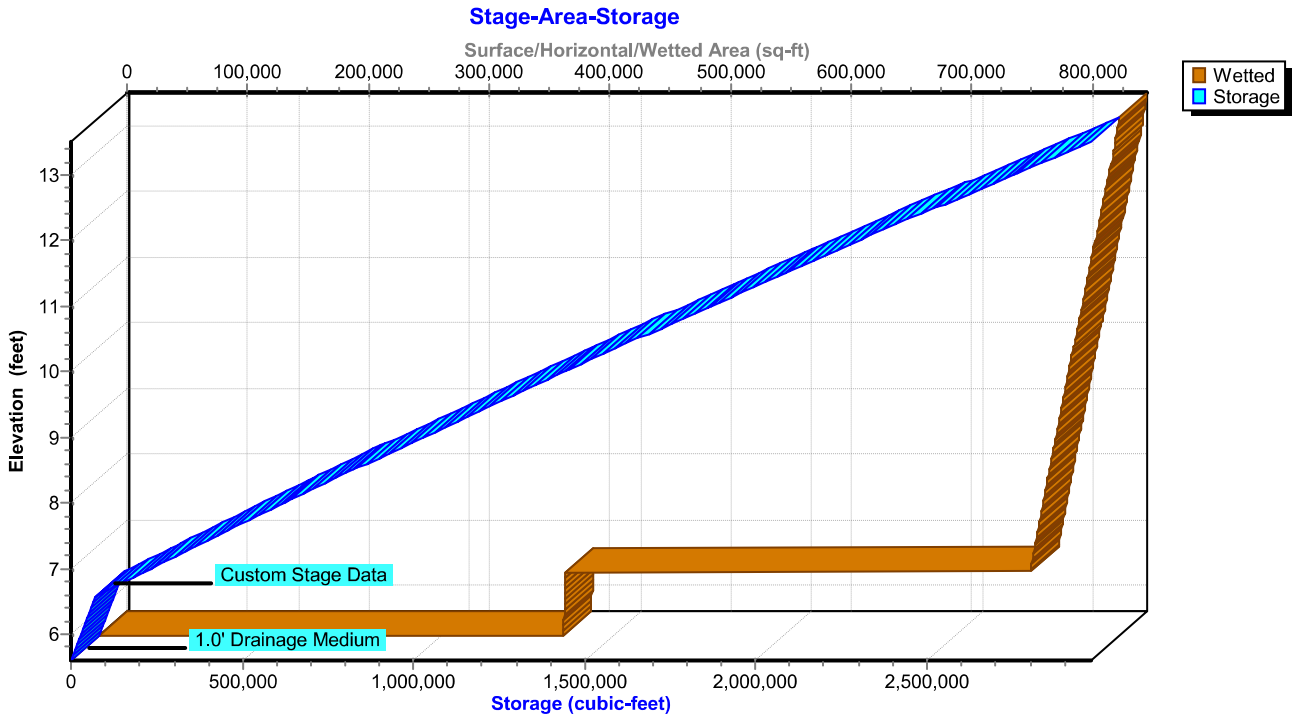
Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=5.60' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)



Pond POND B-01: POND B-01



Pond POND B-01: POND B-01



Hydrograph for Pond POND B-01: POND B-01

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Discarded (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	5.60	0.00	0.00	0.00	**0.00**
10.00	**15.14**	**101,430**	**6.66**	**5.41**	**5.41**	**0.00**	0.00
20.00	**9.79**	**1,092,352**	**9.15**	**15.97**	**9.30**	**6.67**	0.00
30.00	0.00	807,751	8.45	8.20	8.20	0.00	0.00
40.00	0.00	532,258	7.77	7.12	7.12	0.00	0.00
50.00	0.00	293,184	7.16	6.18	6.18	0.00	0.00
60.00	0.00	86,005	6.62	5.35	5.35	0.00	0.00
70.00	0.00	277	5.60	0.10	0.10	0.00	0.00
80.00	0.00	0	5.60	0.00	0.00	0.00	0.00
90.00	0.00	0	5.60	0.00	0.00	0.00	0.00
100.00	0.00	0	5.60	0.00	0.00	0.00	0.00
110.00	0.00	0	5.60	0.00	0.00	0.00	0.00
120.00	0.00	0	5.60	0.00	0.00	0.00	0.00
130.00	0.00	0	5.60	0.00	0.00	0.00	0.00
140.00	0.00	0	5.60	0.00	0.00	0.00	0.00
150.00	0.00	0	5.60	0.00	0.00	0.00	0.00
160.00	0.00	0	5.60	0.00	0.00	0.00	0.00
170.00	0.00	0	5.60	0.00	0.00	0.00	0.00
180.00	0.00	0	5.60	0.00	0.00	0.00	0.00
190.00	0.00	0	5.60	0.00	0.00	0.00	0.00
200.00	0.00	0	5.60	0.00	0.00	0.00	0.00
210.00	0.00	0	5.60	0.00	0.00	0.00	0.00
220.00	0.00	0	5.60	0.00	0.00	0.00	0.00
230.00	0.00	0	5.60	0.00	0.00	0.00	0.00
240.00	0.00	0	5.60	0.00	0.00	0.00	0.00
250.00	0.00	0	5.60	0.00	0.00	0.00	0.00
260.00	0.00	0	5.60	0.00	0.00	0.00	0.00
270.00	0.00	0	5.60	0.00	0.00	0.00	0.00
280.00	0.00	0	5.60	0.00	0.00	0.00	0.00
290.00	0.00	0	5.60	0.00	0.00	0.00	0.00
300.00	0.00	0	5.60	0.00	0.00	0.00	0.00
310.00	0.00	0	5.60	0.00	0.00	0.00	0.00
320.00	0.00	0	5.60	0.00	0.00	0.00	0.00
330.00	0.00	0	5.60	0.00	0.00	0.00	0.00
340.00	0.00	0	5.60	0.00	0.00	0.00	0.00
350.00	0.00	0	5.60	0.00	0.00	0.00	0.00
360.00	0.00	0	5.60	0.00	0.00	0.00	0.00
370.00	0.00	0	5.60	0.00	0.00	0.00	0.00
380.00	0.00	0	5.60	0.00	0.00	0.00	0.00
390.00	0.00	0	5.60	0.00	0.00	0.00	0.00
400.00	0.00	0	5.60	0.00	0.00	0.00	0.00
410.00	0.00	0	5.60	0.00	0.00	0.00	0.00
420.00	0.00	0	5.60	0.00	0.00	0.00	0.00
430.00	0.00	0	5.60	0.00	0.00	0.00	0.00
440.00	0.00	0	5.60	0.00	0.00	0.00	0.00
450.00	0.00	0	5.60	0.00	0.00	0.00	0.00
460.00	0.00	0	5.60	0.00	0.00	0.00	0.00
470.00	0.00	0	5.60	0.00	0.00	0.00	0.00
480.00	0.00	0	5.60	0.00	0.00	0.00	0.00
490.00	0.00	0	5.60	0.00	0.00	0.00	0.00
500.00	0.00	0	5.60	0.00	0.00	0.00	0.00

Stage-Discharge for Pond POND B-01: POND B-01

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Secondary (cfs)
5.60	0.00	0.00	0.00	0.00
5.80	2.40	2.40	0.00	0.00
6.00	2.58	2.58	0.00	0.00
6.20	2.75	2.75	0.00	0.00
6.40	2.93	2.93	0.00	0.00
6.60	5.33	5.33	0.00	0.00
6.80	5.62	5.62	0.00	0.00
7.00	5.93	5.93	0.00	0.00
7.20	6.24	6.24	0.00	0.00
7.40	6.55	6.55	0.00	0.00
7.60	6.87	6.87	0.00	0.00
7.80	7.18	7.18	0.00	0.00
8.00	7.49	7.49	0.00	0.00
8.20	7.80	7.80	0.00	0.00
8.40	8.12	8.12	0.00	0.00
8.60	8.84	8.43	0.41	0.00
8.80	10.87	8.75	2.12	0.00
9.00	13.57	9.06	4.51	0.00
9.20	16.77	9.38	7.39	0.00
9.40	20.36	9.70	10.67	0.00
9.60	24.27	10.01	14.26	0.00
9.80	28.46	10.33	18.13	0.00
10.00	32.87	10.65	22.23	0.00
10.20	37.49	10.96	26.53	0.00
10.40	42.28	11.28	31.00	0.00
10.60	47.23	11.60	35.63	0.00
10.80	52.30	11.92	40.38	0.00
11.00	57.48	12.24	45.24	0.00
11.20	62.75	12.56	50.20	0.00
11.40	68.11	12.88	55.23	0.00
11.60	70.41	13.20	57.21	0.00
11.80	72.24	13.52	58.72	0.00
12.00	74.03	13.84	60.19	0.00
12.20	75.78	14.16	61.62	0.00
12.40	77.50	14.48	63.02	0.00
12.60	81.62	14.81	64.39	2.43
12.80	94.30	15.13	65.73	13.44
13.00	114.11	15.45	67.05	31.61
13.20	140.30	15.77	68.34	56.19
13.40	**170.97**	**16.09**	**69.60**	**85.28**

Stage-Area-Storage for Pond POND B-01: POND B-01

Elevation (feet)	Wetted (sq-ft)	Storage (cubic-feet)
5.60	384,796	0
5.70	385,016	7,696
5.80	385,236	15,392
5.90	385,456	23,088
6.00	385,676	30,784
6.10	385,895	38,480
6.20	386,115	46,176
6.30	386,335	53,871
6.40	386,555	61,567
6.50	386,775	69,263
6.60	771,791	76,959
6.70	772,784	115,487
6.80	773,778	154,112
6.90	774,774	192,834
7.00	775,771	231,653
7.10	776,830	270,573
7.20	777,890	309,596
7.30	778,952	348,723
7.40	780,016	387,953
7.50	781,080	427,288
7.60	782,146	466,727
7.70	783,214	506,271
7.80	784,283	545,919
7.90	785,353	585,671
8.00	786,425	625,528
8.10	787,494	665,490
8.20	788,565	705,557
8.30	789,637	745,728
8.40	790,711	786,004
8.50	791,786	826,385
8.60	792,863	866,872
8.70	793,941	907,464
8.80	795,020	948,161
8.90	796,100	988,964
9.00	797,183	1,029,872
9.10	798,262	1,070,887
9.20	799,344	1,112,006
9.30	800,426	1,153,232
9.40	801,511	1,194,564
9.50	802,596	1,236,001
9.60	803,683	1,277,545
9.70	804,771	1,319,196
9.80	805,861	1,360,952
9.90	806,952	1,402,815
10.00	808,044	1,444,785
10.10	809,135	1,486,862
10.20	810,227	1,529,045
10.30	811,320	1,571,336
10.40	812,414	1,613,733
10.50	813,510	1,656,237
10.60	814,608	1,698,848
10.70	815,706	1,741,567
10.80	816,807	1,784,393
10.90	817,908	1,827,327
11.00	819,011	1,870,368
11.10	820,112	1,913,517
11.20	821,214	1,956,774
11.30	822,318	2,000,139
11.40	823,423	2,043,612
11.50	824,529	2,087,192
11.60	825,637	2,130,881
11.70	826,747	2,174,678
11.80	827,857	2,218,584
11.90	828,969	2,262,598
12.00	830,082	2,306,722
12.10	831,194	2,350,953
12.20	832,307	2,395,294
12.30	833,421	2,439,743
12.40	834,536	2,484,301
12.50	835,653	2,528,969
12.60	836,771	2,573,745
12.70	837,891	2,618,631
12.80	839,012	2,663,626
12.90	840,134	2,708,731
13.00	841,258	2,753,946
13.10	842,114	2,799,257
13.20	842,972	2,844,650
13.30	843,830	2,890,125
13.40	844,689	2,935,683
13.50	**845,549**	**2,981,323**

Summary for Pond POND B-02: POND B-02

Inflow Area = 56.440 ac, 0.00% Impervious, Inflow Depth = 4.31" for Mean Annual 24 Hour Storm event
Inflow = 102.34 cfs @ 12.43 hrs, Volume= 20.262 af
Outflow = 14.24 cfs @ 14.44 hrs, Volume= 20.262 af, Atten= 86%, Lag= 120.2 min
Discarded = 13.12 cfs @ 14.44 hrs, Volume= 20.086 af
Primary = 1.12 cfs @ 14.44 hrs, Volume= 0.176 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 14.69' @ 14.44 hrs Surf.Area= 324,182 sf Storage= 465,790 cf

Plug-Flow detention time= 385.4 min calculated for 20.260 af (100% of inflow)
Center-of-Mass det. time= 385.4 min (1,197.1 - 811.7)

Volume	Invert	Avail.Storage	Storage Description
#1	12.00'	1,090,434 cf	**Custom Stage Data (Conic)** Listed below (Recalc)
#2	11.00'	29,249 cf	**1' Drainage Medium (Conic)** Listed below (Recalc) 146,245 cf Overall x 20.0% Voids
		1,119,683 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
12.00	146,245	0	0	146,245
13.00	157,934	152,052	152,052	158,015
14.00	169,723	163,793	315,845	169,891
15.00	181,613	175,634	491,480	181,874
16.00	193,603	187,576	679,056	193,962
17.00	205,694	199,618	878,674	206,156
18.00	217,886	211,761	1,090,434	218,457

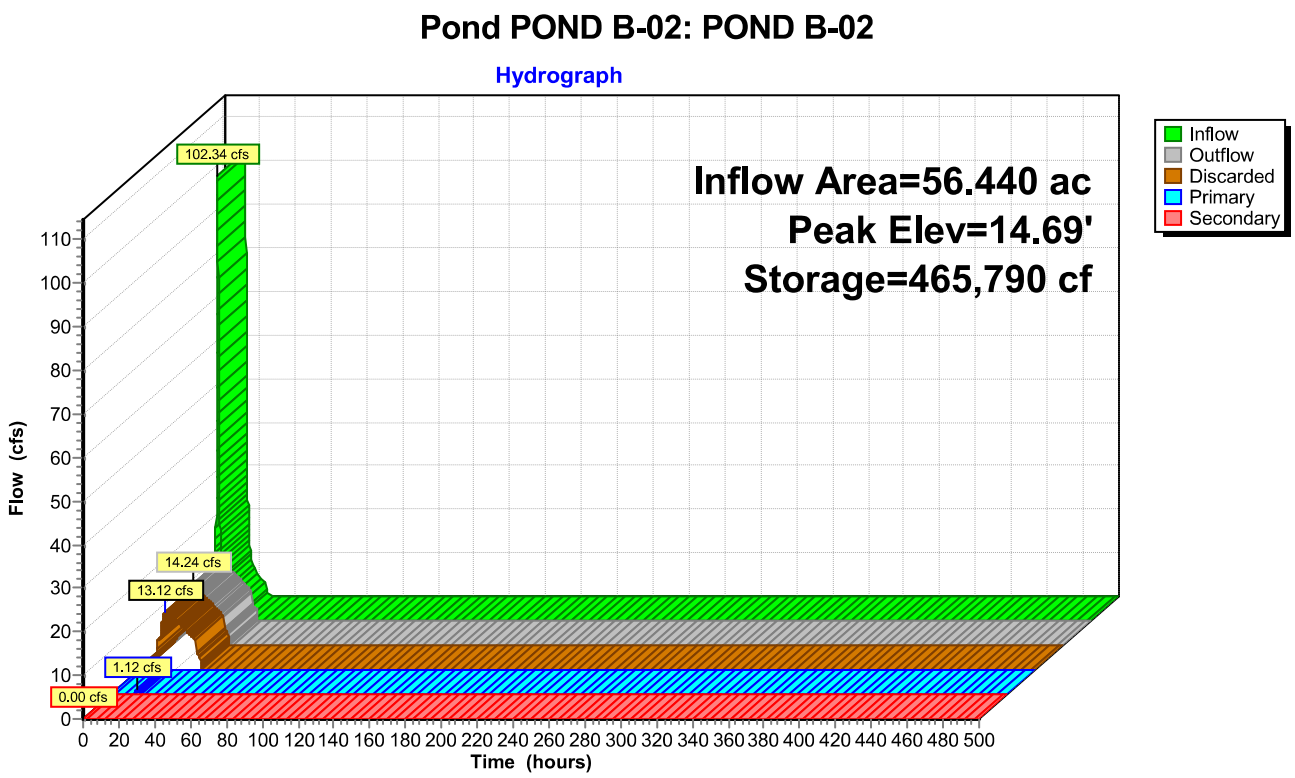
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
11.00	146,245	0	0	146,245
12.00	146,245	146,245	146,245	147,601

Device	Routing	Invert	Outlet Devices
#1	Discarded	11.00'	**0.800 in/hr Exfiltration over Wetted area** Conductivity to Groundwater Elevation = 8.84'
#2	Primary	12.00'	**36.0" Round Culvert** L= 144.8' RCP, groove end projecting, Ke= 0.200 Inlet / Outlet Invert= 12.00' / 4.22' S= 0.0537 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 7.07 sf
#3	Device 2	14.50'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 2	16.00'	**60.0" x 60.0" Horiz. Concrete Box Riser Structure with Grate** C= 0.600 Limited to weir flow at low heads
#5	Secondary	17.00'	**40.0' long + 10.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

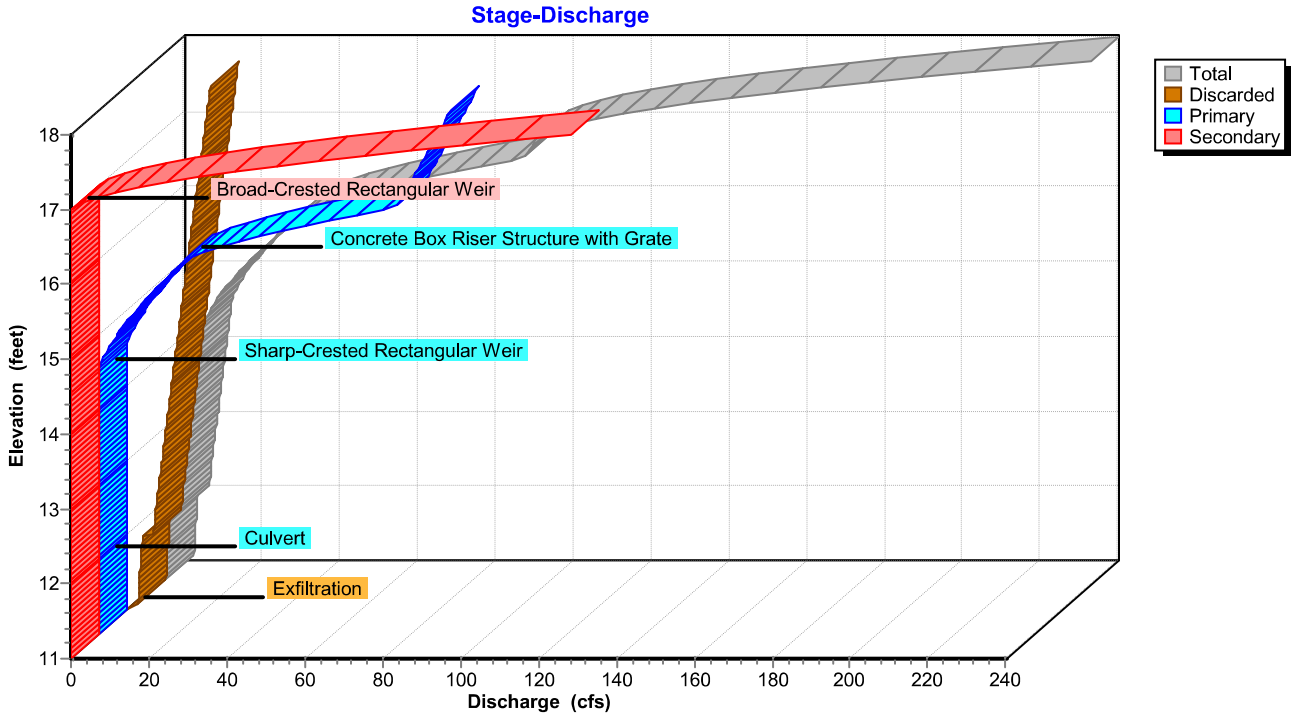
Discarded OutFlow Max=13.12 cfs @ 14.44 hrs HW=14.69' (Free Discharge)
└**1=Exfiltration** (Controls 13.12 cfs)

Primary OutFlow Max=1.11 cfs @ 14.44 hrs HW=14.69' TW=1.08' (Fixed TW Elev= 1.08')
└**2=Culvert** (Passes 1.11 cfs of 46.74 cfs potential flow)
  └**3=Sharp-Crested Rectangular Weir** (Weir Controls 1.11 cfs @ 1.44 fps)
  └**4=Concrete Box Riser Structure with Grate** (Controls 0.00 cfs)

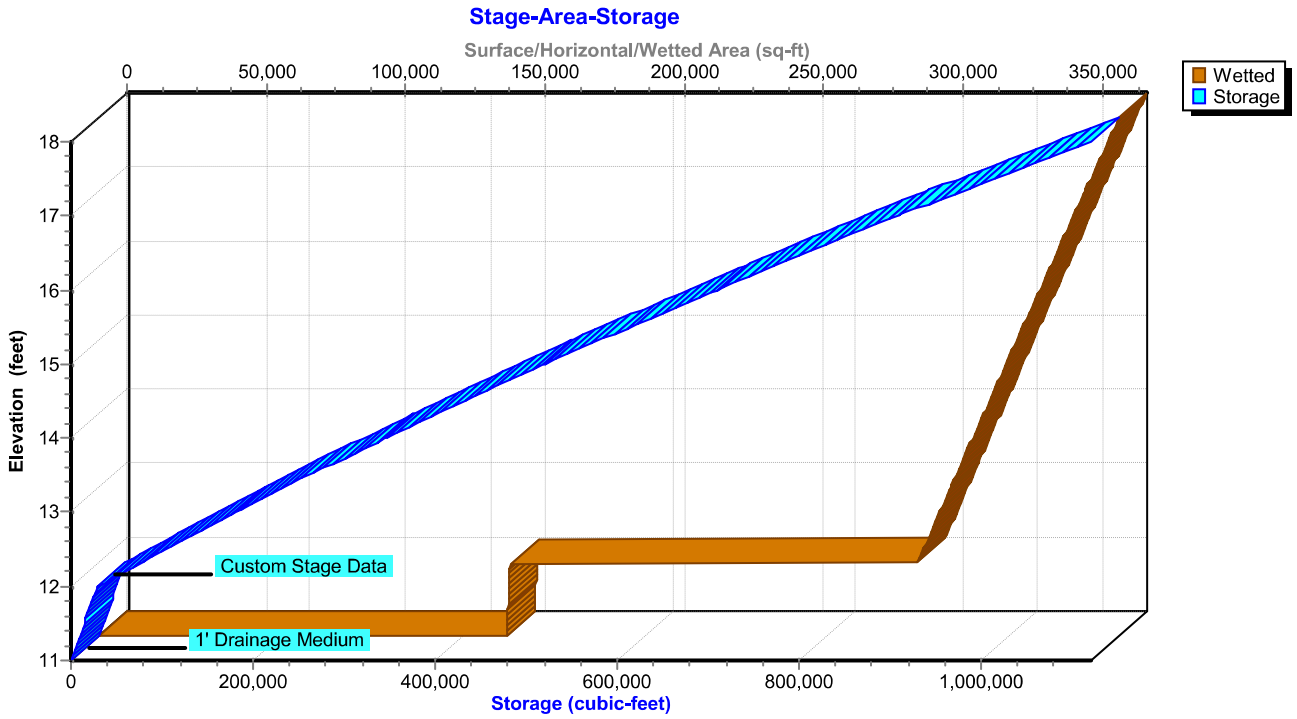
Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=11.00' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)



Pond POND B-02: POND B-02



Pond POND B-02: POND B-02



Hydrograph for Pond POND B-02: POND B-02

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Discarded (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	11.00	0.00	0.00	0.00	**0.00**
10.00	**7.70**	**23,896**	**11.82**	**3.76**	**3.76**	**0.00**	0.00
20.00	**4.86**	**358,397**	**14.08**	**11.61**	**11.61**	**0.00**	0.00
30.00	0.00	76,206	12.32	7.40	7.40	0.00	0.00
40.00	0.00	0	11.00	0.00	0.00	0.00	0.00
50.00	0.00	0	11.00	0.00	0.00	0.00	0.00
60.00	0.00	0	11.00	0.00	0.00	0.00	0.00
70.00	0.00	0	11.00	0.00	0.00	0.00	0.00
80.00	0.00	0	11.00	0.00	0.00	0.00	0.00
90.00	0.00	0	11.00	0.00	0.00	0.00	0.00
100.00	0.00	0	11.00	0.00	0.00	0.00	0.00
110.00	0.00	0	11.00	0.00	0.00	0.00	0.00
120.00	0.00	0	11.00	0.00	0.00	0.00	0.00
130.00	0.00	0	11.00	0.00	0.00	0.00	0.00
140.00	0.00	0	11.00	0.00	0.00	0.00	0.00
150.00	0.00	0	11.00	0.00	0.00	0.00	0.00
160.00	0.00	0	11.00	0.00	0.00	0.00	0.00
170.00	0.00	0	11.00	0.00	0.00	0.00	0.00
180.00	0.00	0	11.00	0.00	0.00	0.00	0.00
190.00	0.00	0	11.00	0.00	0.00	0.00	0.00
200.00	0.00	0	11.00	0.00	0.00	0.00	0.00
210.00	0.00	0	11.00	0.00	0.00	0.00	0.00
220.00	0.00	0	11.00	0.00	0.00	0.00	0.00
230.00	0.00	0	11.00	0.00	0.00	0.00	0.00
240.00	0.00	0	11.00	0.00	0.00	0.00	0.00
250.00	0.00	0	11.00	0.00	0.00	0.00	0.00
260.00	0.00	0	11.00	0.00	0.00	0.00	0.00
270.00	0.00	0	11.00	0.00	0.00	0.00	0.00
280.00	0.00	0	11.00	0.00	0.00	0.00	0.00
290.00	0.00	0	11.00	0.00	0.00	0.00	0.00
300.00	0.00	0	11.00	0.00	0.00	0.00	0.00
310.00	0.00	0	11.00	0.00	0.00	0.00	0.00
320.00	0.00	0	11.00	0.00	0.00	0.00	0.00
330.00	0.00	0	11.00	0.00	0.00	0.00	0.00
340.00	0.00	0	11.00	0.00	0.00	0.00	0.00
350.00	0.00	0	11.00	0.00	0.00	0.00	0.00
360.00	0.00	0	11.00	0.00	0.00	0.00	0.00
370.00	0.00	0	11.00	0.00	0.00	0.00	0.00
380.00	0.00	0	11.00	0.00	0.00	0.00	0.00
390.00	0.00	0	11.00	0.00	0.00	0.00	0.00
400.00	0.00	0	11.00	0.00	0.00	0.00	0.00
410.00	0.00	0	11.00	0.00	0.00	0.00	0.00
420.00	0.00	0	11.00	0.00	0.00	0.00	0.00
430.00	0.00	0	11.00	0.00	0.00	0.00	0.00
440.00	0.00	0	11.00	0.00	0.00	0.00	0.00
450.00	0.00	0	11.00	0.00	0.00	0.00	0.00
460.00	0.00	0	11.00	0.00	0.00	0.00	0.00
470.00	0.00	0	11.00	0.00	0.00	0.00	0.00
480.00	0.00	0	11.00	0.00	0.00	0.00	0.00
490.00	0.00	0	11.00	0.00	0.00	0.00	0.00
500.00	0.00	0	11.00	0.00	0.00	0.00	0.00

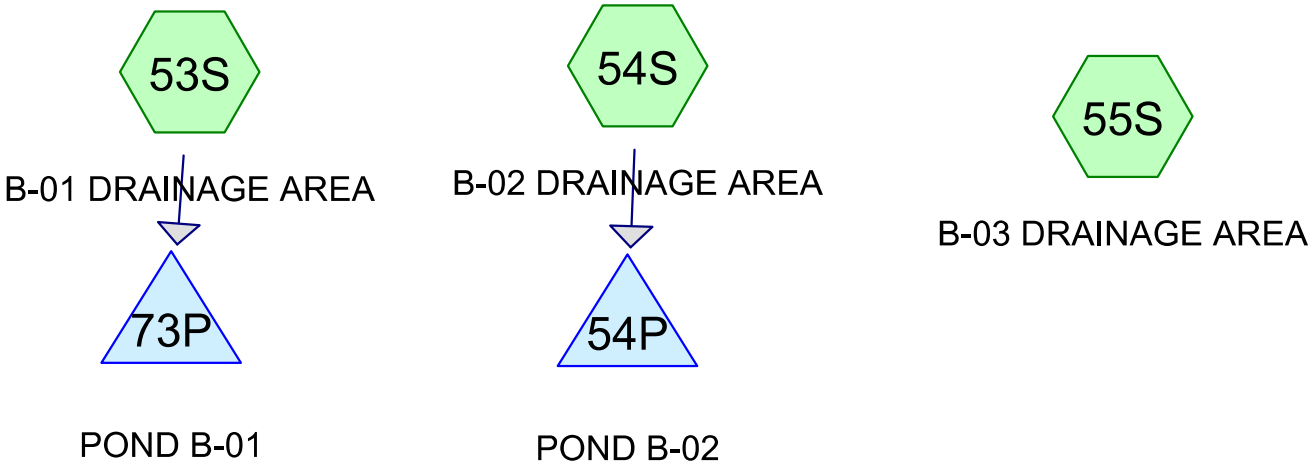
Stage-Discharge for Pond POND B-02: POND B-02

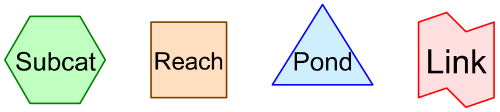
Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Secondary (cfs)
11.00	0.00	0.00	0.00	0.00
11.20	2.96	2.96	0.00	0.00
11.40	3.22	3.22	0.00	0.00
11.60	3.48	3.48	0.00	0.00
11.80	3.73	3.73	0.00	0.00
12.00	6.70	6.70	0.00	0.00
12.20	7.12	7.12	0.00	0.00
12.40	7.59	7.59	0.00	0.00
12.60	8.06	8.06	0.00	0.00
12.80	8.54	8.54	0.00	0.00
13.00	9.01	9.01	0.00	0.00
13.20	9.49	9.49	0.00	0.00
13.40	9.97	9.97	0.00	0.00
13.60	10.45	10.45	0.00	0.00
13.80	10.93	10.93	0.00	0.00
14.00	11.42	11.42	0.00	0.00
14.20	11.91	11.91	0.00	0.00
14.40	12.40	12.40	0.00	0.00
14.60	13.30	12.89	0.41	0.00
14.80	15.50	13.38	2.12	0.00
15.00	18.38	13.87	4.51	0.00
15.20	21.76	14.37	7.39	0.00
15.40	25.53	14.87	10.67	0.00
15.60	29.62	15.36	14.26	0.00
15.80	33.99	15.86	18.13	0.00
16.00	38.59	16.37	22.23	0.00
16.20	49.25	16.87	32.38	0.00
16.40	64.92	17.37	47.55	0.00
16.60	83.90	17.88	66.02	0.00
16.80	95.67	18.38	77.28	0.00
17.00	98.48	18.89	79.59	0.00
17.20	110.50	19.40	81.83	9.26
17.40	131.90	19.91	84.02	27.98
17.60	162.78	20.42	86.14	56.22
17.80	198.46	20.93	88.22	89.31
18.00	**240.34**	**21.45**	**90.25**	**128.64**

Stage-Area-Storage for Pond POND B-02: POND B-02

Elevation (feet)	Wetted (sq-ft)	Storage (cubic-feet)
11.00	146,245	0
11.10	146,381	2,925
11.20	146,516	5,850
11.30	146,652	8,775
11.40	146,787	11,700
11.50	146,923	14,625
11.60	147,058	17,549
11.70	147,194	20,474
11.80	147,330	23,399
11.90	147,465	26,324
12.00	293,846	29,249
12.10	295,002	43,931
12.20	296,164	58,728
12.30	297,329	73,640
12.40	298,500	88,669
12.50	299,674	103,814
12.60	300,854	119,076
12.70	302,037	134,455
12.80	303,226	149,952
12.90	304,419	165,567
13.00	305,616	181,301
13.10	306,784	197,152
13.20	307,957	213,120
13.30	309,134	229,204
13.40	310,315	245,405
13.50	311,501	261,724
13.60	312,690	278,161
13.70	313,884	294,715
13.80	315,083	311,389
13.90	316,285	328,182
14.00	317,492	345,094
14.10	318,672	362,125
14.20	319,856	379,273
14.30	321,044	396,539
14.40	322,236	413,923
14.50	323,433	431,425
14.60	324,633	449,046
14.70	325,837	466,787
14.80	327,046	484,647
14.90	328,258	502,628
15.00	329,474	520,729
15.10	330,666	538,949
15.20	331,861	557,288
15.30	333,060	575,745
15.40	334,263	594,322
15.50	335,470	613,018
15.60	336,681	631,834
15.70	337,895	650,770
15.80	339,114	669,827
15.90	340,336	689,005
16.00	341,562	708,305
16.10	342,765	727,725
16.20	343,972	747,264
16.30	345,182	766,923
16.40	346,396	786,702
16.50	347,613	806,602
16.60	348,835	826,623
16.70	350,060	846,765
16.80	351,288	867,029
16.90	352,521	887,415
17.00	353,757	907,923
17.10	354,971	928,552
17.20	356,188	949,302
17.30	357,410	970,173
17.40	358,634	991,165
17.50	359,863	1,012,279
17.60	361,095	1,033,515
17.70	362,330	1,054,873
17.80	363,569	1,076,353
17.90	364,811	1,097,957
18.00	**366,057**	**1,119,683**

POST-DEVELOPMENT
- WITH PONDS - 100
YR TAILWATER = 6'





Routing Diagram for JEA SJRPP
Prepared by Black & Veatch, Printed 4/15/2026
HydroCAD® 10.20-5c s/n 02393 © 2023 HydroCAD Software Solutions LLC

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	100-YR, 24-HR	Type II FL 24-hr		Default	24.00	1	12.30	2

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
111.250	95	(53S)
56.440	94	(54S)
28.040	77	(55S)
195.730	**92**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
195.730	Other	53S, 54S, 55S
195.730		**TOTAL AREA**

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.000	195.730	195.730		53S, 54S, 55S
0.000	**0.000**	**0.000**	**0.000**	**195.730**	**195.730**	**TOTAL AREA**	

Pipe Listing (selected nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
1	54P	12.00	4.22	144.8	0.0537	0.011	0.0	36.0	0.0	
2	73P	6.60	2.85	163.1	0.0230	0.011	0.0	30.0	0.0	

Time span=0.00-500.00 hrs, dt=0.05 hrs, 10001 points
Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

Subcatchment 53S: B-01 DRAINAGE Runoff Area=111.250 ac 0.00% Impervious Runoff Depth=11.69"
Tc=28.0 min CN=95 Runoff=454.97 cfs 108.378 af

Subcatchment 54S: B-02 DRAINAGE AREA Runoff Area=56.440 ac 0.00% Impervious Runoff Depth=11.57"
Tc=19.8 min CN=94 Runoff=263.19 cfs 54.398 af

Subcatchment 55S: B-03 DRAINAGE AREA Runoff Area=28.040 ac 0.00% Impervious Runoff Depth=9.32"
Tc=8.0 min CN=77 Runoff=147.21 cfs 21.785 af

Pond 54P: POND B-02 Peak Elev=17.40' Storage=990,779 cf Inflow=263.19 cfs 54.398 af
Discarded=19.91 cfs 31.083 af Primary=84.00 cfs 21.794 af Secondary=27.96 cfs 1.521 af Outflow=131.86 cfs 54.398 af

Pond 73P: POND B-01 Peak Elev=13.01' Storage=2,757,484 cf Inflow=454.97 cfs 108.378 af
Discarded=15.46 cfs 45.762 af Primary=67.10 cfs 58.788 af Secondary=32.50 cfs 3.828 af Outflow=115.06 cfs 108.378 af

Total Runoff Area = 195.730 ac Runoff Volume = 184.561 af Average Runoff Depth = 11.32"
100.00% Pervious = 195.730 ac 0.00% Impervious = 0.000 ac

Summary for Subcatchment 53S: B-01 DRAINAGE AREA

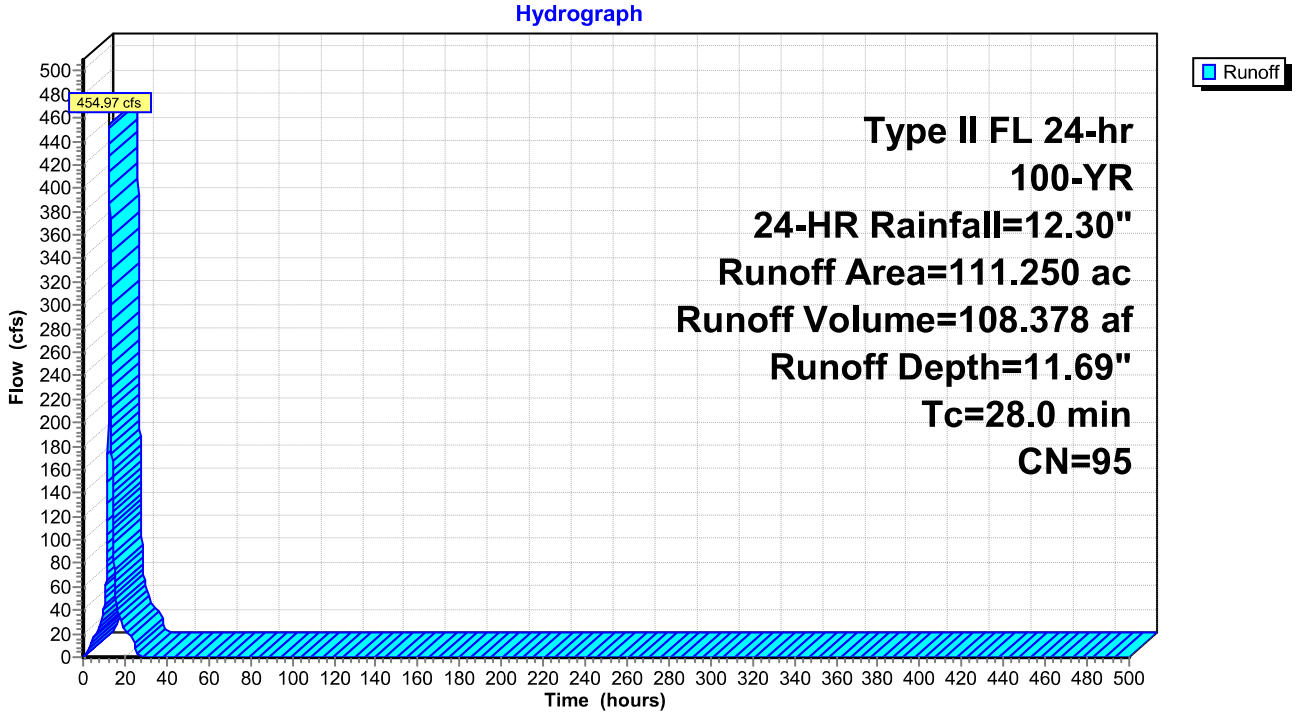
Runoff = 454.97 cfs @ 12.55 hrs, Volume= 108.378 af, Depth=11.69"
Routed to Pond 73P : POND B-01

Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Type II FL 24-hr 100-YR, 24-HR Rainfall=12.30"

	Area (ac)	CN	Description
*	111.250	95	
	111.250		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
28.0					**Direct Entry,**

Subcatchment 53S: B-01 DRAINAGE AREA



Hydrograph for Subcatchment 53S: B-01 DRAINAGE AREA

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
5.00	0.82	0.41	16.41
10.00	2.36	1.82	**43.29**
15.00	10.28	9.68	**65.90**
20.00	**11.64**	**11.03**	24.30
25.00	**12.30**	**11.69**	4.45
30.00	12.30	11.69	0.00
35.00	12.30	11.69	0.00
40.00	12.30	11.69	0.00
45.00	12.30	11.69	0.00
50.00	12.30	11.69	0.00
55.00	12.30	11.69	0.00
60.00	12.30	11.69	0.00
65.00	12.30	11.69	0.00
70.00	12.30	11.69	0.00
75.00	12.30	11.69	0.00
80.00	12.30	11.69	0.00
85.00	12.30	11.69	0.00
90.00	12.30	11.69	0.00
95.00	12.30	11.69	0.00
100.00	12.30	11.69	0.00
105.00	12.30	11.69	0.00
110.00	12.30	11.69	0.00
115.00	12.30	11.69	0.00
120.00	12.30	11.69	0.00
125.00	12.30	11.69	0.00
130.00	12.30	11.69	0.00
135.00	12.30	11.69	0.00
140.00	12.30	11.69	0.00
145.00	12.30	11.69	0.00
150.00	12.30	11.69	0.00
155.00	12.30	11.69	0.00
160.00	12.30	11.69	0.00
165.00	12.30	11.69	0.00
170.00	12.30	11.69	0.00
175.00	12.30	11.69	0.00
180.00	12.30	11.69	0.00
185.00	12.30	11.69	0.00
190.00	12.30	11.69	0.00
195.00	12.30	11.69	0.00
200.00	12.30	11.69	0.00
205.00	12.30	11.69	0.00
210.00	12.30	11.69	0.00
215.00	12.30	11.69	0.00
220.00	12.30	11.69	0.00
225.00	12.30	11.69	0.00
230.00	12.30	11.69	0.00
235.00	12.30	11.69	0.00
240.00	12.30	11.69	0.00
245.00	12.30	11.69	0.00
250.00	12.30	11.69	0.00
255.00	12.30	11.69	0.00
260.00	12.30	11.69	0.00
265.00	12.30	11.69	0.00
270.00	12.30	11.69	0.00
275.00	12.30	11.69	0.00
280.00	12.30	11.69	0.00
285.00	12.30	11.69	0.00
290.00	12.30	11.69	0.00
295.00	12.30	11.69	0.00
300.00	12.30	11.69	0.00
305.00	12.30	11.69	0.00
310.00	12.30	11.69	0.00
315.00	12.30	11.69	0.00
320.00	12.30	11.69	0.00
325.00	12.30	11.69	0.00
330.00	12.30	11.69	0.00
335.00	12.30	11.69	0.00
340.00	12.30	11.69	0.00
345.00	12.30	11.69	0.00
350.00	12.30	11.69	0.00
355.00	12.30	11.69	0.00
360.00	12.30	11.69	0.00
365.00	12.30	11.69	0.00
370.00	12.30	11.69	0.00
375.00	12.30	11.69	0.00
380.00	12.30	11.69	0.00
385.00	12.30	11.69	0.00
390.00	12.30	11.69	0.00
395.00	12.30	11.69	0.00
400.00	12.30	11.69	0.00
405.00	12.30	11.69	0.00
410.00	12.30	11.69	0.00
415.00	12.30	11.69	0.00
420.00	12.30	11.69	0.00
425.00	12.30	11.69	0.00
430.00	12.30	11.69	0.00
435.00	12.30	11.69	0.00
440.00	12.30	11.69	0.00
445.00	12.30	11.69	0.00
450.00	12.30	11.69	0.00
455.00	12.30	11.69	0.00
460.00	12.30	11.69	0.00
465.00	12.30	11.69	0.00
470.00	12.30	11.69	0.00
475.00	12.30	11.69	0.00
480.00	12.30	11.69	0.00
485.00	12.30	11.69	0.00
490.00	12.30	11.69	0.00
495.00	12.30	11.69	0.00
500.00	12.30	11.69	0.00

Summary for Subcatchment 54S: B-02 DRAINAGE AREA

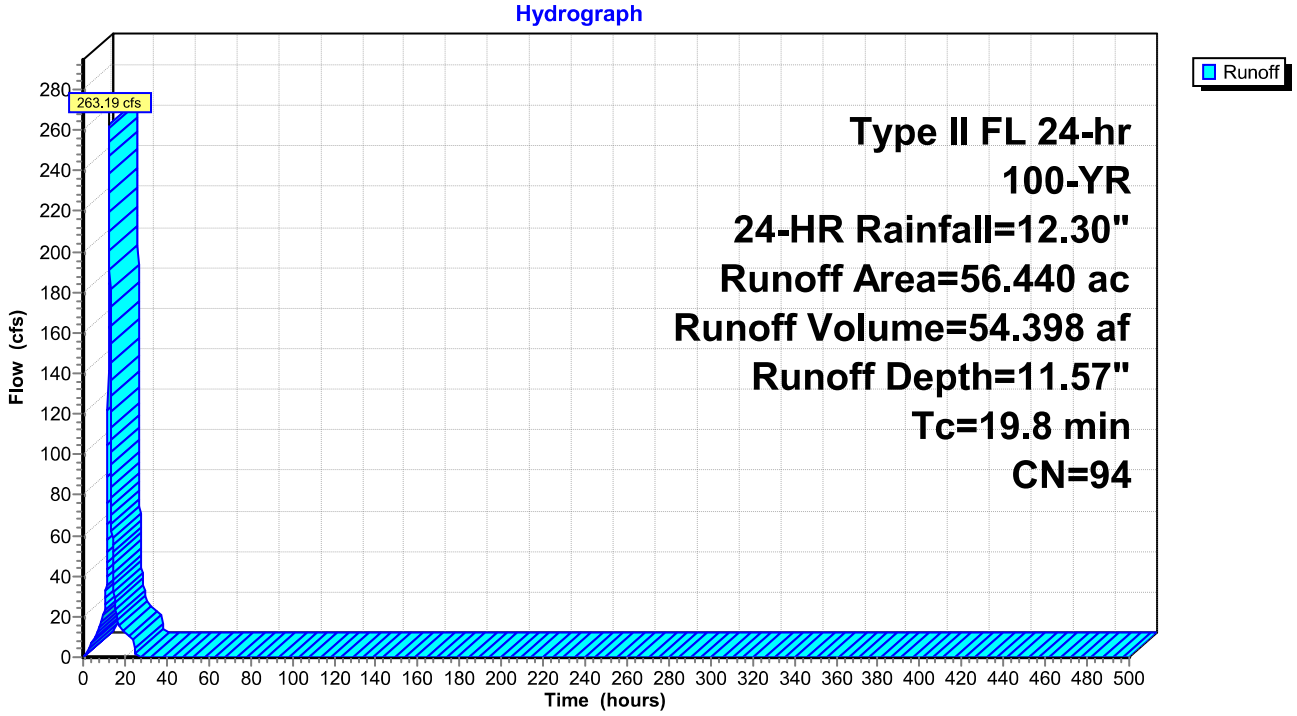
Runoff = 263.19 cfs @ 12.42 hrs, Volume= 54.398 af, Depth=11.57"
Routed to Pond 54P : POND B-02

Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Type II FL 24-hr 100-YR, 24-HR Rainfall=12.30"

	Area (ac)	CN	Description
*	56.440	94	
	56.440		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.8					**Direct Entry,**

Subcatchment 54S: B-02 DRAINAGE AREA



Hydrograph for Subcatchment 54S: B-02 DRAINAGE AREA

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
5.00	0.82	0.36	8.16
10.00	2.36	1.73	**22.77**
15.00	10.28	9.56	**27.55**
20.00	**11.64**	**10.91**	12.11
25.00	**12.30**	**11.57**	1.16
30.00	12.30	11.57	0.00
35.00	12.30	11.57	0.00
40.00	12.30	11.57	0.00
45.00	12.30	11.57	0.00
50.00	12.30	11.57	0.00
55.00	12.30	11.57	0.00
60.00	12.30	11.57	0.00
65.00	12.30	11.57	0.00
70.00	12.30	11.57	0.00
75.00	12.30	11.57	0.00
80.00	12.30	11.57	0.00
85.00	12.30	11.57	0.00
90.00	12.30	11.57	0.00
95.00	12.30	11.57	0.00
100.00	12.30	11.57	0.00
105.00	12.30	11.57	0.00
110.00	12.30	11.57	0.00
115.00	12.30	11.57	0.00
120.00	12.30	11.57	0.00
125.00	12.30	11.57	0.00
130.00	12.30	11.57	0.00
135.00	12.30	11.57	0.00
140.00	12.30	11.57	0.00
145.00	12.30	11.57	0.00
150.00	12.30	11.57	0.00
155.00	12.30	11.57	0.00
160.00	12.30	11.57	0.00
165.00	12.30	11.57	0.00
170.00	12.30	11.57	0.00
175.00	12.30	11.57	0.00
180.00	12.30	11.57	0.00
185.00	12.30	11.57	0.00
190.00	12.30	11.57	0.00
195.00	12.30	11.57	0.00
200.00	12.30	11.57	0.00
205.00	12.30	11.57	0.00
210.00	12.30	11.57	0.00
215.00	12.30	11.57	0.00
220.00	12.30	11.57	0.00
225.00	12.30	11.57	0.00
230.00	12.30	11.57	0.00
235.00	12.30	11.57	0.00
240.00	12.30	11.57	0.00
245.00	12.30	11.57	0.00
250.00	12.30	11.57	0.00
255.00	12.30	11.57	0.00
260.00	12.30	11.57	0.00
265.00	12.30	11.57	0.00
270.00	12.30	11.57	0.00
275.00	12.30	11.57	0.00
280.00	12.30	11.57	0.00
285.00	12.30	11.57	0.00
290.00	12.30	11.57	0.00
295.00	12.30	11.57	0.00
300.00	12.30	11.57	0.00
305.00	12.30	11.57	0.00
310.00	12.30	11.57	0.00
315.00	12.30	11.57	0.00
320.00	12.30	11.57	0.00
325.00	12.30	11.57	0.00
330.00	12.30	11.57	0.00
335.00	12.30	11.57	0.00
340.00	12.30	11.57	0.00
345.00	12.30	11.57	0.00
350.00	12.30	11.57	0.00
355.00	12.30	11.57	0.00
360.00	12.30	11.57	0.00
365.00	12.30	11.57	0.00
370.00	12.30	11.57	0.00
375.00	12.30	11.57	0.00
380.00	12.30	11.57	0.00
385.00	12.30	11.57	0.00
390.00	12.30	11.57	0.00
395.00	12.30	11.57	0.00
400.00	12.30	11.57	0.00
405.00	12.30	11.57	0.00
410.00	12.30	11.57	0.00
415.00	12.30	11.57	0.00
420.00	12.30	11.57	0.00
425.00	12.30	11.57	0.00
430.00	12.30	11.57	0.00
435.00	12.30	11.57	0.00
440.00	12.30	11.57	0.00
445.00	12.30	11.57	0.00
450.00	12.30	11.57	0.00
455.00	12.30	11.57	0.00
460.00	12.30	11.57	0.00
465.00	12.30	11.57	0.00
470.00	12.30	11.57	0.00
475.00	12.30	11.57	0.00
480.00	12.30	11.57	0.00
485.00	12.30	11.57	0.00
490.00	12.30	11.57	0.00
495.00	12.30	11.57	0.00
500.00	12.30	11.57	0.00

Summary for Subcatchment 55S: B-03 DRAINAGE AREA

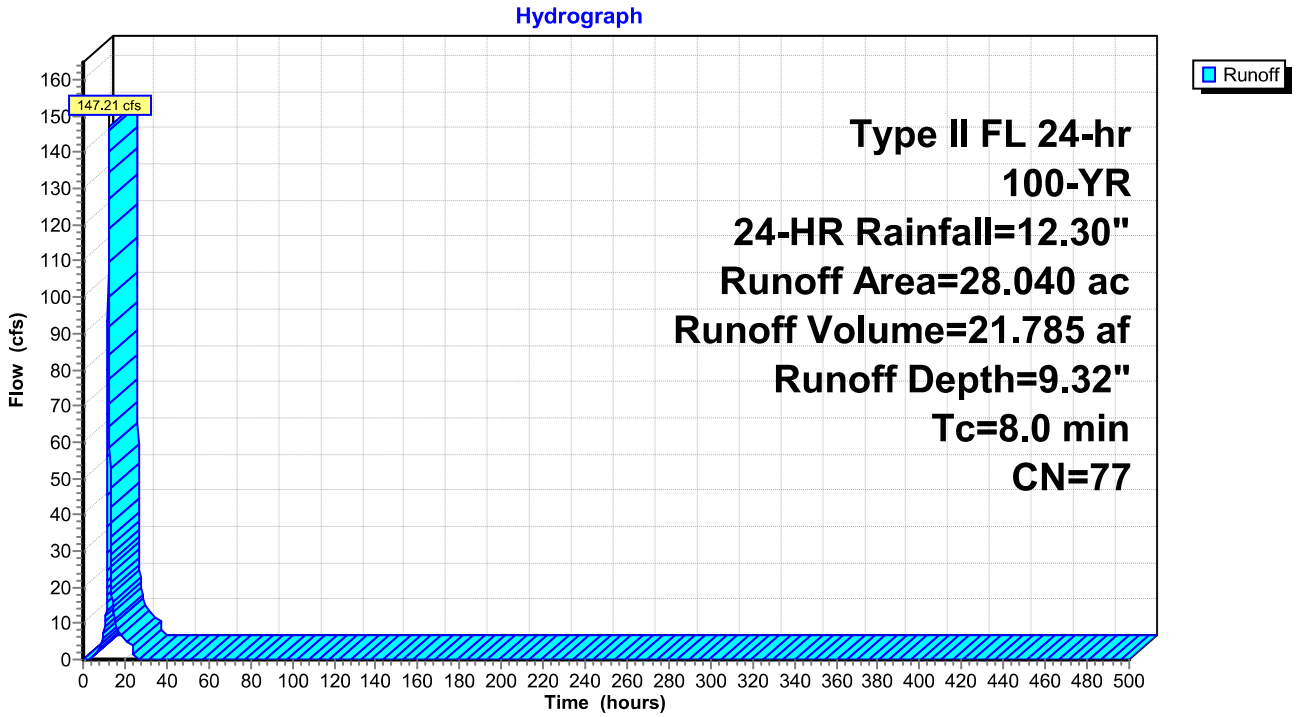
Runoff = 147.21 cfs @ 12.23 hrs, Volume= 21.785 af, Depth= 9.32"

Runoff by SCS TR-20 method, UH=SWFWMD-256, Weighted-CN, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Type II FL 24-hr 100-YR, 24-HR Rainfall=12.30"

	Area (ac)	CN	Description
*	28.040	77	
	28.040		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.0					**Direct Entry,**

Subcatchment 55S: B-03 DRAINAGE AREA



Hydrograph for Subcatchment 55S: B-03 DRAINAGE AREA

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
5.00	0.82	0.02	0.64
10.00	2.36	0.65	**7.62**
15.00	10.28	7.40	**11.42**
20.00	**11.64**	**8.69**	5.61
25.00	**12.30**	**9.32**	0.00
30.00	12.30	9.32	0.00
35.00	12.30	9.32	0.00
40.00	12.30	9.32	0.00
45.00	12.30	9.32	0.00
50.00	12.30	9.32	0.00
55.00	12.30	9.32	0.00
60.00	12.30	9.32	0.00
65.00	12.30	9.32	0.00
70.00	12.30	9.32	0.00
75.00	12.30	9.32	0.00
80.00	12.30	9.32	0.00
85.00	12.30	9.32	0.00
90.00	12.30	9.32	0.00
95.00	12.30	9.32	0.00
100.00	12.30	9.32	0.00
105.00	12.30	9.32	0.00
110.00	12.30	9.32	0.00
115.00	12.30	9.32	0.00
120.00	12.30	9.32	0.00
125.00	12.30	9.32	0.00
130.00	12.30	9.32	0.00
135.00	12.30	9.32	0.00
140.00	12.30	9.32	0.00
145.00	12.30	9.32	0.00
150.00	12.30	9.32	0.00
155.00	12.30	9.32	0.00
160.00	12.30	9.32	0.00
165.00	12.30	9.32	0.00
170.00	12.30	9.32	0.00
175.00	12.30	9.32	0.00
180.00	12.30	9.32	0.00
185.00	12.30	9.32	0.00
190.00	12.30	9.32	0.00
195.00	12.30	9.32	0.00
200.00	12.30	9.32	0.00
205.00	12.30	9.32	0.00
210.00	12.30	9.32	0.00
215.00	12.30	9.32	0.00
220.00	12.30	9.32	0.00
225.00	12.30	9.32	0.00
230.00	12.30	9.32	0.00
235.00	12.30	9.32	0.00
240.00	12.30	9.32	0.00
245.00	12.30	9.32	0.00
250.00	12.30	9.32	0.00
255.00	12.30	9.32	0.00
260.00	12.30	9.32	0.00
265.00	12.30	9.32	0.00
270.00	12.30	9.32	0.00
275.00	12.30	9.32	0.00
280.00	12.30	9.32	0.00
285.00	12.30	9.32	0.00
290.00	12.30	9.32	0.00
295.00	12.30	9.32	0.00
300.00	12.30	9.32	0.00
305.00	12.30	9.32	0.00
310.00	12.30	9.32	0.00
315.00	12.30	9.32	0.00
320.00	12.30	9.32	0.00
325.00	12.30	9.32	0.00
330.00	12.30	9.32	0.00
335.00	12.30	9.32	0.00
340.00	12.30	9.32	0.00
345.00	12.30	9.32	0.00
350.00	12.30	9.32	0.00
355.00	12.30	9.32	0.00
360.00	12.30	9.32	0.00
365.00	12.30	9.32	0.00
370.00	12.30	9.32	0.00
375.00	12.30	9.32	0.00
380.00	12.30	9.32	0.00
385.00	12.30	9.32	0.00
390.00	12.30	9.32	0.00
395.00	12.30	9.32	0.00
400.00	12.30	9.32	0.00
405.00	12.30	9.32	0.00
410.00	12.30	9.32	0.00
415.00	12.30	9.32	0.00
420.00	12.30	9.32	0.00
425.00	12.30	9.32	0.00
430.00	12.30	9.32	0.00
435.00	12.30	9.32	0.00
440.00	12.30	9.32	0.00
445.00	12.30	9.32	0.00
450.00	12.30	9.32	0.00
455.00	12.30	9.32	0.00
460.00	12.30	9.32	0.00
465.00	12.30	9.32	0.00
470.00	12.30	9.32	0.00
475.00	12.30	9.32	0.00
480.00	12.30	9.32	0.00
485.00	12.30	9.32	0.00
490.00	12.30	9.32	0.00
495.00	12.30	9.32	0.00
500.00	12.30	9.32	0.00

Summary for Pond 54P: POND B-02

Inflow Area = 56.440 ac, 0.00% Impervious, Inflow Depth = 11.57" for 100-YR, 24-HR event
Inflow = 263.19 cfs @ 12.42 hrs, Volume= 54.398 af
Outflow = 131.86 cfs @ 13.23 hrs, Volume= 54.398 af, Atten= 50%, Lag= 48.4 min
Discarded = 19.91 cfs @ 13.23 hrs, Volume= 31.083 af
Primary = 84.00 cfs @ 13.23 hrs, Volume= 21.794 af
Secondary = 27.96 cfs @ 13.23 hrs, Volume= 1.521 af

Routing by Stor-Ind method, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 17.40' @ 13.23 hrs Surf.Area= 356,751 sf Storage= 990,779 cf

Plug-Flow detention time= 283.7 min calculated for 54.393 af (100% of inflow)
Center-of-Mass det. time= 283.7 min (1,072.2 - 788.5)

Volume	Invert	Avail.Storage	Storage Description
#1	12.00'	1,090,434 cf	**Custom Stage Data (Conic)** Listed below (Recalc)
#2	11.00'	29,249 cf	**1' Drainage Medium (Conic)** Listed below (Recalc) 146,245 cf Overall x 20.0% Voids
		1,119,683 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
12.00	146,245	0	0	146,245
13.00	157,934	152,052	152,052	158,015
14.00	169,723	163,793	315,845	169,891
15.00	181,613	175,634	491,480	181,874
16.00	193,603	187,576	679,056	193,962
17.00	205,694	199,618	878,674	206,156
18.00	217,886	211,761	1,090,434	218,457

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
11.00	146,245	0	0	146,245
12.00	146,245	146,245	146,245	147,601

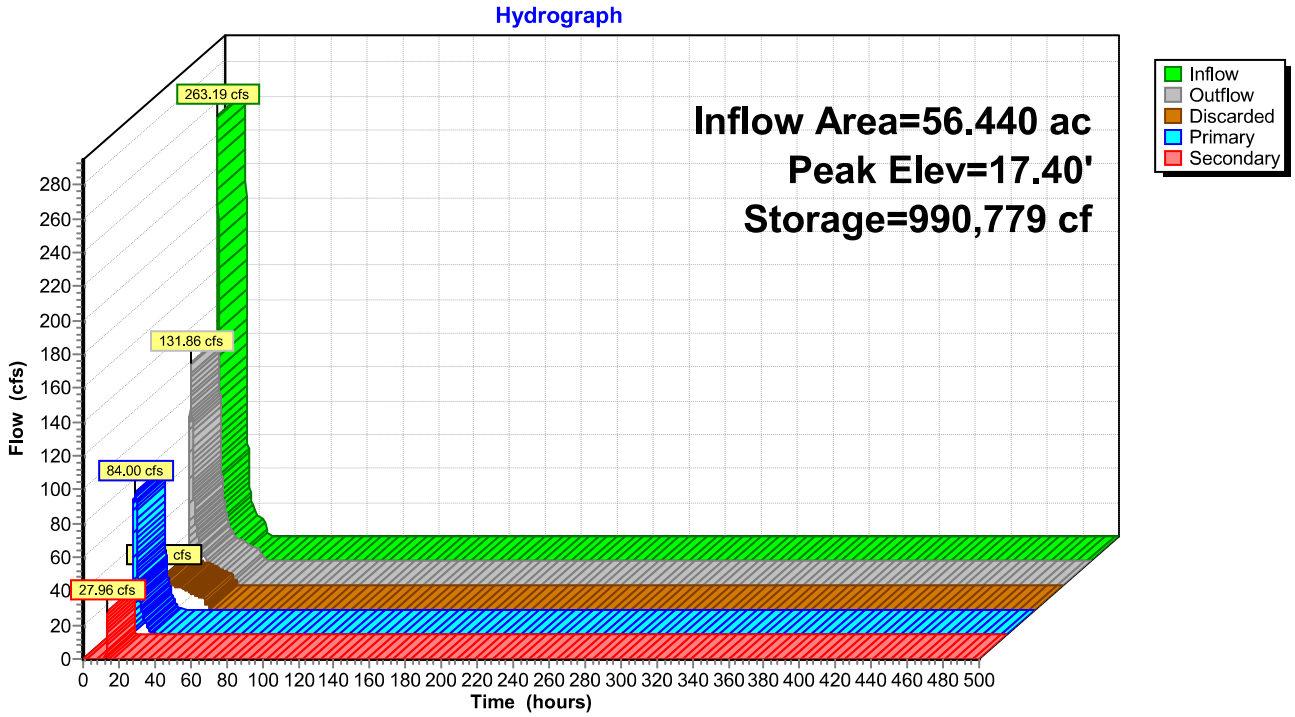
Device	Routing	Invert	Outlet Devices
#1	Discarded	11.00'	**0.800 in/hr Exfiltration over Wetted area** Conductivity to Groundwater Elevation = 8.84'
#2	Primary	12.00'	**36.0" Round Culvert** L= 144.8' RCP, groove end projecting, Ke= 0.200 Inlet / Outlet Invert= 12.00' / 4.22' S= 0.0537 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 7.07 sf
#3	Device 2	14.50'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 2	16.00'	**60.0" x 60.0" Horiz. Concrete Box Riser Structure with Grate** C= 0.600 Limited to weir flow at low heads
#5	Secondary	17.00'	**40.0' long + 10.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Discarded OutFlow Max=19.90 cfs @ 13.23 hrs HW=17.40' (Free Discharge)
└**1=Exfiltration** (Controls 19.90 cfs)

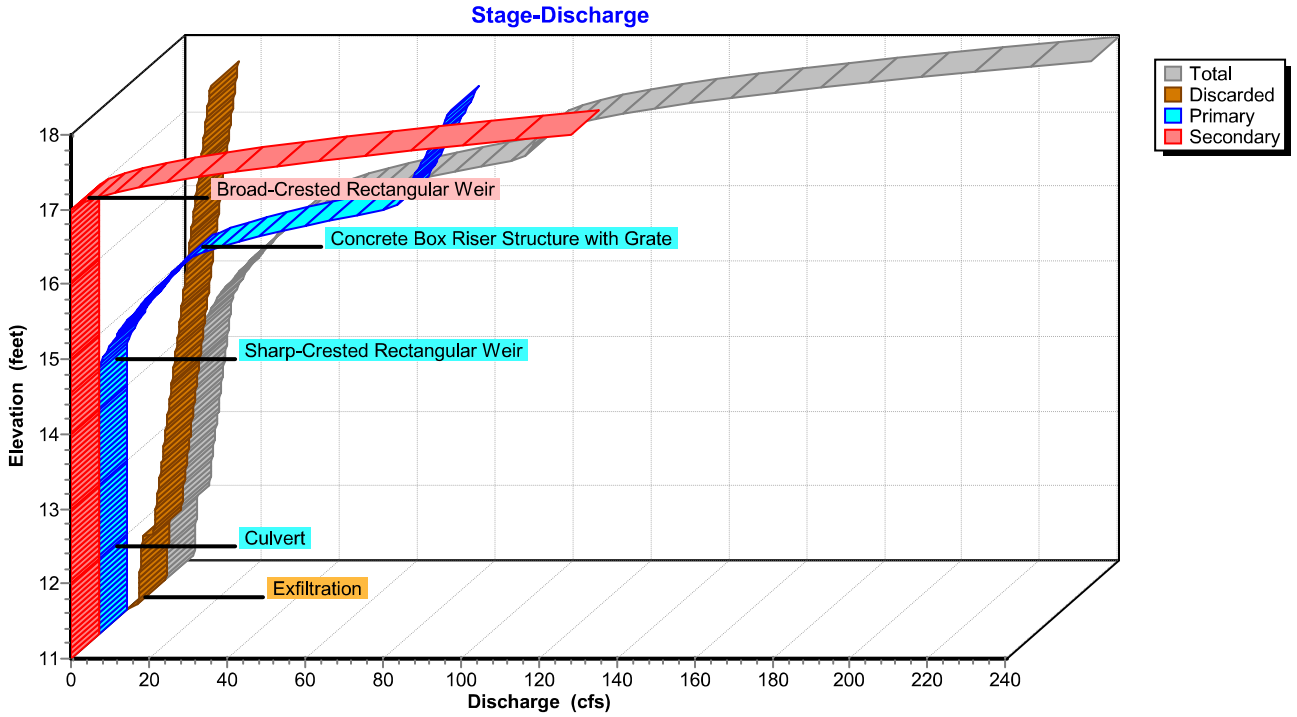
Primary OutFlow Max=83.99 cfs @ 13.23 hrs HW=17.40' TW=6.00' (Fixed TW Elev= 6.00')
└**2=Culvert** (Inlet Controls 83.99 cfs @ 11.88 fps)
  └**3=Sharp-Crested Rectangular Weir** (Passes < 55.16 cfs potential flow)
  └**4=Concrete Box Riser Structure with Grate** (Passes < 108.03 cfs potential flow)

Secondary OutFlow Max=27.68 cfs @ 13.23 hrs HW=17.40' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Weir Controls 27.68 cfs @ 1.58 fps)

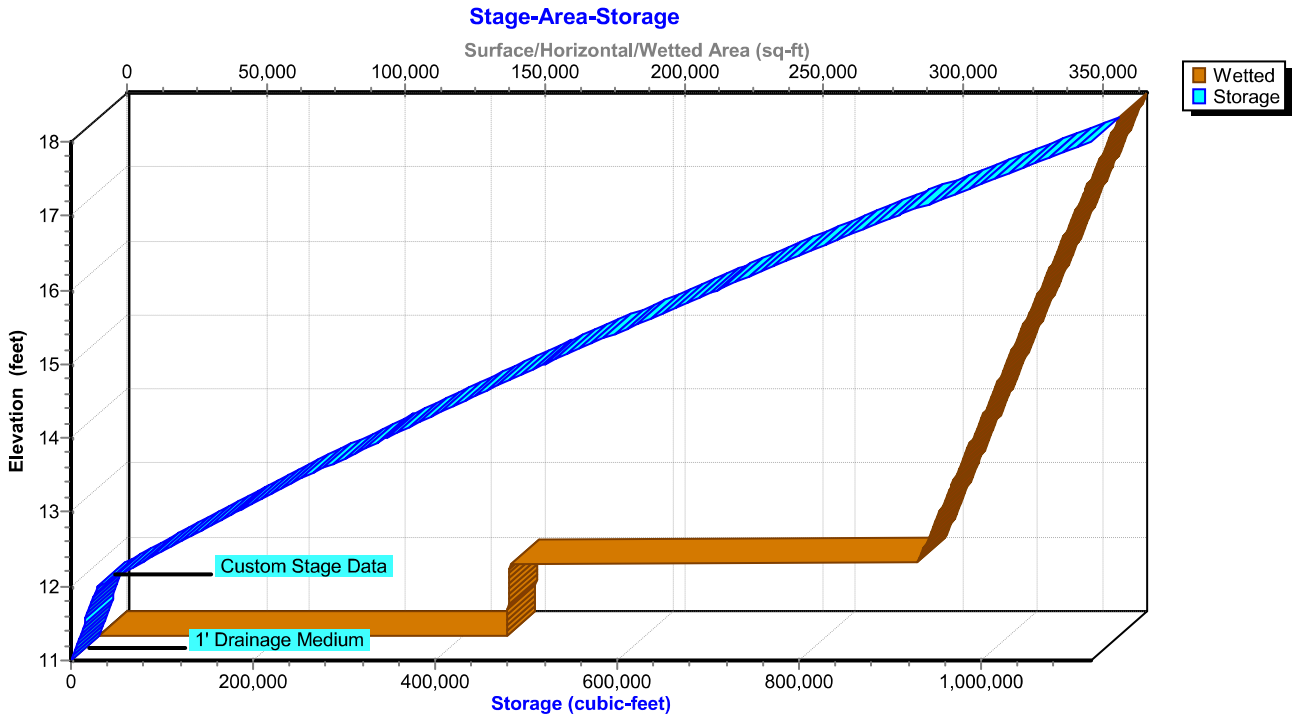
Pond 54P: POND B-02



Pond 54P: POND B-02



Pond 54P: POND B-02



Hydrograph for Pond 54P: POND B-02

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Discarded (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	11.00	0.00	0.00	0.00	0.00
10.00	**22.77**	**146,289**	**12.78**	**8.48**	**8.48**	**0.00**	**0.00**
20.00	**12.11**	**530,412**	**15.05**	**19.24**	**14.01**	**5.24**	**0.00**
30.00	0.00	219,915	13.24	9.59	9.59	0.00	0.00
40.00	0.00	6	11.00	0.01	0.01	0.00	0.00
50.00	0.00	0	11.00	0.00	0.00	0.00	0.00
60.00	0.00	0	11.00	0.00	0.00	0.00	0.00
70.00	0.00	0	11.00	0.00	0.00	0.00	0.00
80.00	0.00	0	11.00	0.00	0.00	0.00	0.00
90.00	0.00	0	11.00	0.00	0.00	0.00	0.00
100.00	0.00	0	11.00	0.00	0.00	0.00	0.00
110.00	0.00	0	11.00	0.00	0.00	0.00	0.00
120.00	0.00	0	11.00	0.00	0.00	0.00	0.00
130.00	0.00	0	11.00	0.00	0.00	0.00	0.00
140.00	0.00	0	11.00	0.00	0.00	0.00	0.00
150.00	0.00	0	11.00	0.00	0.00	0.00	0.00
160.00	0.00	0	11.00	0.00	0.00	0.00	0.00
170.00	0.00	0	11.00	0.00	0.00	0.00	0.00
180.00	0.00	0	11.00	0.00	0.00	0.00	0.00
190.00	0.00	0	11.00	0.00	0.00	0.00	0.00
200.00	0.00	0	11.00	0.00	0.00	0.00	0.00
210.00	0.00	0	11.00	0.00	0.00	0.00	0.00
220.00	0.00	0	11.00	0.00	0.00	0.00	0.00
230.00	0.00	0	11.00	0.00	0.00	0.00	0.00
240.00	0.00	0	11.00	0.00	0.00	0.00	0.00
250.00	0.00	0	11.00	0.00	0.00	0.00	0.00
260.00	0.00	0	11.00	0.00	0.00	0.00	0.00
270.00	0.00	0	11.00	0.00	0.00	0.00	0.00
280.00	0.00	0	11.00	0.00	0.00	0.00	0.00
290.00	0.00	0	11.00	0.00	0.00	0.00	0.00
300.00	0.00	0	11.00	0.00	0.00	0.00	0.00
310.00	0.00	0	11.00	0.00	0.00	0.00	0.00
320.00	0.00	0	11.00	0.00	0.00	0.00	0.00
330.00	0.00	0	11.00	0.00	0.00	0.00	0.00
340.00	0.00	0	11.00	0.00	0.00	0.00	0.00
350.00	0.00	0	11.00	0.00	0.00	0.00	0.00
360.00	0.00	0	11.00	0.00	0.00	0.00	0.00
370.00	0.00	0	11.00	0.00	0.00	0.00	0.00
380.00	0.00	0	11.00	0.00	0.00	0.00	0.00
390.00	0.00	0	11.00	0.00	0.00	0.00	0.00
400.00	0.00	0	11.00	0.00	0.00	0.00	0.00
410.00	0.00	0	11.00	0.00	0.00	0.00	0.00
420.00	0.00	0	11.00	0.00	0.00	0.00	0.00
430.00	0.00	0	11.00	0.00	0.00	0.00	0.00
440.00	0.00	0	11.00	0.00	0.00	0.00	0.00
450.00	0.00	0	11.00	0.00	0.00	0.00	0.00
460.00	0.00	0	11.00	0.00	0.00	0.00	0.00
470.00	0.00	0	11.00	0.00	0.00	0.00	0.00
480.00	0.00	0	11.00	0.00	0.00	0.00	0.00
490.00	0.00	0	11.00	0.00	0.00	0.00	0.00
500.00	0.00	0	11.00	0.00	0.00	0.00	0.00

Stage-Discharge for Pond 54P: POND B-02

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Secondary (cfs)
11.00	0.00	0.00	0.00	0.00
11.20	2.96	2.96	0.00	0.00
11.40	3.22	3.22	0.00	0.00
11.60	3.48	3.48	0.00	0.00
11.80	3.73	3.73	0.00	0.00
12.00	6.70	6.70	0.00	0.00
12.20	7.12	7.12	0.00	0.00
12.40	7.59	7.59	0.00	0.00
12.60	8.06	8.06	0.00	0.00
12.80	8.54	8.54	0.00	0.00
13.00	9.01	9.01	0.00	0.00
13.20	9.49	9.49	0.00	0.00
13.40	9.97	9.97	0.00	0.00
13.60	10.45	10.45	0.00	0.00
13.80	10.93	10.93	0.00	0.00
14.00	11.42	11.42	0.00	0.00
14.20	11.91	11.91	0.00	0.00
14.40	12.40	12.40	0.00	0.00
14.60	13.30	12.89	0.41	0.00
14.80	15.50	13.38	2.12	0.00
15.00	18.38	13.87	4.51	0.00
15.20	21.76	14.37	7.39	0.00
15.40	25.53	14.87	10.67	0.00
15.60	29.62	15.36	14.26	0.00
15.80	33.99	15.86	18.13	0.00
16.00	38.59	16.37	22.23	0.00
16.20	49.25	16.87	32.38	0.00
16.40	64.92	17.37	47.55	0.00
16.60	83.90	17.88	66.02	0.00
16.80	95.67	18.38	77.28	0.00
17.00	98.48	18.89	79.59	0.00
17.20	110.50	19.40	81.83	9.26
17.40	131.90	19.91	84.02	27.98
17.60	162.78	20.42	86.14	56.22
17.80	198.46	20.93	88.22	89.31
18.00	**240.34**	**21.45**	**90.25**	**128.64**

Stage-Area-Storage for Pond 54P: POND B-02

Elevation (feet)	Wetted (sq-ft)	Storage (cubic-feet)
11.00	146,245	0
11.10	146,381	2,925
11.20	146,516	5,850
11.30	146,652	8,775
11.40	146,787	11,700
11.50	146,923	14,625
11.60	147,058	17,549
11.70	147,194	20,474
11.80	147,330	23,399
11.90	147,465	26,324
12.00	293,846	29,249
12.10	295,002	43,931
12.20	296,164	58,728
12.30	297,329	73,640
12.40	298,500	88,669
12.50	299,674	103,814
12.60	300,854	119,076
12.70	302,037	134,455
12.80	303,226	149,952
12.90	304,419	165,567
13.00	305,616	181,301
13.10	306,784	197,152
13.20	307,957	213,120
13.30	309,134	229,204
13.40	310,315	245,405
13.50	311,501	261,724
13.60	312,690	278,161
13.70	313,884	294,715
13.80	315,083	311,389
13.90	316,285	328,182
14.00	317,492	345,094
14.10	318,672	362,125
14.20	319,856	379,273
14.30	321,044	396,539
14.40	322,236	413,923
14.50	323,433	431,425
14.60	324,633	449,046
14.70	325,837	466,787
14.80	327,046	484,647
14.90	328,258	502,628
15.00	329,474	520,729
15.10	330,666	538,949
15.20	331,861	557,288
15.30	333,060	575,745
15.40	334,263	594,322
15.50	335,470	613,018
15.60	336,681	631,834
15.70	337,895	650,770
15.80	339,114	669,827
15.90	340,336	689,005
16.00	341,562	708,305
16.10	342,765	727,725
16.20	343,972	747,264
16.30	345,182	766,923
16.40	346,396	786,702
16.50	347,613	806,602
16.60	348,835	826,623
16.70	350,060	846,765
16.80	351,288	867,029
16.90	352,521	887,415
17.00	353,757	907,923
17.10	354,971	928,552
17.20	356,188	949,302
17.30	357,410	970,173
17.40	358,634	991,165
17.50	359,863	1,012,279
17.60	361,095	1,033,515
17.70	362,330	1,054,873
17.80	363,569	1,076,353
17.90	364,811	1,097,957
18.00	**366,057**	**1,119,683**

Summary for Pond 73P: POND B-01

Inflow Area = 111.250 ac, 0.00% Impervious, Inflow Depth = 11.69" for 100-YR, 24-HR event
Inflow = 454.97 cfs @ 12.55 hrs, Volume= 108.378 af
Outflow = 115.06 cfs @ 14.33 hrs, Volume= 108.378 af, Atten= 75%, Lag= 107.2 min
Discarded = 15.46 cfs @ 14.33 hrs, Volume= 45.762 af
Primary = 67.10 cfs @ 14.33 hrs, Volume= 58.788 af
Secondary = 32.50 cfs @ 14.33 hrs, Volume= 3.828 af

Routing by Stor-Ind method, Time Span= 0.00-500.00 hrs, dt= 0.05 hrs
Peak Elev= 13.01' @ 14.33 hrs Surf.Area= 837,556 sf Storage= 2,757,484 cf

Plug-Flow detention time= 697.4 min calculated for 108.378 af (100% of inflow)
Center-of-Mass det. time= 697.3 min (1,496.0 - 798.7)

Volume	Invert	Avail.Storage	Storage Description
#1	6.60'	2,904,364 cf	**Custom Stage Data (Conic)** Listed below (Recalc)
#2	5.60'	76,959 cf	**1.0' Drainage Medium (Conic)** Listed below (Recalc) 384,796 cf Overall x 20.0% Voids
		2,981,323 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
6.60	384,796	0	0	384,796
7.00	388,677	154,694	154,694	388,776
8.00	399,096	393,875	548,569	399,430
9.00	409,615	404,344	952,913	410,188
10.00	420,234	414,913	1,367,826	421,049
11.00	430,954	425,583	1,793,409	432,016
12.00	441,775	436,353	2,229,762	443,087
13.00	452,696	447,224	2,676,987	454,263
13.50	456,817	227,377	2,904,364	458,554

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
5.60	384,796	0	0	384,796
6.60	384,796	384,796	384,796	386,995

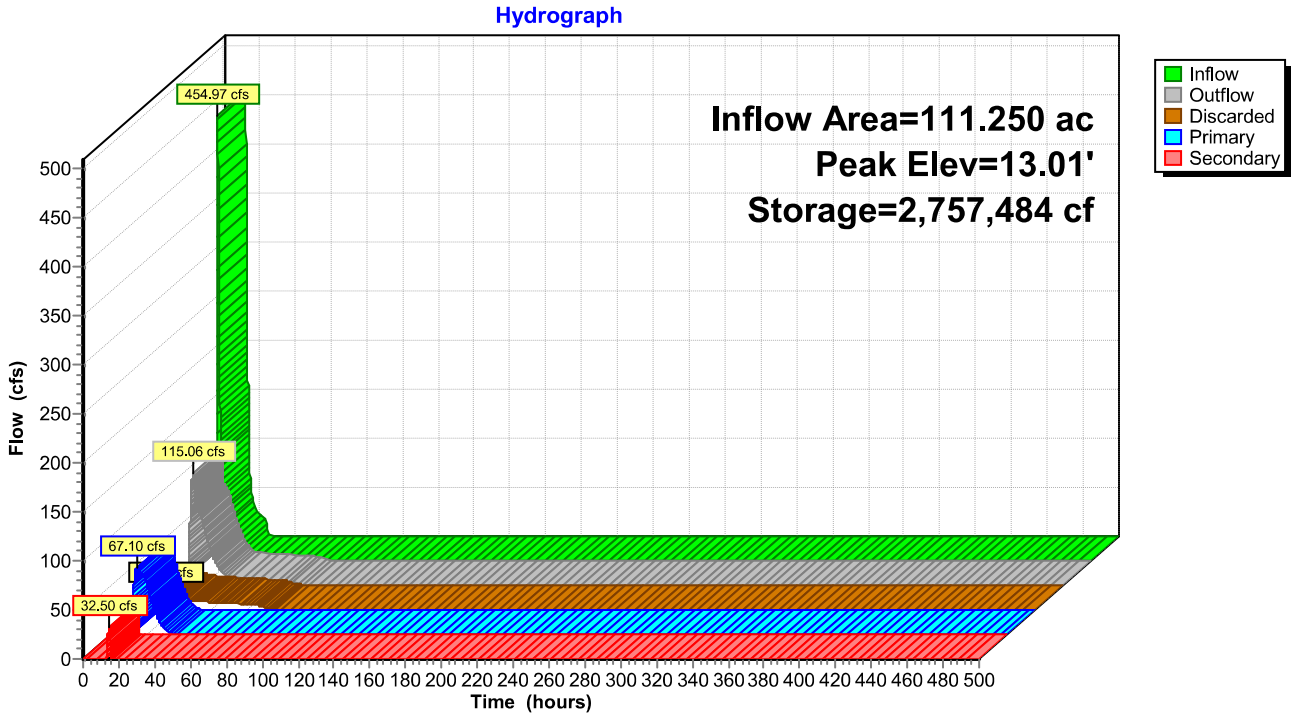
Device	Routing	Invert	Outlet Devices
#1	Discarded	5.60'	**0.250 in/hr Exfiltration over Wetted area** Conductivity to Groundwater Elevation = 3.02'
#2	Primary	6.60'	**30.0" Round Culvert - EXISTING** L= 163.1' RCP, groove end projecting, Ke= 0.200 Inlet / Outlet Invert= 6.60' / 2.85' S= 0.0230 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 4.91 sf
#3	Device 2	8.50'	**4.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s)
#4	Device 2	11.50'	**60.0" x 60.0" Horiz. Concrete Box Riser Structure with Grate** C= 0.600 Limited to weir flow at low heads
#5	Secondary	12.50'	**30.0' long + 10.0 '/' SideZ x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Discarded OutFlow Max=15.46 cfs @ 14.33 hrs HW=13.01' (Free Discharge)
└**1=Exfiltration** (Controls 15.46 cfs)

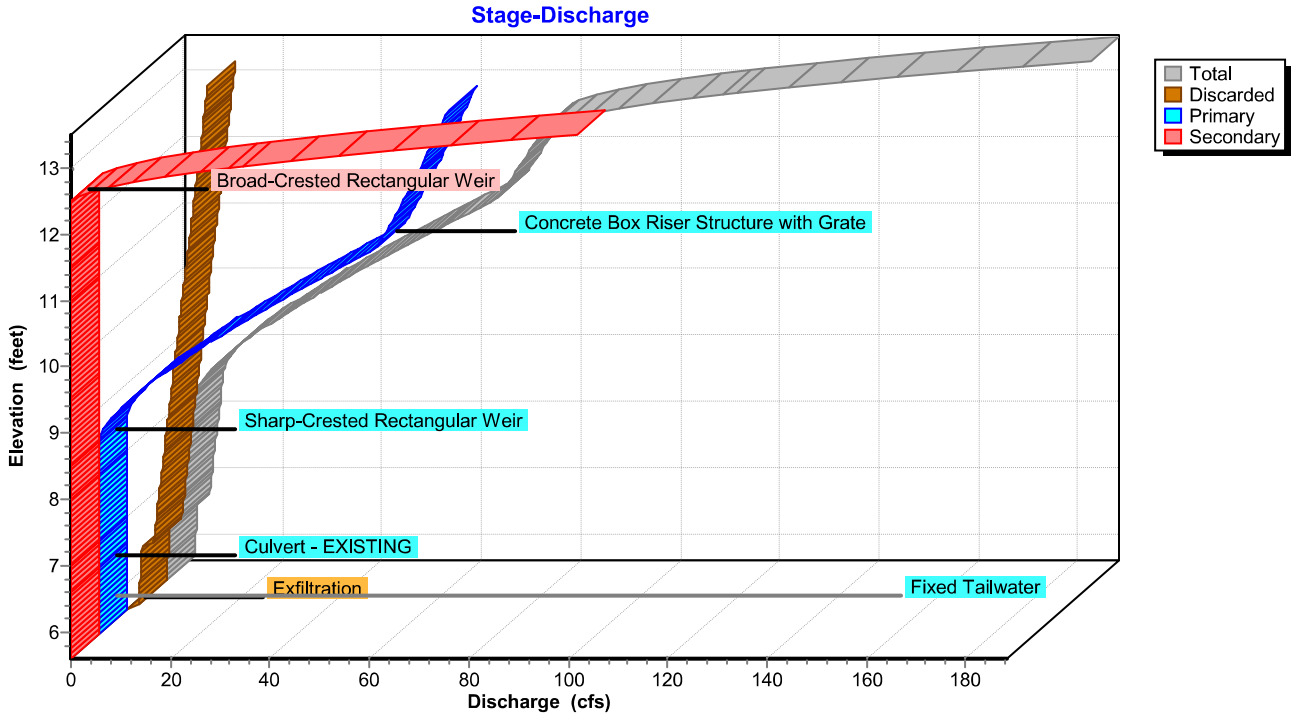
Primary OutFlow Max=67.10 cfs @ 14.33 hrs HW=13.01' TW=6.00' (Fixed TW Elev= 6.00')
└**2=Culvert - EXISTING** (Inlet Controls 67.10 cfs @ 13.67 fps)
  └**3=Sharp-Crested Rectangular Weir** (Passes < 96.96 cfs potential flow)
  └**4=Concrete Box Riser Structure with Grate** (Passes < 121.06 cfs potential flow)

Secondary OutFlow Max=32.46 cfs @ 14.33 hrs HW=13.01' (Free Discharge)
└**5=Broad-Crested Rectangular Weir** (Weir Controls 32.46 cfs @ 1.82 fps)

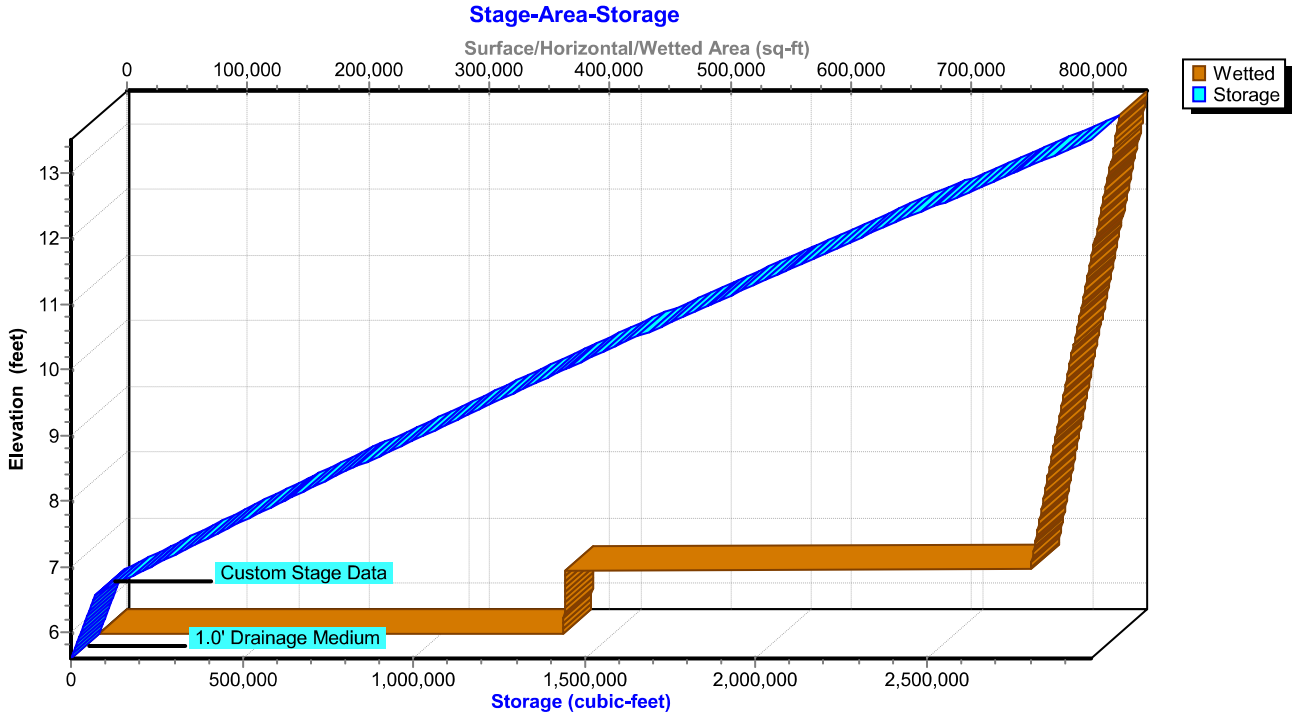
Pond 73P: POND B-01



Pond 73P: POND B-01



Pond 73P: POND B-01



Hydrograph for Pond 73P: POND B-01

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Outflow (cfs)	Discarded (cfs)	Primary (cfs)	Secondary (cfs)
0.00	0.00	0	5.60	0.00	0.00	0.00	0.00
10.00	**43.29**	**467,190**	**7.60**	**6.87**	**6.87**	**0.00**	**0.00**
20.00	**24.30**	**1,967,544**	**11.22**	**63.42**	**12.60**	**50.82**	**0.00**
30.00	0.00	1,059,059	9.07	14.66	9.18	5.49	0.00
40.00	0.00	712,660	8.22	7.83	7.83	0.00	0.00
50.00	0.00	449,694	7.56	6.80	6.80	0.00	0.00
60.00	0.00	221,609	6.97	5.89	5.89	0.00	0.00
70.00	0.00	46,274	6.20	2.75	2.75	0.00	0.00
80.00	0.00	3	5.60	0.00	0.00	0.00	0.00
90.00	0.00	0	5.60	0.00	0.00	0.00	0.00
100.00	0.00	0	5.60	0.00	0.00	0.00	0.00
110.00	0.00	0	5.60	0.00	0.00	0.00	0.00
120.00	0.00	0	5.60	0.00	0.00	0.00	0.00
130.00	0.00	0	5.60	0.00	0.00	0.00	0.00
140.00	0.00	0	5.60	0.00	0.00	0.00	0.00
150.00	0.00	0	5.60	0.00	0.00	0.00	0.00
160.00	0.00	0	5.60	0.00	0.00	0.00	0.00
170.00	0.00	0	5.60	0.00	0.00	0.00	0.00
180.00	0.00	0	5.60	0.00	0.00	0.00	0.00
190.00	0.00	0	5.60	0.00	0.00	0.00	0.00
200.00	0.00	0	5.60	0.00	0.00	0.00	0.00
210.00	0.00	0	5.60	0.00	0.00	0.00	0.00
220.00	0.00	0	5.60	0.00	0.00	0.00	0.00
230.00	0.00	0	5.60	0.00	0.00	0.00	0.00
240.00	0.00	0	5.60	0.00	0.00	0.00	0.00
250.00	0.00	0	5.60	0.00	0.00	0.00	0.00
260.00	0.00	0	5.60	0.00	0.00	0.00	0.00
270.00	0.00	0	5.60	0.00	0.00	0.00	0.00
280.00	0.00	0	5.60	0.00	0.00	0.00	0.00
290.00	0.00	0	5.60	0.00	0.00	0.00	0.00
300.00	0.00	0	5.60	0.00	0.00	0.00	0.00
310.00	0.00	0	5.60	0.00	0.00	0.00	0.00
320.00	0.00	0	5.60	0.00	0.00	0.00	0.00
330.00	0.00	0	5.60	0.00	0.00	0.00	0.00
340.00	0.00	0	5.60	0.00	0.00	0.00	0.00
350.00	0.00	0	5.60	0.00	0.00	0.00	0.00
360.00	0.00	0	5.60	0.00	0.00	0.00	0.00
370.00	0.00	0	5.60	0.00	0.00	0.00	0.00
380.00	0.00	0	5.60	0.00	0.00	0.00	0.00
390.00	0.00	0	5.60	0.00	0.00	0.00	0.00
400.00	0.00	0	5.60	0.00	0.00	0.00	0.00
410.00	0.00	0	5.60	0.00	0.00	0.00	0.00
420.00	0.00	0	5.60	0.00	0.00	0.00	0.00
430.00	0.00	0	5.60	0.00	0.00	0.00	0.00
440.00	0.00	0	5.60	0.00	0.00	0.00	0.00
450.00	0.00	0	5.60	0.00	0.00	0.00	0.00
460.00	0.00	0	5.60	0.00	0.00	0.00	0.00
470.00	0.00	0	5.60	0.00	0.00	0.00	0.00
480.00	0.00	0	5.60	0.00	0.00	0.00	0.00
490.00	0.00	0	5.60	0.00	0.00	0.00	0.00
500.00	0.00	0	5.60	0.00	0.00	0.00	0.00

Stage-Discharge for Pond 73P: POND B-01

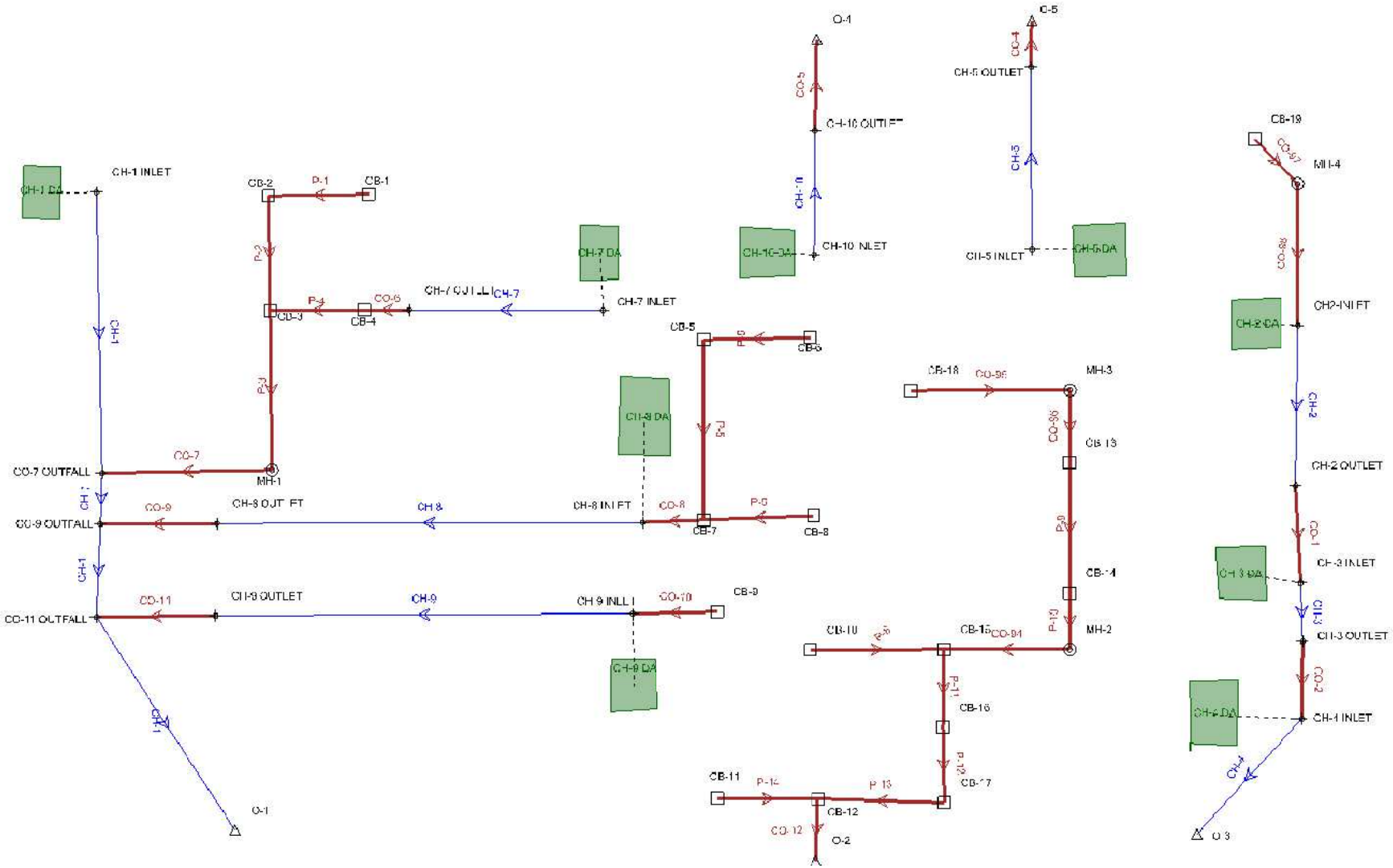
Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Secondary (cfs)
5.60	0.00	0.00	0.00	0.00
5.80	2.40	2.40	0.00	0.00
6.00	2.58	2.58	0.00	0.00
6.20	2.75	2.75	0.00	0.00
6.40	2.93	2.93	0.00	0.00
6.60	5.33	5.33	0.00	0.00
6.80	5.62	5.62	0.00	0.00
7.00	5.93	5.93	0.00	0.00
7.20	6.24	6.24	0.00	0.00
7.40	6.55	6.55	0.00	0.00
7.60	6.87	6.87	0.00	0.00
7.80	7.18	7.18	0.00	0.00
8.00	7.49	7.49	0.00	0.00
8.20	7.80	7.80	0.00	0.00
8.40	8.12	8.12	0.00	0.00
8.60	8.84	8.43	0.41	0.00
8.80	10.87	8.75	2.12	0.00
9.00	13.57	9.06	4.51	0.00
9.20	16.77	9.38	7.39	0.00
9.40	20.36	9.70	10.67	0.00
9.60	24.27	10.01	14.26	0.00
9.80	28.46	10.33	18.13	0.00
10.00	32.87	10.65	22.23	0.00
10.20	37.49	10.96	26.53	0.00
10.40	42.28	11.28	31.00	0.00
10.60	47.23	11.60	35.63	0.00
10.80	52.30	11.92	40.38	0.00
11.00	57.48	12.24	45.24	0.00
11.20	62.75	12.56	50.20	0.00
11.40	68.11	12.88	55.23	0.00
11.60	70.41	13.20	57.21	0.00
11.80	72.24	13.52	58.72	0.00
12.00	74.03	13.84	60.19	0.00
12.20	75.78	14.16	61.62	0.00
12.40	77.50	14.48	63.02	0.00
12.60	81.62	14.81	64.39	2.43
12.80	94.30	15.13	65.73	13.44
13.00	114.11	15.45	67.05	31.61
13.20	140.30	15.77	68.34	56.19
13.40	**170.97**	**16.09**	**69.60**	**85.28**

Stage-Area-Storage for Pond 73P: POND B-01

Elevation (feet)	Wetted (sq-ft)	Storage (cubic-feet)
5.60	384,796	0
5.70	385,016	7,696
5.80	385,236	15,392
5.90	385,456	23,088
6.00	385,676	30,784
6.10	385,895	38,480
6.20	386,115	46,176
6.30	386,335	53,871
6.40	386,555	61,567
6.50	386,775	69,263
6.60	771,791	76,959
6.70	772,784	115,487
6.80	773,778	154,112
6.90	774,774	192,834
7.00	775,771	231,653
7.10	776,830	270,573
7.20	777,890	309,596
7.30	778,952	348,723
7.40	780,016	387,953
7.50	781,080	427,288
7.60	782,146	466,727
7.70	783,214	506,271
7.80	784,283	545,919
7.90	785,353	585,671
8.00	786,425	625,528
8.10	787,494	665,490
8.20	788,565	705,557
8.30	789,637	745,728
8.40	790,711	786,004
8.50	791,786	826,385
8.60	792,863	866,872
8.70	793,941	907,464
8.80	795,020	948,161
8.90	796,100	988,964
9.00	797,183	1,029,872
9.10	798,262	1,070,887
9.20	799,344	1,112,006
9.30	800,426	1,153,232
9.40	801,511	1,194,564
9.50	802,596	1,236,001
9.60	803,683	1,277,545
9.70	804,771	1,319,196
9.80	805,861	1,360,952
9.90	806,952	1,402,815
10.00	808,044	1,444,785
10.10	809,135	1,486,862
10.20	810,227	1,529,045
10.30	811,320	1,571,336
10.40	812,414	1,613,733
10.50	813,510	1,656,237
10.60	814,608	1,698,848
10.70	815,706	1,741,567
10.80	816,807	1,784,393
10.90	817,908	1,827,327
11.00	819,011	1,870,368
11.10	820,112	1,913,517
11.20	821,214	1,956,774
11.30	822,318	2,000,139
11.40	823,423	2,043,612
11.50	824,529	2,087,192
11.60	825,637	2,130,881
11.70	826,747	2,174,678
11.80	827,857	2,218,584
11.90	828,969	2,262,598
12.00	830,082	2,306,722
12.10	831,194	2,350,953
12.20	832,307	2,395,294
12.30	833,421	2,439,743
12.40	834,536	2,484,301
12.50	835,653	2,528,969
12.60	836,771	2,573,745
12.70	837,891	2,618,631
12.80	839,012	2,663,626
12.90	840,134	2,708,731
13.00	841,258	2,753,946
13.10	842,114	2,799,257
13.20	842,972	2,844,650
13.30	843,830	2,890,125
13.40	844,689	2,935,683
13.50	**845,549**	**2,981,323**

Appendix J. Conveyance Channel and Storm Drain Design

Culvert + Channel Design Summary																		
Inlet ID	Downstream Connection	Culvert ID	Barrel/ Channel Length to Downstream Connection (ft)	Inlet Invert Elevation (ft)	Outlet Invert Elevation (ft)	Slope%	No. of Barrels	Pipe Diameter (in)	Average Channel Depth (ft)	Channel Side Slopes (ft/ft)	Min. Channel Bottom Depth (ft)	Channel Velocity (ft/s)	Channel Lining	Max Permissable Channel Lining Velocity (ft/s)	Top of Grate Elevation (ft)	Edge of Pad (ft)	Road Peak Elevation (ft)	Top of Foundation Elevation (ft)
CH-10	CO-5	-	1231.51	15.68	13.22	0.20	-	-	4.00	4.00	9.50	3.30	Sod	4.00	-	-	-	-
CO-5	O-4	CO-5	108.52	13.22	13.00	0.20	2.00	36.00	-	-	-	-	-	-	-	-	-	-
CB-19	MH-4	-	95.00	14.14	13.90	0.25	1.00	24.00	-	-	-	-	-	-	19.00	19.25	19.50	20
MH-4	CH-2	-	87.99	13.90	13.68	0.25	1.00	30.00	-	-	-	-	-	-	19.00	19.25	19.50	20
CH-2	CO-1	-	504.78	13.68	12.42	0.25	-	-	4.00	4.00	11.00	2.82	Sod	4.00	-	-	-	-
CO-1	CH-3	CO-1	106.23	12.42	12.15	0.25	2.00	42.00	-	-	-	-	-	-	-	-	-	-
CH-3	CO-2	-	878.26	12.15	9.96	0.25	-	-	4.00	4.00	11.00	3.54	Sod	4.00	-	-	-	-
CO-2	CH-4	CO-2	73.12	9.96	9.77	0.25	2.00	42.00	-	-	-	-	-	-	-	-	-	-
CH-4	O-3	-	709.12	9.77	8.00	0.25	-	-	4.00	4.00	11.00	3.48	Sod	4.00	-	-	-	-
CH-5	CO-4	-	1254.02	15.70	13.19	0.20	-	-	3.50	4.00	11.00	3.31	Sod	4.00	-	-	-	-
CO-4	O-5	CO-4	94.13	13.19	13.00	0.20	2.00	48.00	-	-	-	-	-	-	-	-	-	-
CB-1	CB-2	-	329.10	14.89	14.07	0.25	1.00	30.00	-	-	-	-	-	-	19.00	19.25	19.5	20
CB-2	CB-3	-	411.18	14.07	13.04	0.25	1.00	36.00	-	-	-	-	-	-	19.00	19.25	19.5	20
CB-3	MH-1	-	102.39	13.04	12.79	0.25	1.00	48.00	-	-	-	-	-	-	19.00	19.25	19.5	20
CB-4	CB-3	-	329.10	13.86	13.04	0.25	1.00	48.00	-	-	-	-	-	-	19.00	19.25	19.5	20
CH-7	CO-6	-	660.12	15.74	14.09	0.25	-	-	4.00	4.00	6.00	3.06	Sod	-	-	-	-	-
CO-6	CB-4	CO-6	89.25	14.09	13.86	0.25	1.00	42.00	-	-	-	-	-	-	-	-	-	-
MH-1	CH-1	CO-7	310.47	12.79	12.01	0.25	1.00	54.00	-	-	-	-	-	-	18.00	18.25	18.5	19
CB-9	CH-9	CO-10	115.71	13.97	13.68	0.25	1.00	30.00	-	-	-	-	-	-	18.00	18.25	18.5	19
CH-9	CO-11	-	835.37	13.68	11.59	0.25	-	-	5.00	4.00	6.00	3.40	Sod	-	-	-	-	-
CO-11	CH-1	CO-11	203.10	11.59	11.09	0.25	1.00	48.00	-	-	-	-	-	-	-	-	-	-
CB-5	CB-7	-	342.70	14.82	13.96	0.25	1.00	30.00	-	-	-	-	-	-	18.00	18.25	18.5	19
CB-6	CB-5	-	288.13	15.54	14.82	0.25	1.00	24.00	-	-	-	-	-	-	18.00	18.25	18.5	19
CB-7	CH-8	CO-8	27.04	13.96	13.89	0.25	1.00	36.00	-	-	-	-	-	-	18.00	18.25	18.5	19
CB-8	CB-7	-	288.67	14.68	13.96	0.25	1.00	24.00	-	-	-	-	-	-	18.00	18.25	18.5	19
CH-8	CO-9	-	816.07	13.89	11.85	0.25	-	-	5.00	4.00	7.00	3.33	Sod	-	-	-	-	-
CO-9	CH-1	CO-9	203.44	11.85	11.34	0.25	1.00	54.00	-	-	-	-	-	-	-	-	-	-
CH-1	O-1	-	2295.20	13.09	8.50	0.20	-	-	5.00	4.00	6.00	3.68	Sod	-	-	-	-	-
CB-10	CB-15	-	142.62	11.52	11.16	0.25	1.00	24.00	-	-	-	-	-	-	18.00	18.25	18.5	19
CB-18	MH-3	-	102.82	13.10	12.85	0.25	1.00	24.00	-	-	-	-	-	-	19.00	19.25	19.50	20
MH-3	CB-13	-	196.08	12.85	12.36	0.25	1.00	24.00	-	-	-	-	-	-	19.00	19.25	19.50	20
CB-13	CB-14	-	260.83	12.36	11.71	0.25	1.00	36.00	-	-	-	-	-	-	18.00	18.25	18.5	19
CB-14	MH-2	-	89.20	11.71	11.48	0.25	1.00	36.00	-	-	-	-	-	-	18.00	18.25	18.5	19
MH-2	CB-15	-	128.63	11.48	11.16	0.25	1.00	48.00	-	-	-	-	-	-	18.00	18.25	18.5	19
CB-15	CB-16	-	228.40	11.16	10.59	0.25	1.00	48.00	-	-	-	-	-	-	18.00	18.25	18.5	19
CB-16	CB-17	-	309.32	10.59	9.82	0.25	1.00	48.00	-	-	-	-	-	-	18.00	18.25	18.5	19
CB-17	CB-12	-	128.2541	9.82	9.50	0.25	1.00	48.00	-	-	-	-	-	-	18.00	18.25	18.5	19
CB-11	CB-12	-	162.4624	9.90	9.50	0.25	1.00	18.00	-	-	-	-	-	-	18.00	18.25	18.5	19
CB-12	O-2	CO-12	198.355	9.50	9	0.25	1.00	48.00	-	-	-	-	-	-	18.00	18.25	18.5	19


CH-1 INLET
CH-1 DA
CB-2
P-1
CB-1
P-2
CH-7 DA
CH-10-3A
O-1
CO-5
CH-10 OUTLET
CH-10
CH-10 INLET
O-5
CO-4
CH-5 OUTLET
CH-5
CH-5 INLET
CH-5 DA
CB-19
CO-97
MH-4
CO-98
CH-2 INLET
CH-2 DA
CH-2
CH-2 OUTLET
CO-1
CH-3 INLET
CH-3 DA
CH-3
CH-3 OUTLET
CO-2
CH-4 DA
CH-4 INLET
CH-4
O-3
P-4
CO-6
CH-7 OUTLET
CH-7
CH-7 INLET
CB-3
CB-4
P-3
CB-5
P-6
CB-6
CH-8 DA
P-5
CO-7
CO-7 OUTFALL
MH-1
CH-6
CO-9
CH-8 OUTLET
CH-8
CH-8 INLET
CO-8
P-8
CB-7
CB-8
CH-9
CO-11
CH-9 OUTLET
CH-9
CH-9 INLET
CO-10
CB-9
CO-11 OUTFALL
CH-9 DA
CH-11
O-1
CB-18
CO-96
MH-3
CO-96
CB-13
P-9
CB-14
CB-10
P-10
CB-15
CO-94
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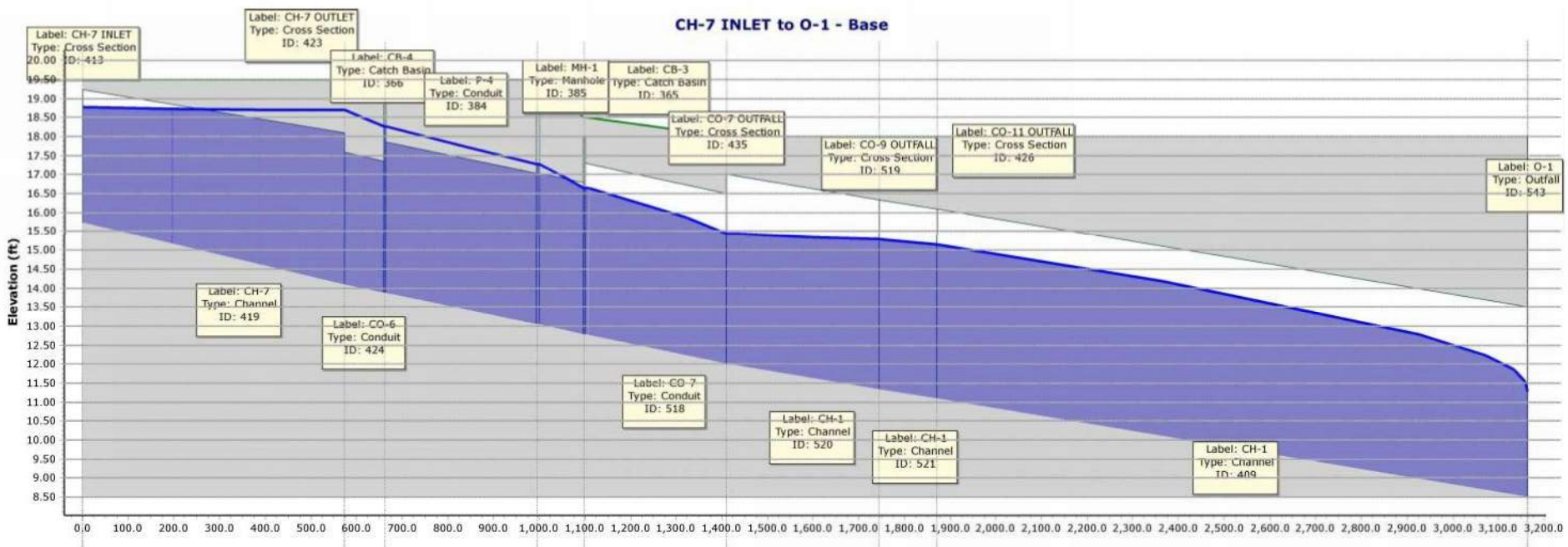
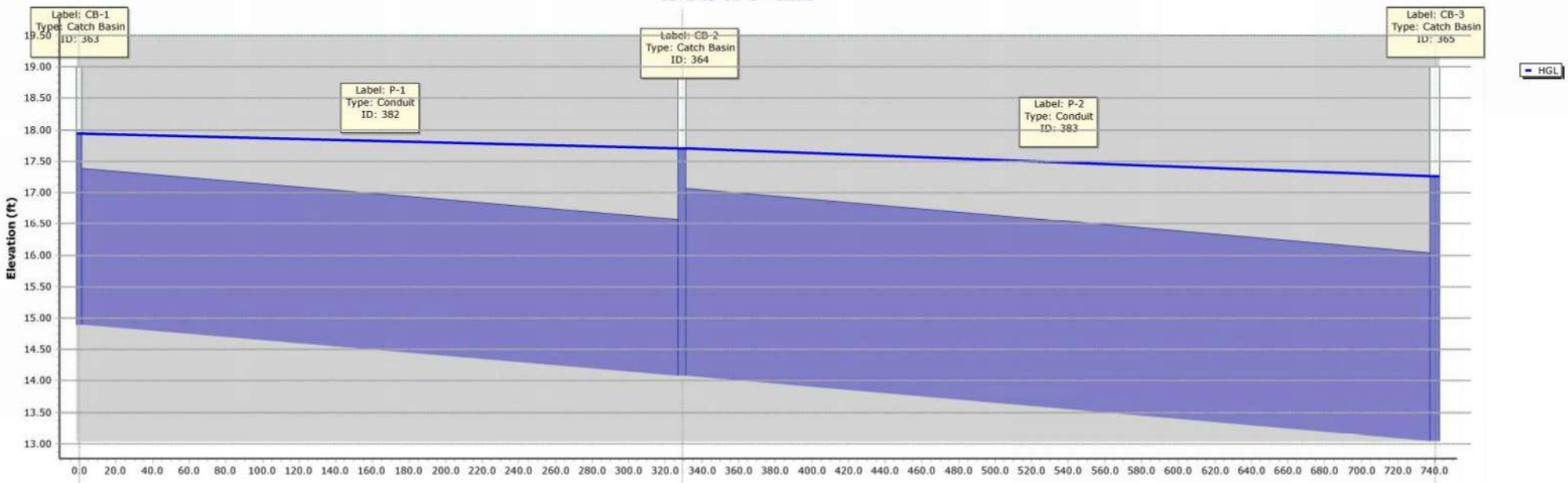
CB-11
P-14
P-13
CB-12
CO-12
O-2



ID\Label	419 \ CH-7	424 \ CO-6	384 \ P-4	386 \ P-3	518 \ CO-7	520 \ CH-1	521 \ CH-1	409 \ CH-1
Link Length (ft)	572.8	89.2	334.2	102.4	310.5	333.9	127.5	1293.5
Rise (in)\Material	42.0 \ Rough channel, with grass	42.0 \ Corrugated HDPE (Smooth Interior)	42.0 \ Corrugated HDPE (Smooth Interior)	42.0 \ Corrugated HDPE (Smooth Interior)	60.0 \ Rough channel, with grass	60.0 \ Rough channel, with grass	60.0 \ Rough channel, with grass	60.0 \ Very rough channel, with grass
Flow (cfs)	84.64	74.60	85.56	118.74	118.16	145.19	251.16	349.39
Slope (ft/ft)	0.003	0.003	0.002	0.002	0.003	0.002	0.002	0.002

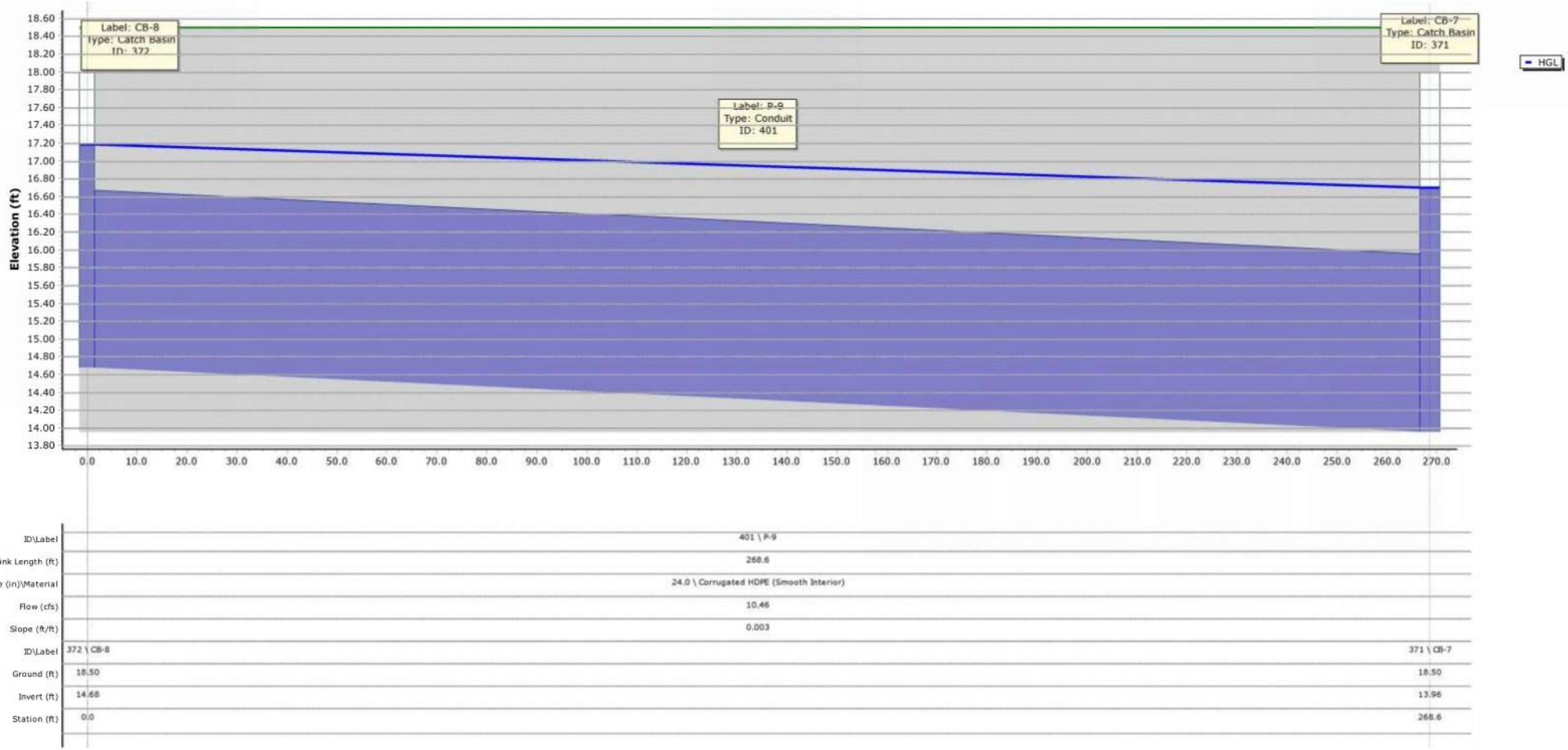
ID\Label	413 \ CH-7 INLET	423 \ CH-7 OUTLET	CB-4	365 \ CB-3	385 \ MH-1	435 \ CO-7 OUTFALL	519 \ CO-9 OUTFALL	426 \ CO-11 OUTFALL	543 \ O-1
Ground (ft)	19.50	19.50	19.50	19.50	18.50	18.00	18.00	18.00	18.00
Invert (ft)	15.74	14.09	13.86	13.04	12.79	12.01	11.34	11.09	8.50
Station (ft)	0.0	572.8	662.0	996.2	1098.6	1409.0	1742.9	1870.4	3163.9

CB-1 to CB-3 - Base



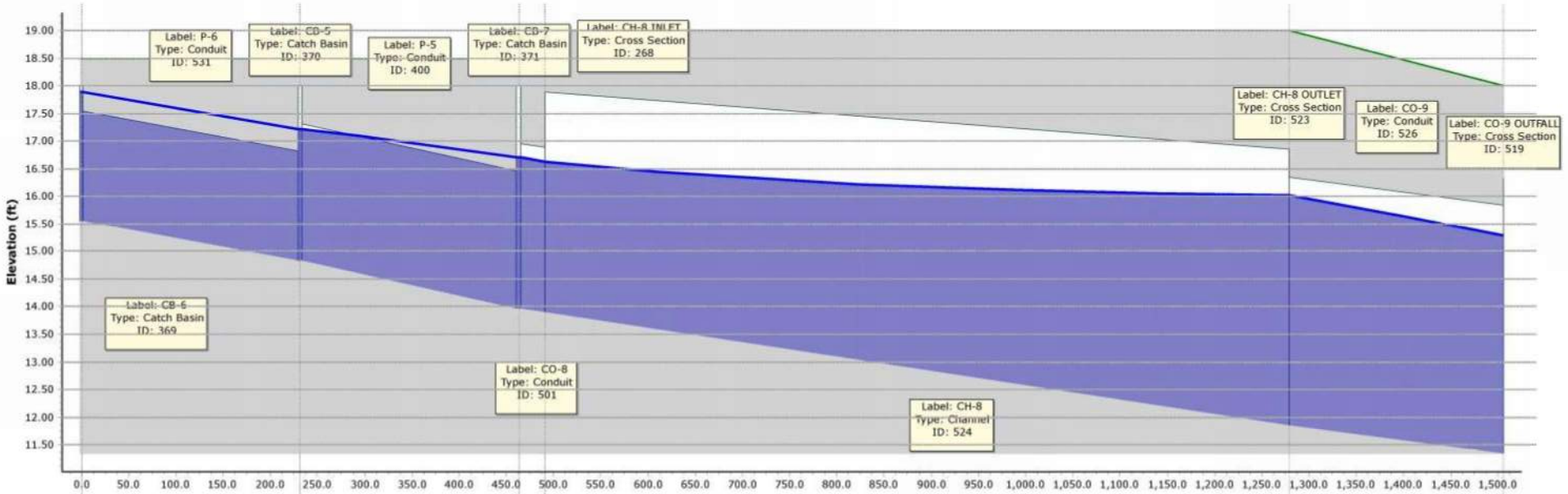
ID\Label		382 \ P-1	383 \ P-2
Link Length (ft)		329.1	411.2
Rise (in)\Material		30.0 \ Corrugated HDPE (Smooth Interior)	36.0 \ Corrugated HDPE (Smooth Interior)
Flow (cfs)		11.65	23.74
Slope (ft/ft)		0.002	0.003
ID\Label	363 \ CB-1	364 \ CB-2	365 \ CB-3
Ground (ft)	19.50	19.50	19.50
Invert (ft)	14.89	14.07	13.04
Station (ft)	0.0	329.1	740.3

CB-8 to CB-7 - Base



ID\Label		401 \ P-9
Link Length (ft)		268.6
Rise (in)\Material		24.0 \ Corrugated HDPE (Smooth Interior)
Flow (cfs)		10.46
Slope (ft/ft)		0.003
ID\Label	372 \ CB-8	371 \ CB-7
Ground (ft)	18.50	18.50
Invert (ft)	14.68	13.96
Station (ft)	0.0	268.6

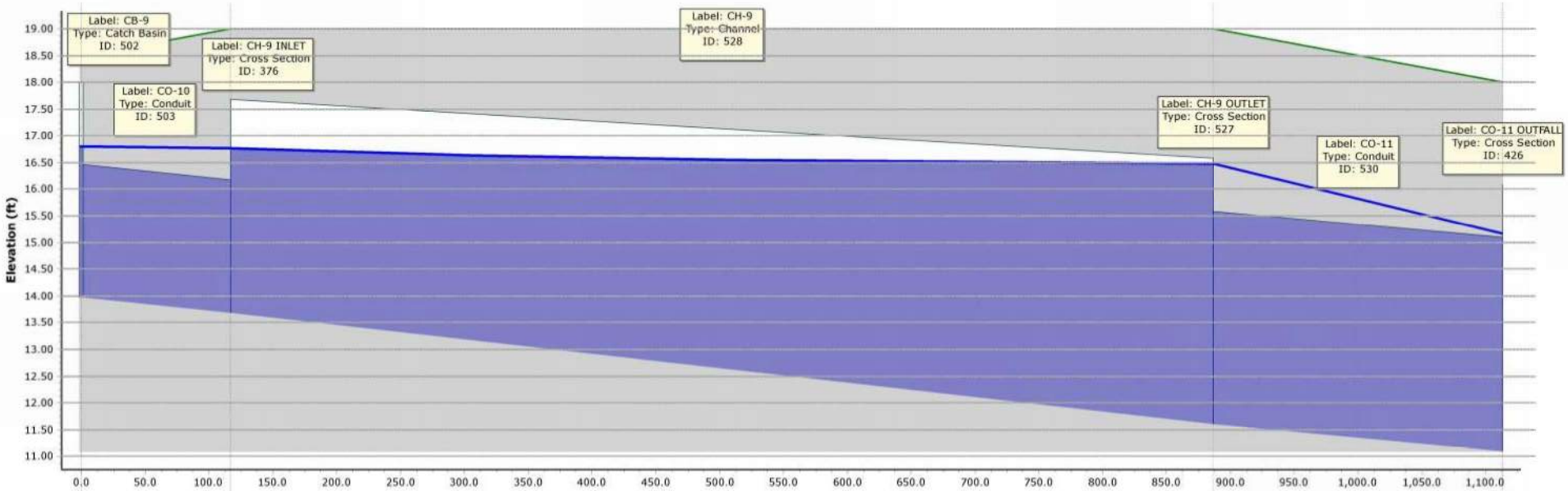
CB-6 to CO-9 OUTFALL - Base



ID\Label	531 \ P-6	400 \ P-5	501 \ CO-8	524 \ CH-8	526 \ CO-9
Link Length (ft)	231.4	231.4	28.6	787.6	227.0
Rise (in)\Material	24.0 \ Corrugated HDPE (Smooth Interior)	30.0 \ Corrugated HDPE (Smooth Interior)	36.0 \ Corrugated HDPE (Smooth Interior)	48.0 \ Rough channel, with grass	54.0 \ Corrugated HDPE (Smooth Interior)
Flow (cfs)	13.11	21.33	40.00	136.02	121.62
Slope (ft/ft)	0.003	0.004	0.002	0.003	0.002

ID\Label	369 \ CB-6	370 \ CB-5	371 \ CB-7	268 \ CH-8 INLET	523 \ CH-8 OUTLET	519 \ CO-9 OUTFALL
Ground (ft)	18.50	18.50	18.50	19.00	19.00	18.00
Invert (ft)	15.54	14.82	13.96	13.89	11.85	11.34
Station (ft)	0.0	231.4	462.9	491.4	1279.0	1506.0

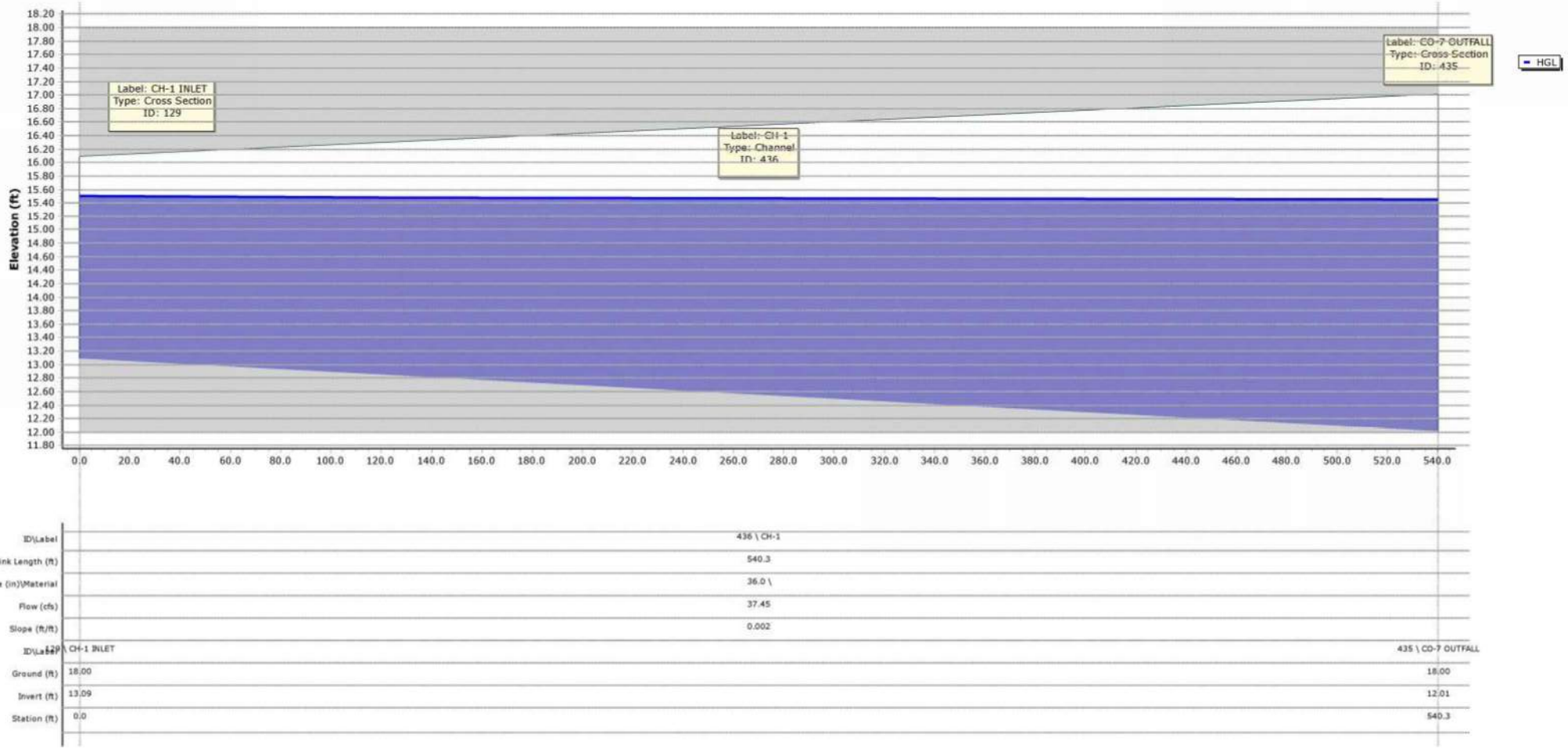
CB-9 to CO-11 OUTFALL - Base



ID\Label	503 \ CO-10	528 \ CH-9	530 \ CO-11
Link Length (ft)	117.0	769.4	227.0
Rise (in)\Material	30.0 \ Corrugated HDPE (Smooth Interior)	48.0 \ Rough channel, with grass	48.0 \ Corrugated HDPE (Smooth Interior)
Flow (cfs)	6.87	137.80	119.01
Slope (ft/ft)	0.002	0.003	0.002

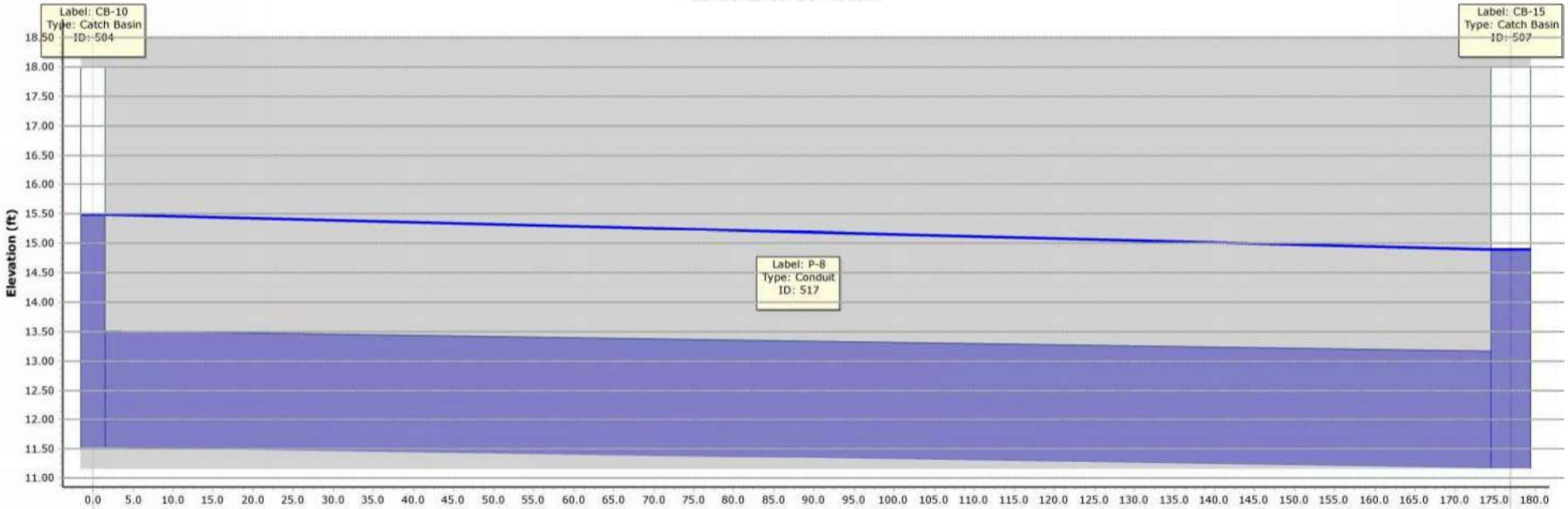
ID\Label	502 \ CB-9	376 \ CH-9 INLET	527 \ CH-9 OUTLET	426 \ CO-11 OUTFALL
Ground (ft)	18.50	19.00	19.00	18.00
Invert (ft)	13.97	13.68	11.59	11.09
Station (ft)	0.0	117.0	886.4	1113.4

CH-1 INLET to CO-7 OUTFALL - Base

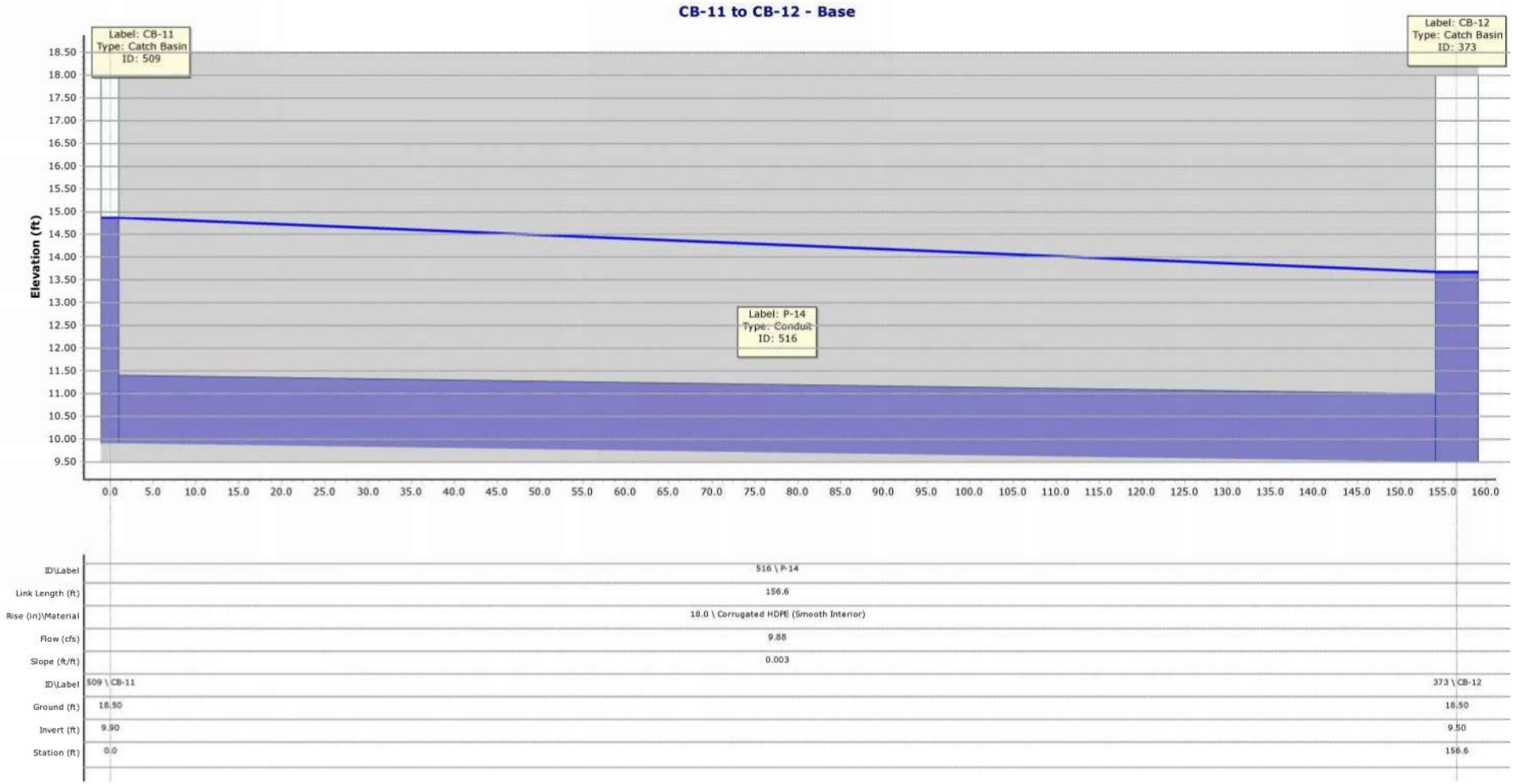


ID\Label		436 \ CH-1	
Link Length (ft)		540.3	
Rise (in)\Material		36.0 \	
Flow (cfs)		37.45	
Slope (ft/ft)		0.002	
ID\Label	129 \ CH-1 INLET		435 \ CO-7 OUTFALL
Ground (ft)	18.00		18.00
Invert (ft)	13.09		12.01
Station (ft)	0.0		540.3

CB-10 to CB-15 - Base

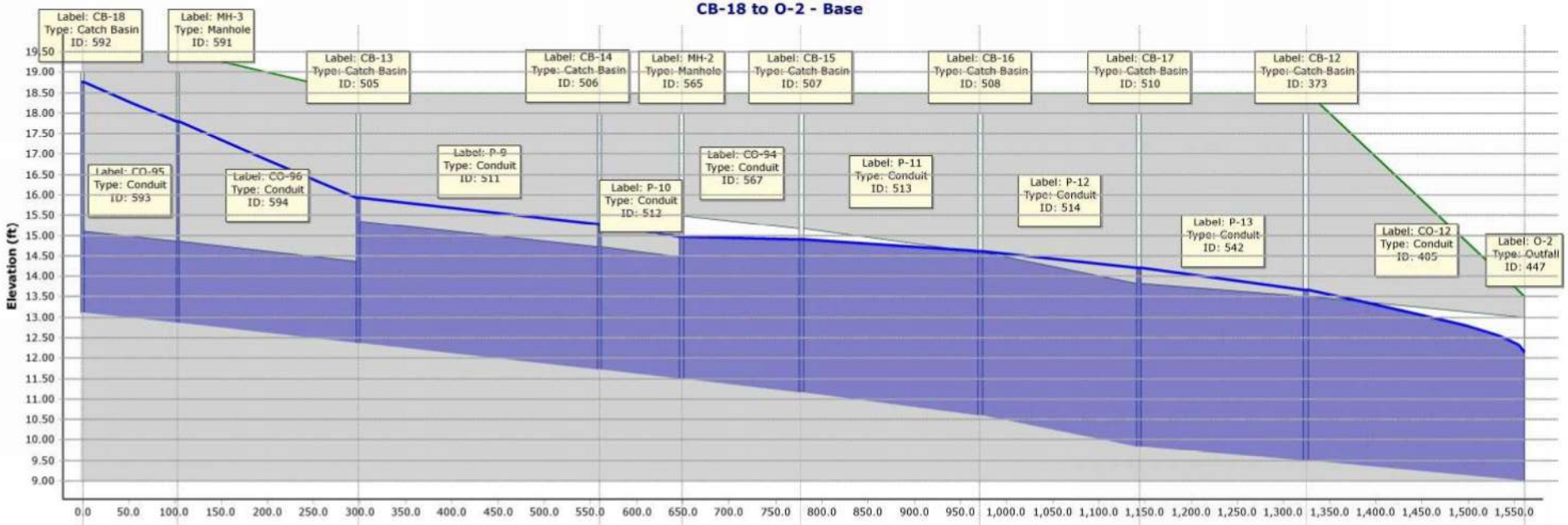


ID\Label		517 \ P-8	
Link Length (ft)		177.0	
Rise (in)\Material		24.0 \ Corrugated HDPE (Smooth Interior)	
Flow (cfs)		14.18	
Slope (ft/ft)		0.002	
ID\Label	504 \ CB-10		507 \ CB-15
Ground (ft)	18.50		18.50
Invert (ft)	11.52		11.16
Station (ft)	0.0		177.0



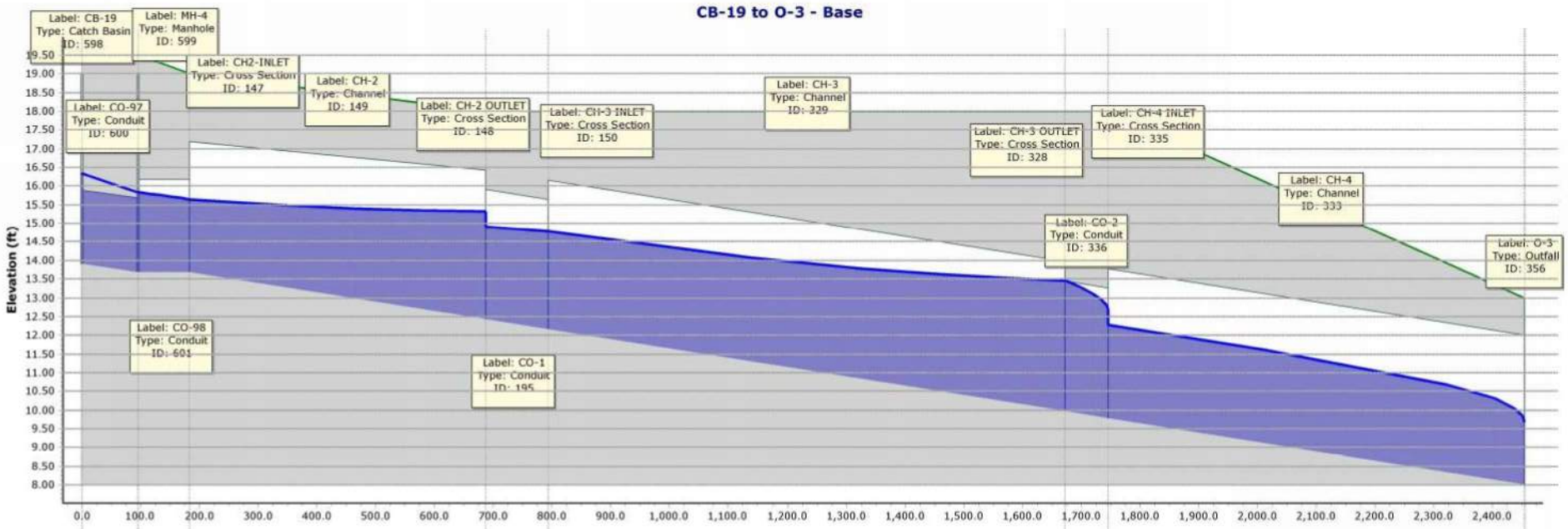
ID\Label	516 \ P-14	
Link Length (ft)	156.6	
Rise (in)\Material	18.0 \ Corrugated HDPE (Smooth Interior)	
Flow (cfs)	9.88	
Slope (ft/ft)	0.003	
ID\Label	509 \ CB-11	373 \ CB-12
Ground (ft)	18.50	18.50
Invert (ft)	9.90	9.50
Station (ft)	0.0	156.6

CB-18 to O-2 - Base



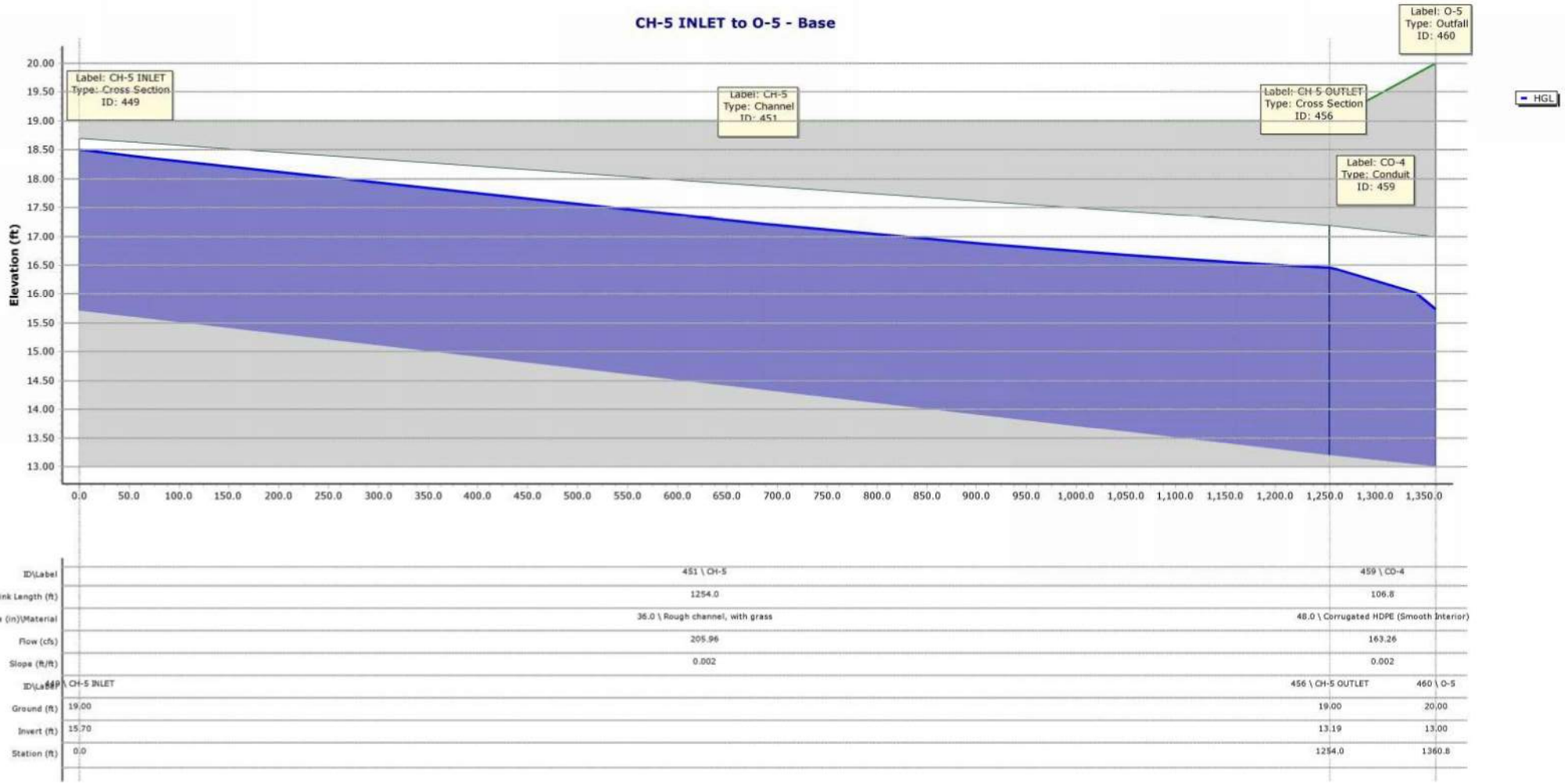
ID\Label	593 \ CO-95	594 \ CO-96	511 \ P-9	512 \ P-10	567 \ CO-94	513 \ P-11	514 \ P-12	542 \ P-13	405 \ CO-12
Link Length (ft)	102.8	196.1	260.8	89.2	128.6	193.8	172.1	180.6	236.9
Rise (in)\Material	24.0 \ Corrugated HDPE (Smooth Interior)	24.0 \ Corrugated HDPE (Smooth Interior)	36.0 \ Corrugated HDPE (Smooth Interior)	36.0 \ Corrugated HDPE (Smooth Interior)	36.0 \ Corrugated HDPE (Smooth Interior)	48.0 \ Corrugated HDPE (Smooth Interior)	48.0 \ Corrugated HDPE (Smooth Interior)	48.0 \ Corrugated HDPE (Smooth Interior)	48.0 \ Corrugated HDPE (Smooth Interior)
Flow (cfs)	23.88	23.88	36.02	42.76	42.76	65.29	73.74	85.03	107.94
Slope (ft/ft)	0.002	0.002	0.002	0.003	0.002	0.003	0.004	0.002	0.002

ID\Label	592 \ CB-18	591 \ MH-3	505 \ CB-13	506 \ CB-14	565 \ MH-2	507 \ CB-15	508 \ CB-16	510 \ CB-17	373 \ CB-12	447 \ O-2
Ground (ft)	19.50	19.50	18.50	18.50	18.50	18.50	18.50	18.50	18.50	13.50
Invert (ft)	13.10	12.85	12.36	11.71	11.48	11.16	10.59	9.82	9.50	9.00
Station (ft)	0.0	102.8	298.9	559.7	648.9	777.6	971.4	1143.5	1324.1	1561.0



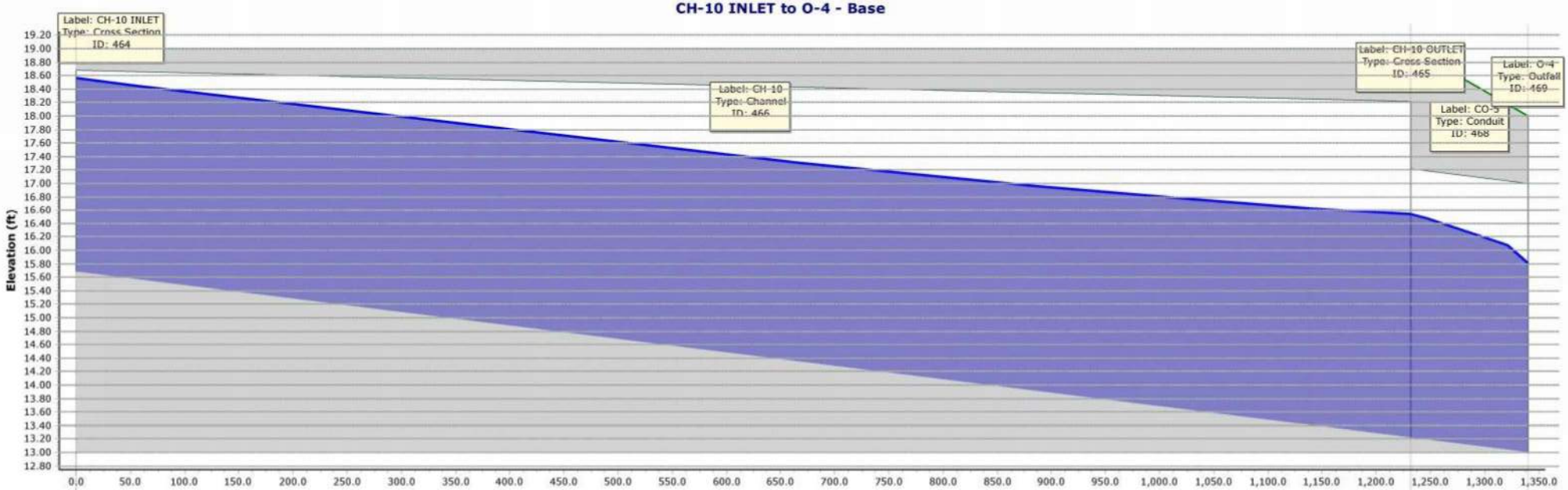
ID\Label	600 \ CO-97	601 \ CO-98	149 \ CH-2	195 \ CO-1	329 \ CH-3	336 \ CO-2	333 \ CH-4
Link Length (ft)	95.0	88.0	504.8	106.2	878.3	73.1	709.1
Rise (in)	24.0 \ Corrugated HDPE (Smooth Interior)	24.0 \ Corrugated HDPE (Smooth Interior)	42.0 \ Rough channel, with grass	42.0 \ Corrugated HDPE (Smooth Interior)	48.0 \ Rough channel, with grass	42.0 \ Corrugated HDPE (Smooth Interior)	48.0 \ Rough channel, with grass
Flow (cfs)	17.78	17.78	86.40	78.61	197.08	177.15	184.15
Slope (ft/ft)	0.002	0.000	0.002	0.003	0.002	0.003	0.002

ID\Label	598 \ CB-19	599 \ MH-4	147 \ CH2-INLET	148 \ CH-2 OUTLET	150 \ CH-3 INLET	328 \ CH-3 OUTLET	335 \ CH-4 INLET	356 \ O-3
Ground (ft)	19.50	19.50	19.00	18.00	18.00	18.00	18.00	13.00
Invert (ft)	13.90	13.68	13.68	12.42	12.15	9.96	9.77	8.00
Station (ft)	0.0	95.0	183.0	687.8	794.0	1672.2	1745.3	2454.4



ID\Label		451 \ CH-5	459 \ CO-4	
Link Length (ft)		1254.0	106.8	
Rise (in)\Material		36.0 \ Rough channel, with grass	48.0 \ Corrugated HDPE (Smooth Interior)	
Flow (cfs)		205.96	163.26	
Slope (ft/ft)		0.002	0.002	
ID\Label	449 \ CH-5 INLET		456 \ CH-5 OUTLET	460 \ O-5
Ground (ft)	19.00		19.00	20.00
Invert (ft)	15.70		13.19	13.00
Station (ft)	0.0		1254.0	1360.8

CH-10 INLET to O-4 - Base



ID\Label		466 \ CH-10		468 \ CO-5	
Link Length (ft)		1231.5		108.5	
Rise (in)\Material		36.0 \ Rough channel, with grass		48.0 \ Corrugated HDPE (Smooth Interior)	
Flow (cfs)		199.52		171.17	
Slope (ft/ft)		0.002		0.002	
ID\Label	464 \ CH-10 INLET			465 \ CH-10 OUTLET	469 \ O-4
Ground (ft)	19.00			19.00	18.00
Invert (ft)	15.68			13.22	13.00
Station (ft)	0.0			1231.5	1340.0

Appendix K. BMP Trains Nutrient Reduction Analysis

SWALE WATER QUALITY TREATMENT CALCULATION													
Drainage Basin ID	Total Area Draining to Swales	Total Drainage Area within Basin	Percentage of drainage area within treatment train	Total Swale Volume Provided (B-02 = CH-5 AND CH-6) (B-01 = CH-1, CH-2, CH-3, CH-4)	Inches of Retention from Treatment Swales	Swale Blocks?	DCIA CN*	Percent Impervious**	Environmental Resource Permit Applicants Handbook V.1 - Appendix O: Mean Annual Mass Removal Efficiencies for 1.25-inches of Retention for Zone 4 by Percent DCIA	Environmental Resource Permit Applicants Handbook V.1 - Appendix O: Mean Annual Mass Removal Efficiencies for 1.25-inches of Retention for Zone 4 by Percent DCIA	TP Adjustment for Percentage of total basin drainage area being treated (BMP Trains Input)	TN Adjustment for Percentage of total basin drainage area being treated (BMP Trains Input)
	AC	AC	%	AC-FT	IN				%	%	%	%
B-01 Swales	79.26	111.20	71.28%	8.79	1.33	Y	95	95	73.30	73.30	52.25	52.25
B-02 Swales	44.51	56.4	78.93%	5.40	1.46	Y	95	95	73.30	73.30	57.85	57.85
*Conservatively assumed a CN of 98 for the combined basins.											^ BMP Trains User Input	
**Conservatively assumed and average impervious percentage of 95% for the combined basins.												

Mean Annual Mass Removal Efficiencies for 1.25-inches of Retention for Zone 4 by Percent DCIA

Non DCIA CN	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
30	97.3	98.0	98.0	97.5	96.8	95.8	94.6	93.3	91.8	90.2	88.5	86.8	85.0	83.2	81.4	79.6	77.9	76.2	74.5	72.9
35	95.9	97.2	97.3	96.9	96.2	95.3	94.2	92.9	91.5	89.9	88.3	86.6	84.8	83.0	81.3	79.5	77.8	76.2	74.5	72.9
40	94.5	96.0	96.3	96.1	95.5	94.6	93.6	92.4	91.1	89.6	88.0	86.3	84.6	82.9	81.2	79.5	77.8	76.1	74.5	72.9
45	92.7	94.6	95.1	95.0	94.6	93.9	93.0	91.8	90.6	89.1	87.6	86.0	84.4	82.7	81.0	79.3	77.7	76.1	74.5	72.9
50	90.7	93.1	93.8	93.8	93.6	93.0	92.1	91.1	89.9	88.6	87.2	85.7	84.1	82.4	80.8	79.2	77.6	76.0	74.5	72.9
55	88.6	91.3	92.2	92.5	92.3	91.9	91.2	90.3	89.2	88.0	86.6	85.2	83.7	82.1	80.6	79.0	77.5	75.9	74.4	72.9
60	86.4	89.3	90.5	90.9	90.9	90.6	90.0	89.2	88.3	87.2	86.0	84.6	83.2	81.8	80.3	78.8	77.3	75.8	74.4	72.9
65	84.3	87.2	88.5	89.1	89.2	89.0	88.6	88.0	87.2	86.3	85.2	84.0	82.7	81.3	79.9	78.5	77.1	75.7	74.3	72.9
70	82.1	85.0	86.4	87.1	87.4	87.3	87.0	86.6	85.9	85.1	84.2	83.1	82.0	80.7	79.5	78.2	76.9	75.6	74.3	72.9
75	80.1	82.7	84.1	84.9	85.3	85.4	85.2	84.9	84.4	83.7	82.9	82.0	81.1	80.0	78.9	77.7	76.6	75.4	74.2	72.9
80	78.2	80.4	81.7	82.5	83.0	83.2	83.1	82.9	82.5	82.0	81.4	80.7	79.9	79.1	78.1	77.1	76.1	75.1	74.0	72.9
85	76.7	78.3	79.3	80.1	80.5	80.7	80.7	80.6	80.4	80.1	79.6	79.1	78.5	77.8	77.1	76.4	75.5	74.7	73.8	72.9
90	75.4	76.3	77.0	77.5	77.8	78.0	78.1	78.0	77.9	77.7	77.5	77.1	76.8	76.3	75.9	75.3	74.8	74.2	73.6	72.9
95	74.2	74.5	74.7	74.9	75.0	75.1	75.1	75.1	75.1	75.0	74.9	74.8	74.6	74.5	74.3	74.0	73.8	73.5	73.3	72.9
98	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.6	73.6	73.6	73.5	73.4	73.4	73.3	73.2	73.1	73.0	72.9

Source: Table excerpted from ERP Applicant's Handbook Volume I, Appendix O, "Mean Annual Mass Removal Efficiencies for 1.25 Inches of Retention for Zone 4 by Percent DCIA" (Reference 1).

Complete Report (not including cost) Ver 4.3.5

Project: JEA SJRPP
Date: 8/11/2026 3:53:17 PM

Site and Catchment Information

Analysis: BMP Analysis

Catchment Name	B-01	B-02	B-03
Rainfall Zone	Florida Zone 4	Florida Zone 4	Florida Zone 4
Annual Mean Rainfall	53.40	53.40	53.40

Pre-Condition Landuse Information

Landuse	Light Industrial: TN=1.200 TP=0.260	Light Industrial: TN=1.200 TP=0.260	Light Industrial: TN=1.200 TP=0.260
Area (acres)	111.25	56.44	28.04
Rational Coefficient (0-1)	0.08	0.08	0.11
Non DCIA Curve Number	71.00	71.00	77.00
DCIA Percent (0-100)	0.00	0.00	0.00
Nitrogen EMC (mg/l)	1.200	1.200	1.200
Phosphorus EMC (mg/l)	0.260	0.260	0.260
Runoff Volume (ac-ft/yr)	37.625	19.088	13.676
Groundwater N (kg/yr)	0.000	0.000	0.000
Groundwater P (kg/yr)	0.000	0.000	0.000
Nitrogen Loading (kg/yr)	55.670	28.243	20.235
Phosphorus Loading (kg/yr)	12.062	6.119	4.384

Post-Condition Landuse Information

Landuse	Light Industrial: TN=1.200 TP=0.260	Light Industrial: TN=1.200 TP=0.260	Light Industrial: TN=1.200 TP=0.260
Area (acres)	111.25	56.44	28.04

Rational Coefficient (0-1)	0.63	0.66	0.11
Non DCIA Curve Number	87.00	81.00	77.00
DCIA Percent (0-100)	68.00	76.00	0.00
Wet Pond Area (ac)	0.00	0.00	0.00
Nitrogen EMC (mg/l)	1.200	1.200	1.200
Phosphorus EMC (mg/l)	0.260	0.260	0.260
Runoff Volume (ac-ft/yr)	311.315	165.593	13.676
Groundwater N (kg/yr)	0.000	0.000	0.000
Groundwater P (kg/yr)	0.000	0.000	0.000
Nitrogen Loading (kg/yr)	460.622	245.012	20.235
Phosphorus Loading (kg/yr)	99.801	53.086	4.384

Catchment Number: 1 Name: B-01

Project: JEA SJRPP
Date: 8/11/2026

Multiple BMP in Series Design Parameters

BMP in Series Number: 1
BMP Type: User Defined BMP

Contributing Catchment Area (acres)	111.250
Provided Nitrogen Treatment Efficiency (%)	52
Provided Phosphorus Treatment Efficiency (%)	52

BMP in Series Number: 2 B-01 Swales
BMP Type: Retention

Retention Depth (in)	2.050
Retention Volume (ac-ft)	19.005

BMP in Series Number: 3
BMP Type: None

BMP in Series Number: 4
BMP Type: None

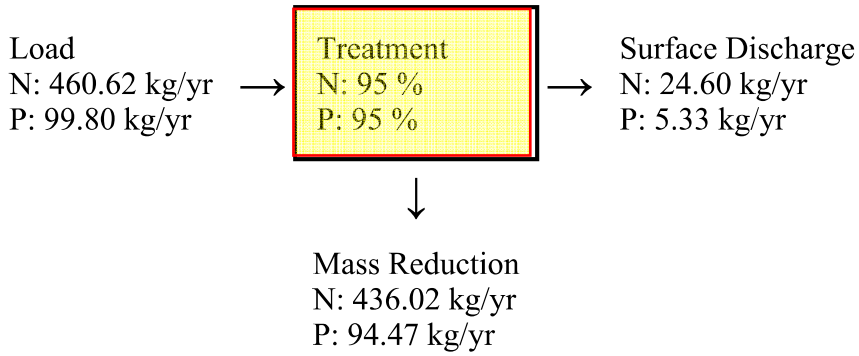
Watershed Characteristics

Catchment Area (acres)	111.25
Contributing Area (acres)	111.250
Non-DCIA Curve Number	87.00
DCIA Percent	68.00
Rainfall Zone	Florida Zone 4
Rainfall (in)	53.40

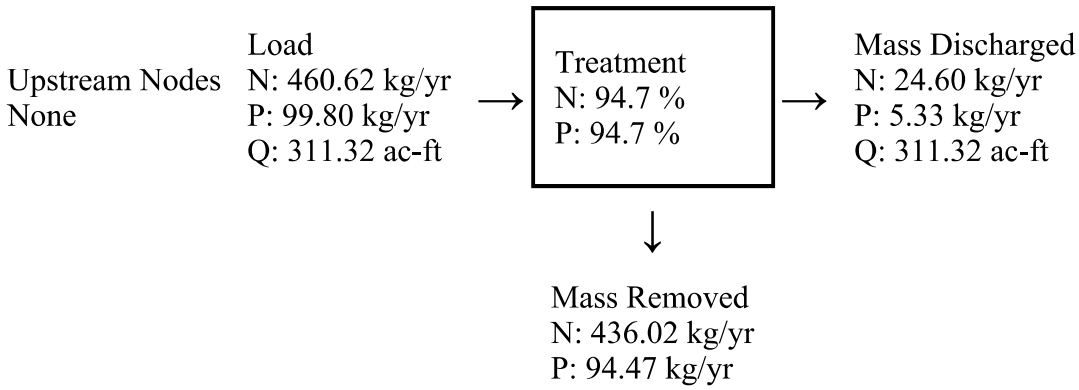
Surface Water Discharge

Required TN Treatment Efficiency (%)	
Provided TN Treatment Efficiency (%)	95
Required TP Treatment Efficiency (%)	
Provided TP Treatment Efficiency (%)	95

Load for Multiple BMP in Series



Load Diagram for Multiple BMP (As Used In Routing)



Catchment Number: 2 Name: B-02

Project: JEA SJRPP
Date: 8/11/2026

Multiple BMP in Series Design Parameters

BMP in Series Number: 1
BMP Type: User Defined BMP

Contributing Catchment Area (acres)	56.440
Provided Nitrogen Treatment Efficiency (%)	58
Provided Phosphorus Treatment Efficiency (%)	58

BMP in Series Number: 2 B-02 Swales
BMP Type: Retention

Retention Depth (in)	1.960
Retention Volume (ac-ft)	9.219

BMP in Series Number: 3
BMP Type: None

BMP in Series Number: 4
BMP Type: None

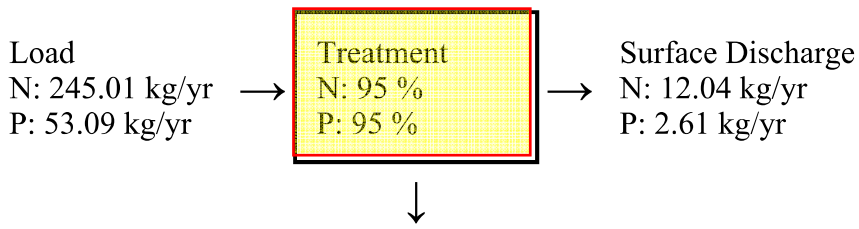
Watershed Characteristics

Catchment Area (acres)	56.44
Contributing Area (acres)	56.440
Non-DCIA Curve Number	81.00
DCIA Percent	76.00
Rainfall Zone	Florida Zone 4
Rainfall (in)	53.40

Surface Water Discharge

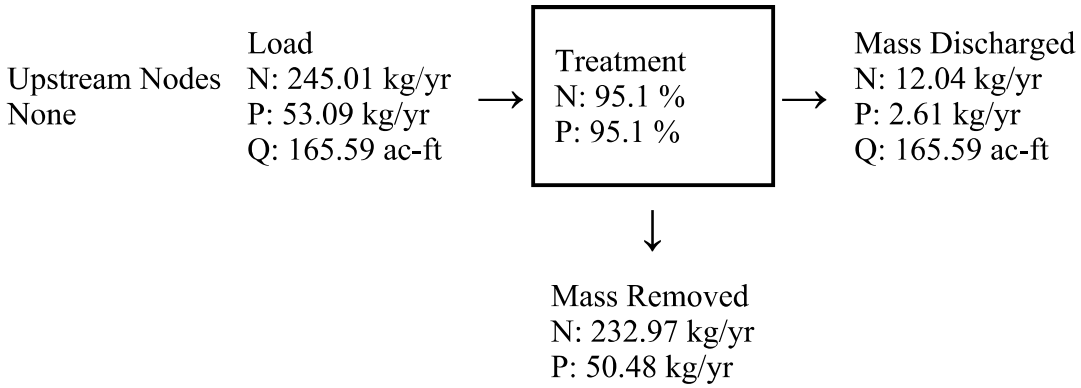
Required TN Treatment Efficiency (%)	
Provided TN Treatment Efficiency (%)	95
Required TP Treatment Efficiency (%)	
Provided TP Treatment Efficiency (%)	95

Load for Multiple BMP in Series



Mass Reduction
N: 232.97 kg/yr
P: 50.48 kg/yr

Load Diagram for Multiple BMP (As Used In Routing)



Catchment Number: 3 Name: B-03

Project: JEA SJRPP
Date: 8/11/2026

None Design

Watershed Characteristics

Catchment Area (acres)	28.04
Contributing Area (acres)	28.040
Non-DCIA Curve Number	77.00
DCIA Percent	0.00
Rainfall Zone	Florida Zone 4
Rainfall (in)	53.40

Surface Water Discharge

Required TN Treatment Efficiency (%)	
Provided TN Treatment Efficiency (%)	
Required TP Treatment Efficiency (%)	
Provided TP Treatment Efficiency (%)	

Media Mix Information

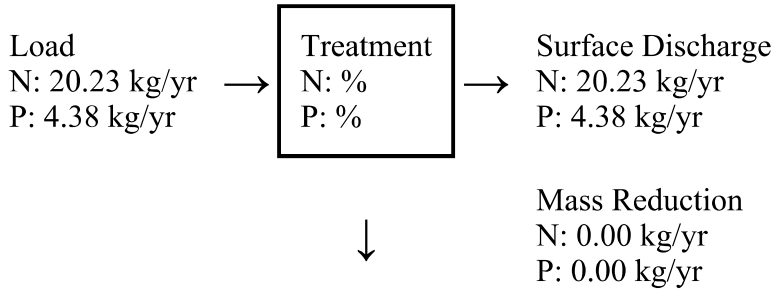
Type of Media Mix	Not Specified
Media N Reduction (%)	0.000

Media P Reduction (%)	0.000

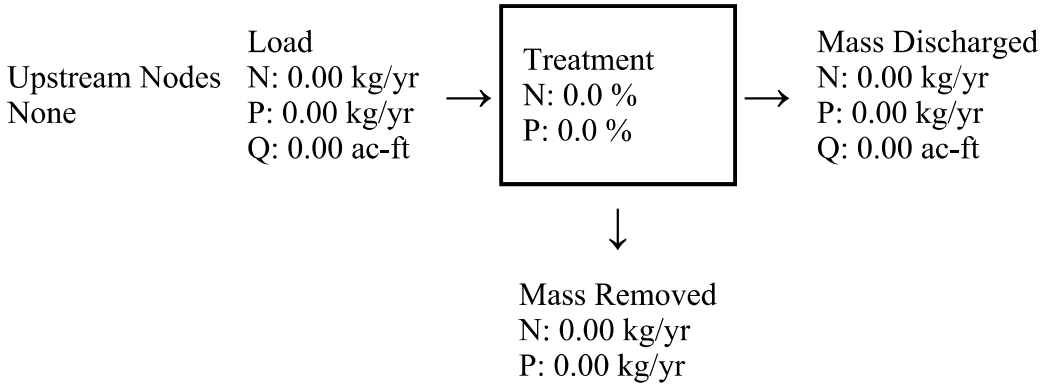
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	0.000
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	0.000
TP Concentration (mg/L)	0.000

Load Diagram for None (stand-alone)



Load Diagram for None (As Used In Routing)



Summary Treatment Report Version: 4.3.5

Project: JEA SJRPP

Analysis Type: BMP Analysis Date:8/11/2026
BMP Types:

Catchment 1 - (B-01) Multiple BMP
Catchment 2 - (B-02) Multiple BMP
Catchment 3 - (B-03) None
Based on % removal values to the nearest percent

Routing Summary
Catchment 1 Routed to Outlet
Catchment 2 Routed to Outlet
Catchment 3 Routed to Outlet

Summary Report

Nitrogen

Surface Water Discharge		
Total N post load	705.63 kg/yr	
Percent N load reduction	95 %	
Provided N discharge load	36.64 kg/yr	80.79 lb/yr
Provided N load removed	668.99 kg/yr	1475.13 lb/yr

Phosphorus

Surface Water Discharge		
Total P post load	152.887 kg/yr	
Percent P load reduction	95 %	
Provided P discharge load	7.939 kg/yr	17.5 lb/yr
Provided P load removed	144.949 kg/yr	319.612 lb/yr

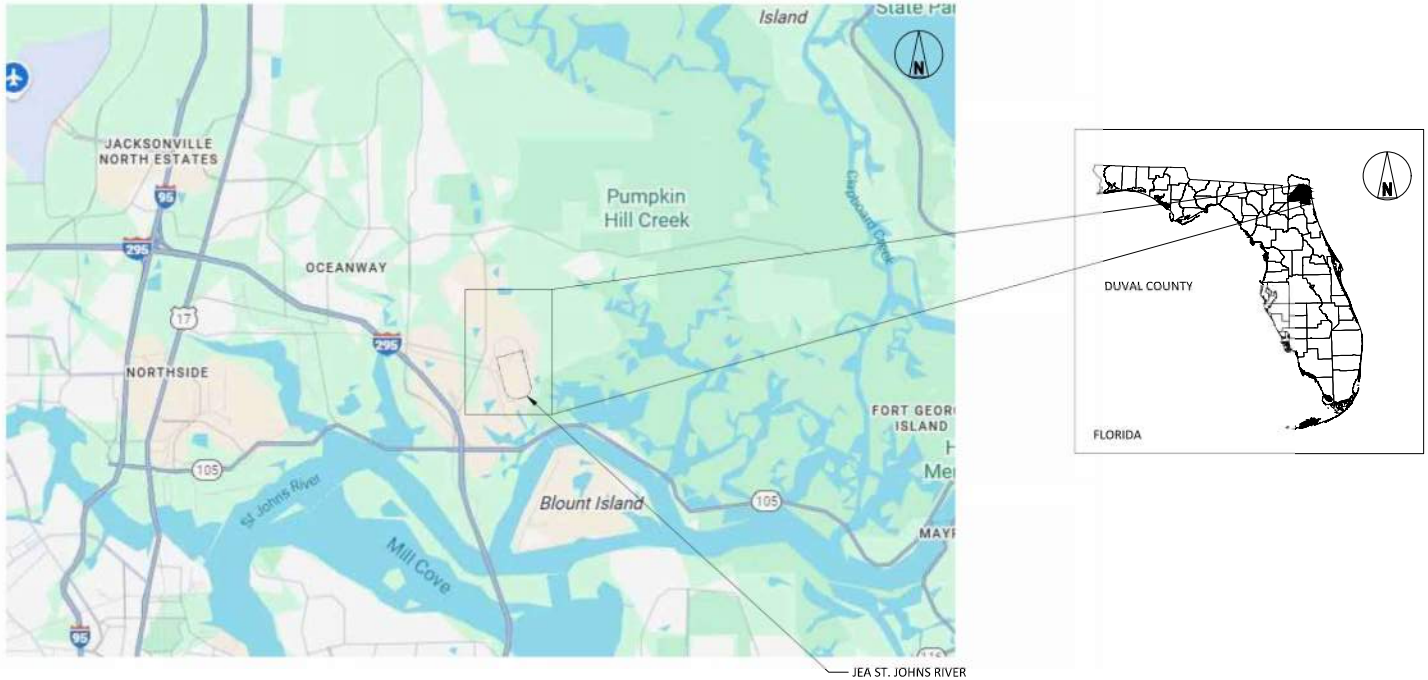
JEA St Johns River Power Park Unit 3 Stormwater Management System Plans

JEA ST. JOHNS RIVER POWER PLANT (SJRPP)
PROJECT UNIT 3
STORMWATER MANAGEMENT SYSTEM PLANS

SECTION 12, 13, TOWNSHIP 1S, RANGE 27E
11201 NEW BERLIN ROAD
CITY OF JACKSONVILLE, DUVAL COUNTY, FLORIDA

INDEX OF PLANS

SHEET NO.	DESCRIPTION
424014-DS-0000	COVER SHEET
424014-DS-1000	OVERALL PLOT PLAN
424014-DS-1001	SITE ARRANGMENT
424014-DS-1101	PRE-DEVELOPMENT STORMWATER MANAGEMENT PLAN-PERMANENT REDEVELOPMENT AREA
424014-DS-1102	PROPOSED STORMWATER MANAGEMENT PLAN-PERMANENT REDEVELOPMENT AREA
424014-DS-1103	CONTACT STORMWATER MANAGEMENT PLAN
424014-DS-1104	PROPOSED STORMWATER MANAGEMENT SECTIONS AND DETAILS
424014-DS-1110	PROPOSED GRADING & DRAINAGE PLAN
424014-DS-1111	GRADING & DRAINAGE PLAN SECTIONS AND DETAILS
424014-DS-1120	EROSION AND SEDIMENT CONTROL PLAN
424014-DS-1121	EROSION CONTROL SECTIONS AND DETAILS



LOCATION MAP

NOT TO SCALE

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NO	DATE	REVISIONS AND RECORD OF ISSUE	DRN	DES	CHK	PDE	APP
3	08/07/2026	ISSUED FOR CLIENT REVIEW	IDM	AEK	OC	JCB	JCB
2	05/01/2026	ISSUED FOR INFORMATION	IDM	AEK	OC	JCB	JCB
1	03/18/2026	ISSUED FOR INFORMATION	IDM	AEK	OC	JCB	JCB
0	02/25/2026	ISSUED FOR INFORMATION	IDM	AEK	OC	JCB	JCB

BLACK & VEATCH CORPORATION
11401 LAMAR AVENUE
OVERLAND PARK, KANSAS 66211
FLORIDA REGISTRATION NO. 8132

BLACK & VEATCH

ENG. DESIGNER	DRAWN
CHECKED	DATE

JEA
SJRPP UNIT 3
COVER SHEET

PROJECT 424014-DS-0000
DRAWING NUMBER
REV 3
CODE
AREA

ANSI E 44x34
USER: JCBARRANCO
PLOTTED: 30 2026 - 7:29 AM
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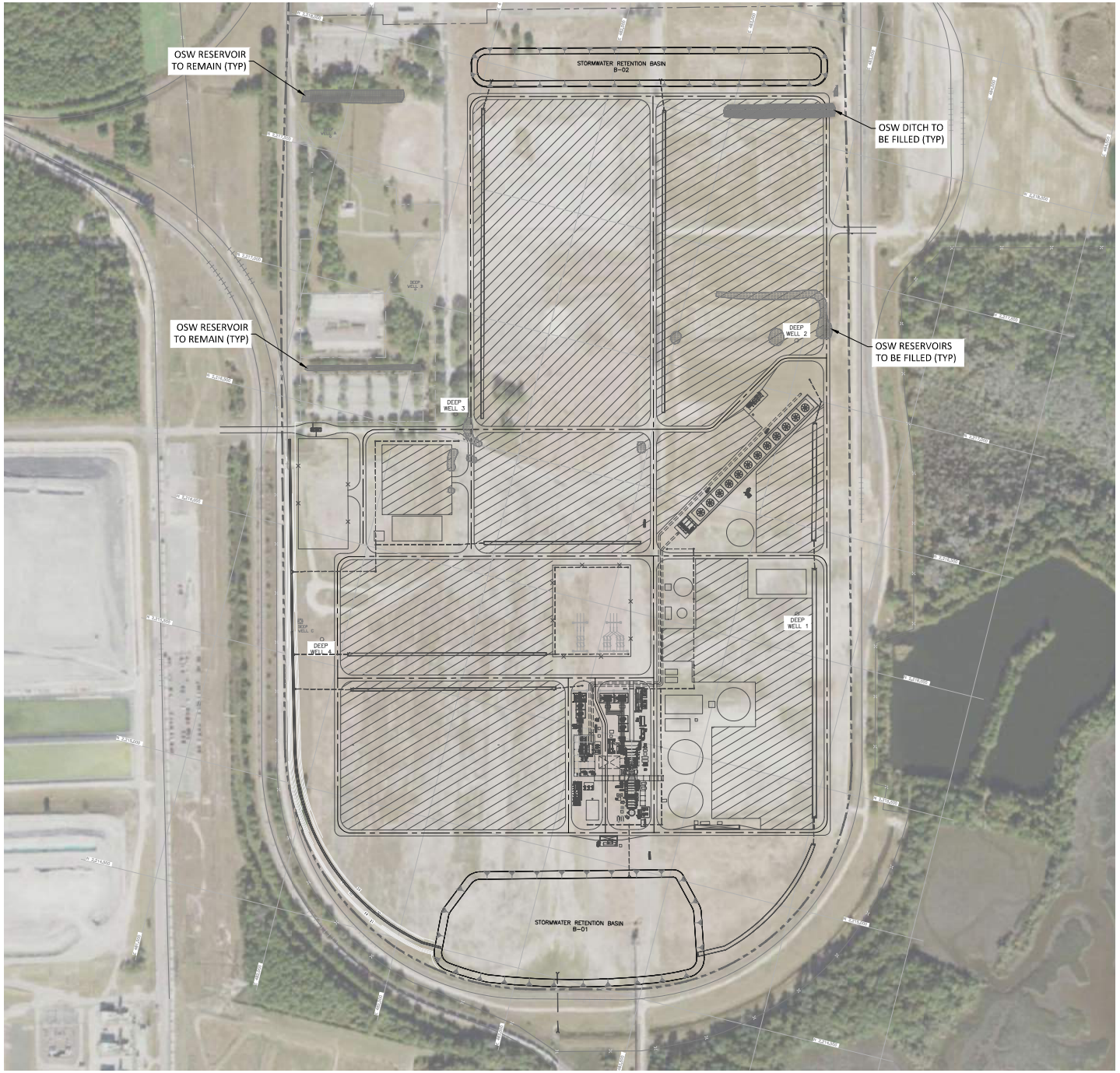

JEA ST JOHNS RIVER POWER PLANT PROJECT

LAND OWNER: JEA

APPLICANT/LESSEE/PROJECT DEVELOPER: JEA

ENGINEER:

JOHN BARRANCO JR, P.E.
BLACK & VEATCH CORPORATION
12740 GRAN BAY PKWY, SUITE 250
JACKSONVILLE, FL 32216

SURVEYOR:

SEE NOTE ON PRE-DEVELOPMENT STORMWATER MANAGEMENT PLAN PERMANENT REDEVELOPMENT AREA (DS-1101) REGARDING SURVEY.

1. PROJECT NAME: JEA SJRPP UNIT 3
2. LOCATION: JACKSONVILLE, FLORIDA
3. LAND USE: EXISTING LAND USE: PUBLIC BUILDINGS AND FACILITIES
   FUTURE LAND USE: INDUSTRIAL SACTUARY
4. PROJECT DESCRIPTION: 706MW NEW COMBINED CYCLE NATURAL GAS FACILITY
5. SEC/TOWN/RANGE: SECTIONS 12, 13, TOWNSHIP 1S, RANGE 27E
6. TOTAL PROPERTY AREA: 1,600 AC
7. TOTAL PROJECT DEVELOPMENT AREA: 194 AC
8. ZONING: PBF-1 (PUBLIC BUILDING AND FACILITIES)
9. FLOOD ZONE: PROJECT LIMITS ARE COVERED UNDER FEMA FIRM MAP NUMBER 12031C0216J EFFECTIVE DATE: NOVEMBER 02, 2018.

"PROJECT LIMITS ARE WITHIN FEMA ZONE X, WITH THE NEAREST ADJACENT ZONE AE HAVING AN ESTABLISHED BFE OF 6FT – NAVD88. THE LOWEST SITE GRADE ELEVATION AROUND EQUIPMENT IS 18FT – NAVD88 THEREFORE SIGNIFICANTLY HIGHER THAN THE NEAREST ESTABLISHED 100 YEAR ELEVATION"

10. UTILITY SERVICE: JEA
11. PROPERTY SETBACKS: NONE (PBF-1 ZONING)
12. MAXIMUM HEIGHT OF STRUCTURE: NONE (PBF-1 ZONING)
13. OTHER SURFACE WATER (OSW) IMPACTS: 1.3 AC
14. PROPOSED: IMPERVIOUS AND PERVIOUS TABLE SUMMARY

OPERATION PHASE SITE ACREAGE AND SURFACING

SUB BASIN	TOTAL AREA		PERVIOUS	IMPERVIOUS*	BASIN SURFACE AREA IMPERVIOUS
	ACRES	% IMPERVIOUS	ACRES	ACRES	ACRES
B-01	111.2	77%	35.6	75.6	10.5
B-02	56.4	85%	13.6	42.8	5.0
B-03**	28.0	28%	20.3	7.7	0.0
Total	195.6	72%	69.5	126.1	15.5

*Impervious areas include equipment areas, storage tanks, laydown areas, roads, and proposed buildings.
**Area to not be modified, CN assumptions taken from the JEA St. Johns River Power Park Decommissioning and Restoration Drainage Analysis Report (Adkinson Engineering, November 2017). Total impervious area estimated based on background imagery.

15. PROPOSED PROJECT LIMITS SURFACING SUMMARY

POST-DEVELOPMENT PROJECT LIMITS SURFACING SUMMARY

SUB BASIN	ACRES	CURVE NUMBER	STORMWATER SYSTEM
B-01	111.2	95	Proposed Pond - B-01
B-02	56.4	94	Proposed Pond - B-02
B-03*	28.0	77	Unmodified Area
Total Drainage Area/ Weighted CN	195.6	92	

*For the purposes of this study, the curve number basis from the JEA St. Johns River Power Park Decommissioning and Restoration Report prepared by Adkinson Engineering, Dated November 30,2017 was utilized.

16. EXISTING PROJECT LIMITS SURFACING SUMMARY

PRE-DEVELOPMENT PROJECT LIMITS SURFACING SUMMARY

SUB BASIN	ACRES	CURVE NUMBER*	STORMWATER SYSTEM
PR-2 MODIFIED	48.0	77	Existing offsite perimeter drainagechannel
PR-3 MODIFIED	34.9	70	Existing offsite perimeter drainagechannel
PR-4 MODIFIED	20.8	77	Existing offsite perimeter drainagechannel
PR-6	91.4	67	Existing offsite perimeter drainagechannel
POND OVERFLOW MODIFIED	0.7	97	Existing offsite perimeter drainagechannel
Total Drainage Area/ Weighted CN	195.8	71	

*For the purposes of this study, the curve number basis from the JEA St. Johns River Power Park Decommissioning and Restoration Drainage Analysis Report (Adkinson Engineering, November 2017) was used for all pre-development basins.

PLANT NORTH
TRUE NORTH
14°

150' 75' 0 150' 300'
1"=150'

NO	DATE	REVISIONS AND RECORD OF ISSUE	DRN	DES	CHK	PDE	APP
3	06/07/2026	ISSUED FOR CLIENT REVIEW	JDM	AEK	CC	JCB	JCB
2	05/01/2026	ISSUED FOR INFORMATION	JDM	AEK	CC	JCB	JCB
1	03/18/2026	ISSUED FOR INFORMATION	JDM	AEK	CC	JCB	JCB
0	03/10/2026	ISSUED FOR INFORMATION	JDM	AEK	CC	JCB	JCB

BLACK & VEATCH CORPORATION
11401 LAMAR AVENUE
OVERLAND PARK, KANSAS 66211
FLORIDA REGISTRATION NO. 8132

BLACK & VEATCH

OWNER	DRAWN
CHECKED	DATE

JEA
SJRPP UNITS 3
OVERALL PLOT PLAN

PROJECT 424014-DS-1000
DRAWING NUMBER
REV 3
CODE
AREA

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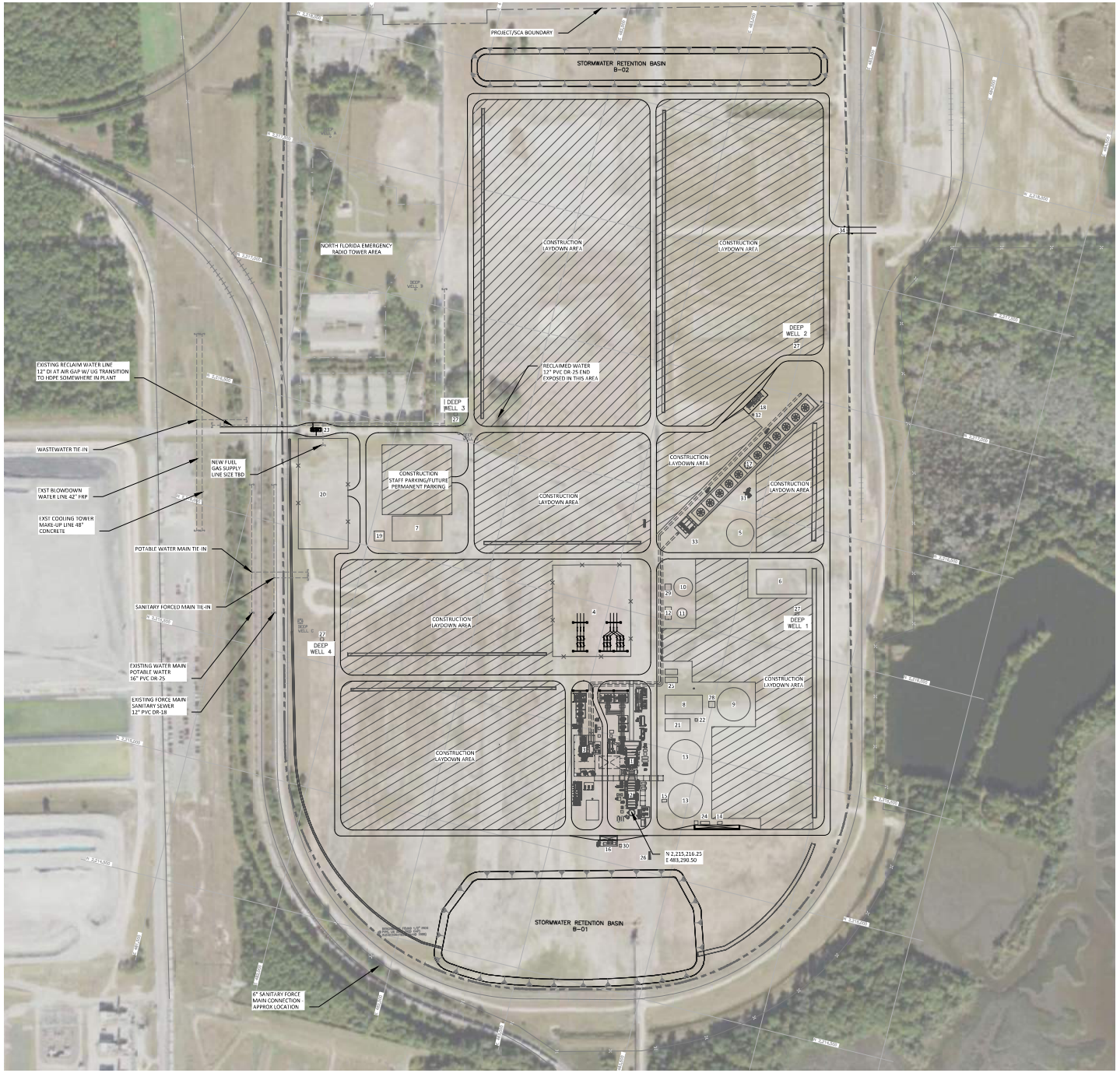
PLOT DATE: 05/14/2026 - 04:15 PM



FACILITIES LEGEND

ID	FACILITY	REMARKS
1	COMBUSTION TURBINE	
2	HEAT RECOVERY STEAM GENERATOR	
3	STEAM TURBINE	
4	COLLECTOR YARD	
5	RECLAIMED WATER TANK	
6	WAREHOUSE/SHOP/MAINTENANCE BUILDING	
7	ADMINISTRATION/CONTROL BUILDING	
8	WATER TREATMENT BUILDING	
9	DEMINERALIZED WATER STORAGE TANK	
10	SERVICE/FIRE WATER STORAGE TANK	
11	FIRE WATER STORAGE TANK	
12	FIRE PROTECTION PUMPS	
13	LIQUID FUEL STORAGE TANK (DOUBLE WALL TANK)	
14	FUEL UNLOADING PUMP SKID	
15	FUEL FORWARDING PUMP SKID	
16	AMMONIA STORAGE TANKS	
17	COOLING TOWER	
18	COOLING TOWER CHEMICAL FEED BUILDING	
19	SANITARY LIFT STATION	
20	PGS M & R YARD	
21	COMPRESSED GAS STORAGE	
22	WATER TREATMENT WASTEWATER COLLECTION SUMP	
23	GUARD HOUSE	
24	EMERGENCY DIESEL GENSET	
25	MOBILE DEMIN TRAILER AREA	
26	OIL/WATER SEPARATOR	
27	DEEP WELLS	
28	DEMINERALIZED WATER PUMP SKID	
29	SERVICE WATER PUMP SKID	
30	RUNOFF SUMP	
31	TRANSFORMER & PDC	
32	COOLING TOWN CHEM UNLOADING SUMP	
33	PLANT DRAINS OIL WATER SEPARATOR	
34	BADGE ACCESSIBLE SECURITY GATE	

GENERAL NOTES

1. THE EQUIPMENT LAYOUT SHOWN IS CONCEPTUAL IN NATURE AND IS INTENDED SOLELY FOR PROJECT PLANNING AND PERMITTING. IT SHOULD NOT BE USED AS A FINAL DESIGN OR ANY CONSTRUCTION IMPLEMENTATION PURPOSES. ALL DIMENSIONS, ELEVATIONS, EQUIPMENT LAYOUTS OR PLAINMETRIC FEATURES SHOWN ON THIS DRAWING ARE SUBJECT TO CHANGE AND BE VERIFIED BY A QUALIFIED ENGINEER BEFORE ANY APPLICATION.
2. VERTICAL DATUM IS BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 - NAVD88 (US FEET)
3. HORIZONTAL DATUM IS BASED ON FLORIDA STATE PLANE, EAST ZONE - NAD83 (US FEET)

LEGEND

- NEW EQUIPMENT
- PROPOSED PROJECT BOUNDARY
- NEW FENCE
- LAYDOWN AREA

PLANT NORTH 14° TRUE NORTH

1"=150'

NO	DATE	REVISIONS AND RECORD OF ISSUE	DRN	DES	CHK	PDI	APP
2	08/07/2026	ISSUED FOR CLIENT REVIEW	JDA	AFK	OC	JCB	JCB
1	03/18/2026	ISSUED FOR INFORMATION	JDA	AFK	OC	JCB	JCB
0	09/10/2026	ISSUED FOR INFORMATION	JDA	AFK	OC	JCB	JCB

BLACK & VEATCH CORPORATION
11401 LAMAR AVENUE
OVERLAND PARK, KANSAS 66211
FLORIDA REGISTRATION NO. 8132

DRAWN: DJH | CHECKED: DAS | DATE

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PROJECT: JEA SJRPP UNITS 3
1X1 COMBINED CYCLE SITE ARRANGEMENT

DRAWING NUMBER: 424014-DS-1001
REV: 2
CODE:
AREA:

DWG 11x17
09/24/2025 16:15 PM1

PRE-DEVELOPMENT PROJECT LIMITS SURFACING SUMMARY			
SUB BASIN	ACRES	CURVE NUMBER*	STORMWATER SYSTEM
PR-2 MODIFIED	48.0	77	Existing offsite perimeter drainage channel
PR-3 MODIFIED	34.9	70	Existing offsite perimeter drainage channel
PR-4 MODIFIED	20.8	77	Existing offsite perimeter drainage channel
PR-6	91.4	67	Existing offsite perimeter drainage channel
POND OVERFLOW MODIFIED	0.7	97	Existing offsite perimeter drainage channel
Total Drainage Area/ Weighted CN	195.8	71	

*For the purposes of this study, the curve number from the JEA St. Johns River Power Park Decommissioning and Restoration Drainage Analysis Report (Adkinson Engineering, November 2017) was used as the basis for all pre-development basins.

NOTES

1. ELEVATIONS ARE REPORTED AS NAVD88.
2. ALL EXISTING FEATURES SHOWN ON THIS DRAWING ARE REFERENCED FROM JEA PROVIDED AS-BUILT SURVEY: SJRPP POST-DEMOLITION UNDERGROUND STRUCTURES DATED 3-5-22.
3. EXISTING ELEVATIONS ARE REFERENCED FROM JEA PROVIDED CONSTRUCTION AS-BUILT SURVEY: 2021-1389-CLIENT NO ZONES DWG, DATED 2021.
4. FEMA 100 YEAR FLOOD ELEVATIONS ARE BASED ON THE NATIONAL FLOODINSURANCE FIRM MAP NO: 12031C0210J EFFECTIVE DATE OF 11/01/2018. THE PROPOSED PROJECT DEVELOPMENT IS WITHIN FEMA ZONE X, HOWEVER ZONE AE IS DIRECTLY ADJACENT TO THE SITE AND SHOWN FOR REFERENCE.
5. THE PERIMETER CHANNEL IS THE LINEAR POINT OF ANALYSIS FOR PRE- AND POST-DEVELOPMENT CONDITIONS.
6. THIS EXISTING POND IS CURRENTLY THE PERMITTED SJRA OUTFALL LOCATION. THE EXISTING POND DISCHARGES TO BROWNS CREEK. FOR ADDITIONAL INFORMATION REGARDING THIS OUTFALL LOCATION AND ASSOCIATED PERMITTING UNITS, REFER TO THE JEA ST. JOHNS RIVER POWER PARK DECOMMISSIONING AND DEMOLITION PLANS PREPARED BY ADKINSON ENGINEERING, DATED NOVEMBER 30, 2017.
7. THE PROJECT UTILIZES THE PROJECT BOUNDARY AS THE HYDROLOGIC CONTROL POINT FOR PRE- AND POST-DEVELOPMENT STORMWATER CALCULATIONS. PROPOSED PROJECT IMPROVEMENTS ARE LOCATED UPSTREAM OF THIS CONTROL POINT. NO MODIFICATIONS ARE PROPOSED BETWEEN THE PROJECT BOUNDARY AND THE EXISTING PERMITTED OUTFALL; ACCORDINGLY, BASED ON THE PROPOSED CONDITIONS, PRE- AND POST-DEVELOPMENT DISCHARGE CRITERIA ARE DEMONSTRATED TO BE MET AT THE EXISTING PERMITTED OUTFALL.

LEGEND

- PRE-DEVELOPMENT BASIN LINEWORK
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- PROPOSED PROJECT BOUNDARY
- GRADE SURFACE FLOW INDICATOR
- FEMA 100-YEAR FLOOD ZONE
- OSW RESERVOIRS
- OSW DITCHES
- (OF) BASIN OUTFALL LOCATION

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NO	DATE	REVISIONS AND RECORD OF ISSUE	DRN	DES	CHK	PDS	APP
7	08/07/2024	ISSUED FOR CLIENT REVIEW	JDM	ACK	CC	JCB	JCB
2	05/01/2024	ISSUED FOR INFORMATION	JDM	ACK	CC	JCB	JCB
1	03/18/2024	ISSUED FOR INFORMATION	JDM	ACK	CC	JCB	JCB
0	02/12/2024	ISSUED FOR INFORMATION	JDM	ACK	CC	JCB	JCB

SCALE 1"=200'

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JEA
SJRPP UNIT 3
PRE-DEVELOPMENT STORMWATER MANAGEMENT PLAN-
PERMANENT REDEVELOPMENT AREA

PROJECT	DRAWING NUMBER	REV
	424014-DS-1101	3
CODE		
AREA		

ANDY E 6/6/24
JOHN C BARRANCO, III 2023.12.27 15:02:05-05'00'
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POST-DEVELOPMENT PROJECT LIMITS SURFACING SUMMARY

SUB BASIN	ACRES	CURVE NUMBER	STORMWATER SYSTEM
B-01	111.2	95	Proposed Pond - B-01
B-02	56.4	94	Proposed Pond - B-02
B-03*	28.0	77	Unmodified Area
Total Drainage Area/ Weighted CN	195.7	92	

*For the purposes of this study, the curve number basis from the JEA St. Johns River Power Park Decommissioning and Restoration Report prepared by Atkinson Engineering, Dated November 30,2017 was utilized.

WATER QUALITY ATTENUATION SUMMARY

	25-Year, 24-Hour Water Quality Attenuation Check (cfs)	Mean Annual 24-Hour Storm Water Quality Attenuation Check (cfs)
Pre-Development - Combined Basins (PR-2, PR-3, PR-4, PR-6, POND OVERFLOW)	342.57	135.19
Post-Development - Combined Basins - No Pond (B-01, B-02, B-03)	598.11	315.88
Post-Development - Combined Basins - With Ponds (B-01, B-02, B-03)	203.19	52.55

B-01 Dry Retention Basin Summary Table - Summary

Total Area Draining to Pond (ac)	=	111.2
Rainfall Depth (25-yr, 24-hr) in	=	8.95
Rainfall Depth (Mean Annual 24-hr) in	=	5
Min. Dry Retention Depth (in)	=	1.76
Min. Dry Retention Volume (ac-ft)	=	16.32

Dry Retention Basin Summary Table

Basin Side Slopes	=	4
	Elevation (ft)	Cumulative Volume (cf)*
Bottom of Sand Medium (ft)	5.6	0
Top of Sand Medium (ft)	6.6	0
Bottom of Basin Elevation	6.80	0
Elevation at Minimum Required Dry Retention Storage (ft)	8.40	709401
Rectangular Weir Elevation	8.50	826385
25-Year, 24-Hr Duration Storm Peak	11.36	2015445
Riser Crest Elevation (inlet grate) (ft)	11.50	2210723
Emergency Overflow Weir	12.50	2452010
100-Year, 24-Hr Duration Storm Peak (BV Check)	13.01	2694901
Top of Embankment	13.50	2904344

Dry Retention Basin Conclusions

Freeboard for 25-Year Design High Water and Top of Embankment (ft)	=	2.13	PASS	Min.	1	ft
Check to Ensure 100-Year Design High Water does not Overtop Embankment (ft)	=	13.01	PASS	Max.	13.50	ft
Freeboard for Top of Riser and Spillway Crest (ft)	=	1.30	PASS	Min.	1	ft
25-Year Design Highwater Check (ft)	=	11.35	PASS	Max.	12.50	ft
Dry Retention Volume (ac-ft)	=	18.97	PASS	Min.	16.32	ac-ft
Recovery Time to Recover Specified Dry Retention Volume (hrs)**	=	51.08	PASS	Max.	96	hrs
25-Year, 24-Hour Peak Flow (cfs)	=	53.88				
Mean Annual 24-Hour Peak Flow (cfs)	=	9.99				

*Volumes reported on the table do not account for any soil storage provided by the sand infiltration medium.

B-02 Dry Retention Basin Summary Table - Summary

Total Area Draining to Pond (ac)	=	56.4
Rainfall Depth (25-yr, 24-hr) in	=	8.95
Rainfall Depth (Mean Annual 24-hr) in	=	5
Min. Dry Retention Depth (in)	=	1.70
Min. Dry Retention Volume (ac-ft)	=	8.00

Dry Retention Basin Summary Table

Basin Side Slopes	=	4
	Elevation (ft)	Cumulative Volume (cf)*
Bottom of Sand Medium (ft)	11	0
Top of Sand Medium (ft)	12	0
Bottom of Basin Elevation	12.00	0
Elevation at Minimum Required Dry Retention Storage (ft)	14.20	350024
Rectangular Weir Elevation	14.50	453,174
25-Year, 24-Hr Duration Storm Peak	16.44	765,358
Riser Crest Elevation (inlet grate) (ft)	16.00	674,654
Emergency Overflow Weir	17.00	878,874
100-Year, 24-Hr Duration Storm Peak (BV Check)	17.40	961,530
Top of Embankment	18.00	1,090,434

Dry Retention Basin Conclusions

Freeboard for 25-Year Design High Water and Top of Embankment (ft)	=	1.56	PASS	Min.	1	ft
Check to Ensure 100-Year Design High Water does not Overtop Embankment (ft)	=	17.40	PASS	Max.	18.00	ft
Freeboard for Top of Riser and Spillway Crest (ft)	=	1.00	PASS	Min.	1	ft
25-Year Design Highwater Check (ft)	=	16.44	PASS	Max.	17.00	ft
Dry Retention Volume (ac-ft)	=	8.23	PASS	Min.	8.00	ac-ft
Recovery Time to Recover Specified Dry Retention Volume (hrs)**	=	10.75	PASS	Min.	96	hrs
25-Year, 24-Hour Peak Flow (cfs)	=	51.02				
Mean Annual 24-Hour Peak Flow (cfs)	=	1.12				

*Volumes reported on the table do not account for any soil storage provided by the sand infiltration medium.

NOTES

1. ELEVATIONS ARE REPORTED AS NAVD88.
2. TOP OF CONCRETE/FINISHED FLOOR ELEVATION IS 19.00 NAVD 88, UNLESS NOTED OTHERWISE.
3. ALL AREAS WITHIN LOOP ROAD OF EQUIPMENT AND BUILDING AREAS TO BE AGGREGATE SURFACED. ALL OTHER AREAS NOT INDICATED WITH SURFACING SHALL BE SEEDED/SODDED WITH BAHIA.
4. ENERGY DISSIPATORS TO BE DESIGNED BY EPC CONTRACTOR TO NON-ERODIBLE DISCHARGE VELOCITIES.
5. TEMPORARY CRAFT PARKING WILL BE AGGREGATE SURFACED DURING CONSTRUCTION AND WILL REMAIN IN PLACE AFTER CONSTRUCTION. THE IMPERVIOUS SURFACING HAS BEEN INCLUDED AS PART OF THE PERMANENT STORMWATER SYSTEM.
6. PROPOSED POND OUTLET STRUCTURE WILL BE INSTALLED AT THE EXISTING CULVERT OUTLET LOCATION. THERE IS NO PROPOSED MODIFICATION TO THE EXISTING CULVERT SIZE AND/OR INVERT ELEVATION.
7. THE PERIMETER CHANNEL IS THE LINEAR POINT OF ANALYSIS FOR PRE- AND POST- DEVELOPMENT CONDITIONS.
8. REFER TO 424014-DS-1111 FOR GRADING AND DRAINAGE DETAILS.
9. REFER TO 424014-DS-1104 FOR STORMWATER MANAGEMENT DETAILS.
10. STORMWATER RETENTION BASINS HAVE BEEN DESIGNED BASED ON A SOIL INFILTRATION RATE OF 0.25 AND 0.8 IN/HR FOR B-01 AND B-02 RESPECTIVELY. THE CONTRACTOR SHALL PROTECT BASINS AREAS FROM SEDIMENT INFLOW DURING CONSTRUCTION AND SHALL REMOVE ANY ACCUMULATED SEDIMENT FROM THE BASINS UPON COMPLETION OF CONSTRUCTION. PRIOR TO PROJECT CLOSEOUT, THE CONTRACTOR SHALL PERFORM FIELD INFILTRATION TESTING WITHIN EACH STORMWATER RETENTION BASIN TO VERIFY THAT A MINIMUM INFILTRATION RATE OF 0.25 AND 0.8 IN/HR FOR B-01 AND B-02 RESPECTIVELY IS ACHIEVED.
11. THIS EXISTING POND IS CURRENTLY THE PERMITTED SCA OUTFALL LOCATION. THE EXISTING POND DISCHARGES TO BROWNS CREEK. FOR ADDITIONAL INFORMATION REGARDING THIS OUTFALL LOCATION AND ASSOCIATED PERMITTING LIMITS, REFER TO THE JEA ST. JOHNS RIVER POWER PARK DECOMMISSIONING AND DEMOLITION PLANS PREPARED BY ATKINSON ENGINEERING, DATED NOVEMBER 30, 2017.
12. ALL EXISTING DITCHES AND RESERVOIRS WITHIN THE PROJECT LIMITS OF DISTURBANCE WILL BE FILLED PER GRADING PLANS SHOWN ON 424014-DS-1110. ANY OTHER SURFACE WATERS OUTSIDE OF LOD WILL REMAIN IN PLACE UNDISTURBED.

LEGEND

- PROPOSED STORM WATER DRAINAGE AREA
- PROPOSED PROJECT BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- CONSTRUCTION/ MAINTENANCE USE AREAS
- CATCH BASIN INLET
- MANHOLE
- DRY RETENTION BASIN OUTFALL STRUCTURE
- GRADE SURFACE FLOW INDICATOR
- STORMWATER CULVERT
- PROPOSED STORMWATER POND OUTFALL LOCATION
- RIPRAP
- CFS CHECK DAM

NO	DATE	REVISIONS AND RECORD OF ISSUE	DRN	DES	CHK	PDE	APP
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SJRPP UNIT 3
PROPOSED STORM WATER MANAGEMENT PLAN - PERMANENT REDEVELOPMENT AREA

PROJECT 424014-DS-1102 | DRAWING NUMBER | REV 3
CODE | AREA

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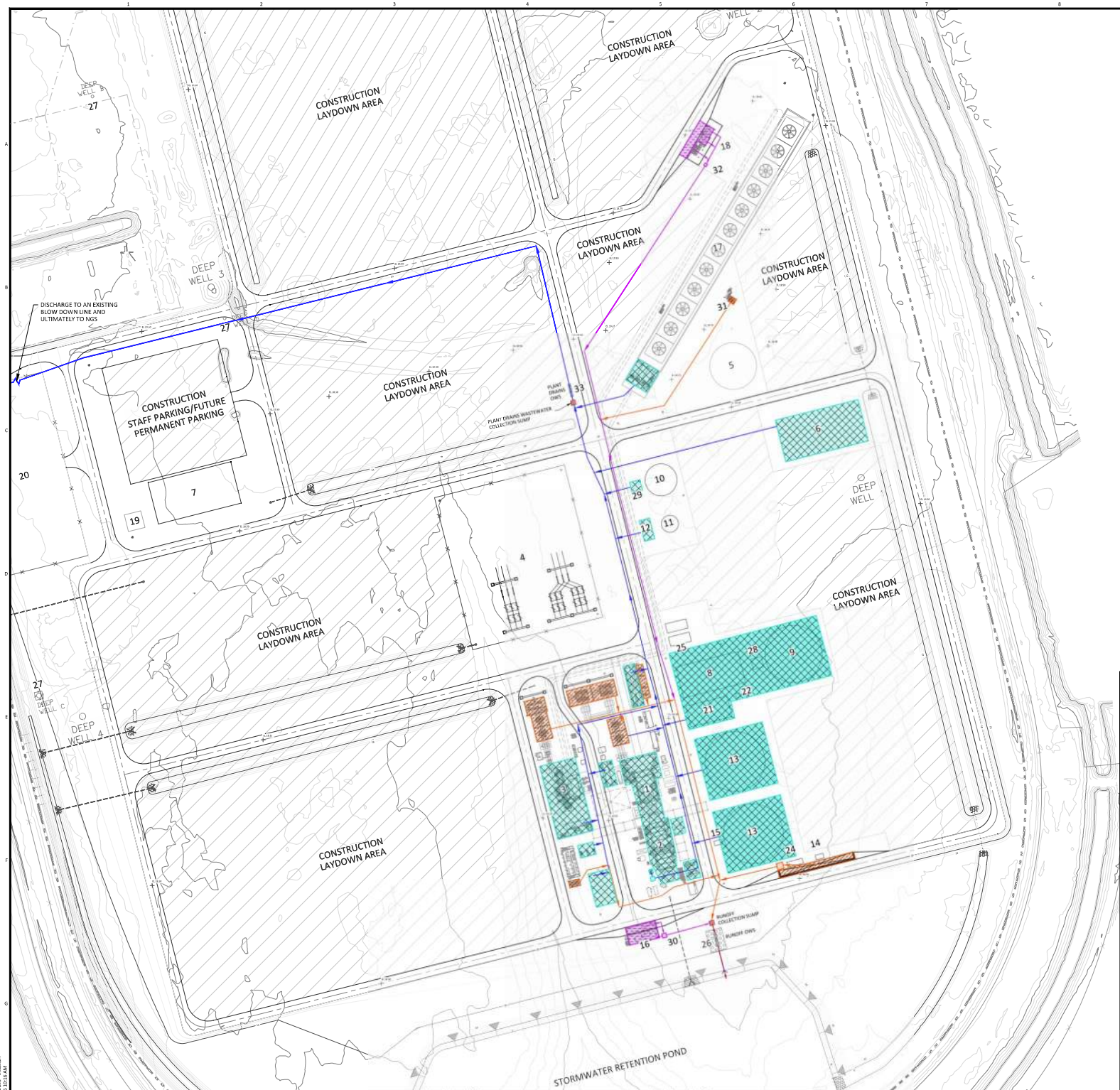

FACILITIES LEGEND

ID	FACILITY	REMARKS
1	COMBUSTION TURBINE	
2	HEAT RECOVERY STEAM GENERATOR	
3	STEAM TURBINE	
4	COLLECTOR YARD	
5	RECLAIMED WATER TANK	
6	WAREHOUSE/SHOP/MAINTENANCE BUILDING	
7	ADMINISTRATION/CONTROL BUILDING	
8	WATER TREATMENT BUILDING	
9	DEMINERALIZED WATER STORAGE TANK	
10	SERVICE/FIRE WATER STORAGE TANK	
11	FIRE WATER STORAGE TANK	
12	FIRE PROTECTION PUMPS	
13	LIQUID FUEL STORAGE TANK (DOUBLE WALL TANK)	
14	FUEL UNLOADING PUMP SKID	
15	FUEL FORWARDING PUMP SKID	
16	AMMONIA STORAGE TANKS	
17	COOLING TOWER	
18	COOLING TOWER CHEMICAL FEED BUILDING	
19	SANITARY LIFT STATION	
20	PGS M & R YARD	
21	COMPRESSED GAS STORAGE	
22	WATER TREATMENT WASTEWATER COLLECTION SUMP	
23	GUARD HOUSE	
24	EMERGENCY DIESEL GENSET	
25	MOBILE DEMIN TRAILER AREA	
26	OIL/WATER SEPARATOR	
27	EXISTING DEEP WELLS	
28	DEMINERALIZED WATER PUMP SKID	
29	SERVICE WATER PUMP SKID	
30	RUNOFF SUMP	
31	RO REJECTS SUMP (INSIDE OF WATER TREATMENT BUILDING)	
32	COOLING TOWN CHEM UNLOADING SUMP	
33	PLANT DRAINS OIL WATER SEPARATOR	
34	TRANSFORMER & PDC	

NOTES

1. THIS DRAWING IS INTENDED TO CONVEY THE PROJECT'S NON-CONTACT STORMWATER DESIGN PHILOSOPHY. AREAS SHOWN OR IMPLIED AS NON-CONTACT STORMWATER ARE BASED ON CONCEPTUAL LAYOUT AND INTENDED OPERATIONAL ASSUMPTIONS AT THIS EARLY DESIGN STAGE. FINAL DETERMINATION OF CONTACT VS NON-CONTACT STORMWATER AREAS, INCLUDING IDENTIFICATION OF EQUIPMENT AREAS PROVIDING LOCAL SECONDARY CONTAINMENT VERSUS AREAS THAT WILL USE AN OIL/WATER SEPARATOR AS THE SECONDARY CONTAINMENT CONTROL, SHALL BE CONFIRMED AND REFINED DURING DETAILED DESIGN. FINAL DESIGN SHALL BE BASED ON EQUIPMENT SELECTION, MANUFACTURER REQUIREMENTS, REGULATORY AGENCY COORDINATION, AND OPERATIONAL CONSIDERATIONS.
2. OILY WATER WASTE DRAINS AND CONTACT STORMWATER SHALL BE DESIGNED, CONVEYED, AND MANAGED IN COMPLIANCE WITH EPA 40 CFR PART 112 SPILL PREVENTION, CONTROL, AND COUNTERMEASURE (SPCC) REGULATIONS AND APPLICABLE STATE OF FLORIDA REQUIREMENTS, INCLUDING FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) INDUSTRIAL STORMWATER REGULATIONS AND THE FDEP NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) INDUSTRIAL MULTI - SECTOR GENERIC PERMIT (MSGP), AS APPLICABLE.
3. AREAS WHICH CONTRIBUTE RUNOFF TO THE CONTACT WATER SYSTEM SHALL BE CONVEYED TO THE OIL/WATER SEPARATOR AND DISCHARGED TO THE STORMWATER RETENTION POND AT <50 PPM OR FREE OILS.
4. ALL PERMANENT PAVING LOTS WILL BE ROUTED TO THE STORMWATER RETENTION POND, WITH DISCHARGE CONTROLLED BY AN OIL SKIMMER INSTALLED AT THE OUTFALL STRUCTURE.
5. OIL CONTENT METERING IS TO BE PROVIDED ON THE DISCHARGE OF EACH OIL/WATER SEPARATOR (OWS). THE METER SHALL CONTINUOUSLY MONITOR EFFLUENT OIL CONCENTRATION AND PROVIDE AN ALARM SIGNAL TO THE PLANT DCS WHEN OIL CONCENTRATION APPROACHES 15 PPM. UPON ALARM, PLANT OPERATORS SHALL ISOLATE THE OWS DISCHARGE BY CLOSING THE DISCHARGE ISOLATION VALVE AND EVALUATE THE SYSTEM FOR MAINTENANCE, CLEANING, OR OTHER CORRECTIVE ACTIONS NECESSARY TO REDUCE OIL CONCENTRATION TO ACCEPTABLE OPERATING LEVELS PRIOR TO RESTORING DISCHARGE.

LEGEND

- SECONDARY CONTAINMENT OR BUNDED AREAS THAT FULLY CONTRIBUTE TO CONTACT STORMWATER
- AREAS THAT CONTAIN OILY WASTEWATER BELL-UPS OR FLOOR DRAIN, BUT THE FULL AREA DOES NOT CONTRIBUTE TO CONTACT STORMWATER
- CHEMICAL CONTAINMENT AREAS WITH LOCAL SECONDARY CONTAINMENT
- OIL/WATER SEPARATOR
- CONSTRUCTION LAYDOWN AREA
- CONTACT STORM WATER FLOW INDICATOR

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0	02/10/2026	ISSUED FOR INFORMATION	JDW	ACB	OC	JCB	JCB

SCALE 1"=80'

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PROJ. MANAGER	
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CONTACT STORMWATER MANAGEMENT PLAN

PROJECT	424014-DS-1103
DRAWING NUMBER	
REV	3
CODE	
AREA	

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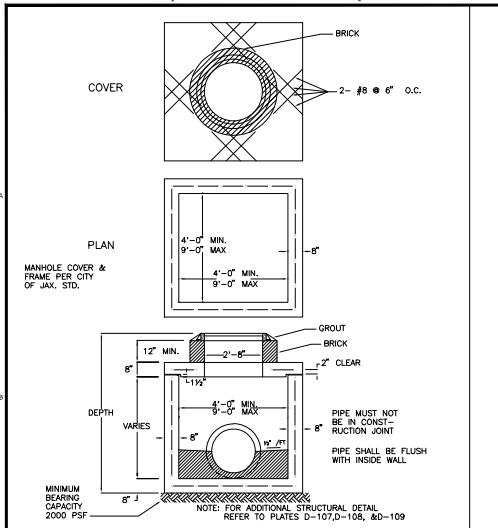
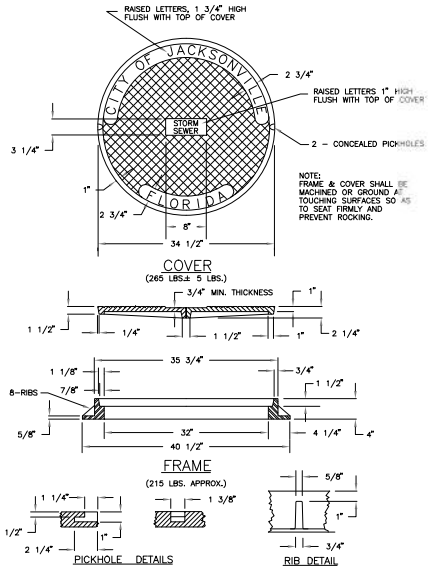
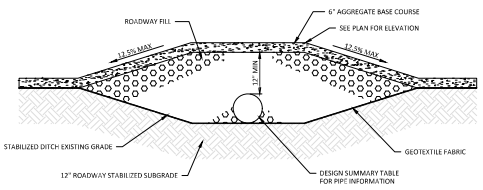


STORM SEWER TYPE J-2
MANHOLE DETAIL



STORM SEWER MANHOLE
COVER AND FRAME DETAIL



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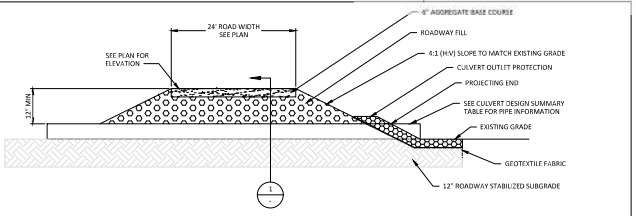

TYPICAL ROAD CULVERT CROSSING DETAIL
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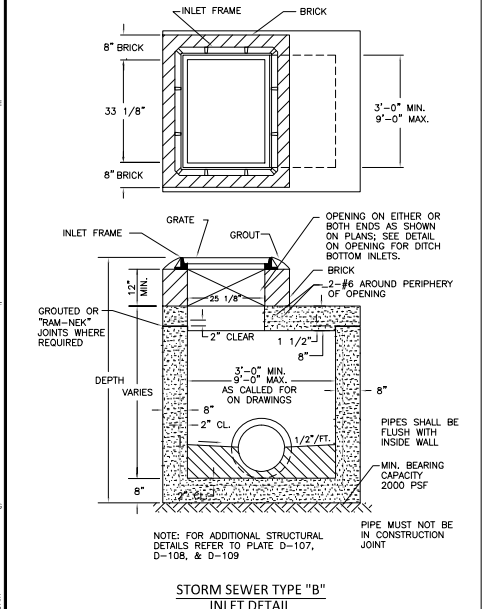
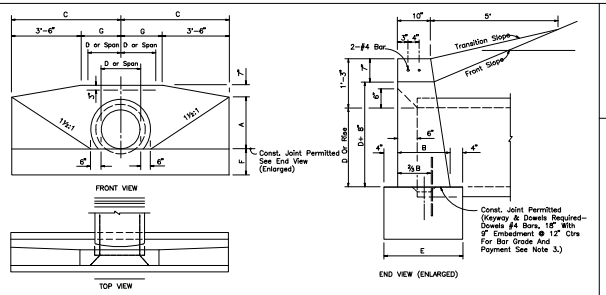
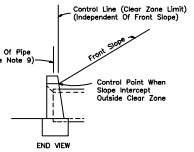


STORM SEWER TYPE "B"
INLET DETAIL



ENDWALL DIMENSIONS (EXCLUSIVE OF MULTIPLE PIPE SPACING)

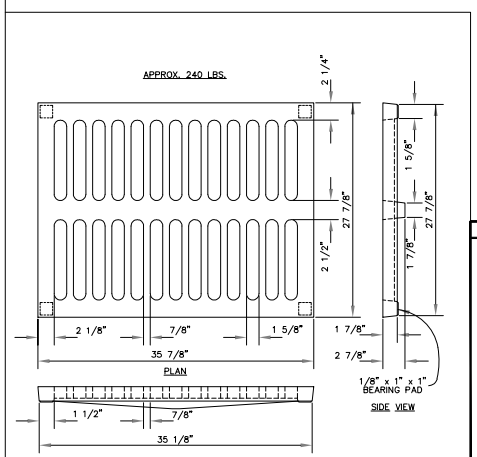


STANDARD
LOCATION CONTROL

GENERAL NOTES

1. Endwall dimensions, locations and positions are for round and elliptical concrete pipe and for round and pipe-arch corrugated metal pipe. Round concrete pipe shown. See plates D-403, 404, & 405.
2. Endwalls may be cast in place or precast concrete. Reinforcing steel shall be Grades 40 or 60. Additional reinforcement necessary for handling precast units shall be determined by the Contractor or the supplier. Cost of reinforcement shall be included in the contract unit price for concrete, (endwalls).
3. All exposed corners and edges of concrete are to be chamfered ¾".
4. Concrete meeting the requirements of ASTM C-478 (4000 psi) may be used in lieu of Class ⇔ concrete in precast items manufactured in plants which are under the Standard Operating Procedures for the inspection of precast drainage products.
5. On outfall ditches with side slopes flatter than 1½:1 provide 20' transitions from the endwall to the flatter side slopes, right of way permitting.
6. Pipe length plan quantities shall be based on the pipe and locations shown in the standard location control end view, or lengths based on special endwall locations called for in the plans.

STRAIGHT CONCRETE ENDWALLS-
SINGLE AND MULTIPLE PIPE
DETAIL



STORM SEWER INLET GRATE

CATCH BASIN AND MANHOLE DESIGN TABLE

STRUCTURE NO.	DOWNSTREAM ELEMENT	DRAWING NO.	CENTERLINE COORDINATES		STRUCTURE SIZE	TOP OF GRATE ELEVATION	BOTTOM OF CATCH BASIN ELEVATION	INLET & OUTLET PIPE INFORMATION																PIPE MATERIAL
								A		B		C		D		E		F		G		H		
			NORTHING	EASTING	FT×FT	FT	FT	INVEL	DIA	INVEL	DIA	INVEL	DIA	INVEL	DIA	INVEL	DIA	INVEL	DIA	INVEL	DIA	INVEL	DIA	
								FT	IN	FT	IN	FT	IN	FT	IN	FT	IN	FT	IN	FT	IN	FT	IN	
CB-1	CB-2	DS-1110	2216496.44	482254.38	3x3	19	14.89	-	-	-	-	-	-	-	-	-	-	-	-	14.89	30	-	-	CHDPE
CB-2	CB-3	DS-1110	2216414.89	481930.39	4x4	19	14.07	-	-	-	-	14.07	30	-	-	14.07	36	-	-	-	-	-	-	CHDPE
CB-3	MH-1	DS-1110	2216311.3	482231.99	5x5	19.00	13.04	13.04	36.00	-	-	13.04	48.00	-	-	13.04	48.00	-	-	-	-	-	-	CHDPE
CB-4	CB-3	DS-1110	2216382.86	482355.97	5x5	19.00	13.86	-	-	-	-	13.86	42.00	-	-	-	-	-	-	13.86	48.00	-	-	CHDPE
MH-1	CH-1	DS-1110	2215907.13	482258.11	5x5	18.00	12.79	12.79	48.00	-	-	-	-	-	-	-	-	-	-	12.79	54.00	-	-	CHDPE
CB-5	CB-7	DS-1110	2216696.99	482753	3x3	18.00	14.82	-	-	-	-	14.82	24	-	-	14.82	30	-	-	-	-	-	-	CHDPE
CB-6	CB-5	DS-1110	2216168.57	483037.23	3x3	18.00	15.54	-	-	-	-	-	-	-	-	-	-	-	-	15.54	24.00	-	-	CHDPE
CB-7	CO-8	DS-1110	2215759.77	482637.7	4x4	18.00	13.96	13.96	30.00	-	-	13.96	24.00	-	-	-	-	-	-	13.96	36.00	-	-	CHDPE
CB-8	CB-7	DS-1110	2215831.14	483122.57	3x3	18.00	14.68	-	-	-	-	-	-	-	-	-	-	-	-	14.68	24.00	-	-	CHDPE
CB-9	CO-10	DS-1110	2215962.94	482874.25	3x3	18.00	13.97	-	-	-	-	-	-	-	-	-	-	-	-	13.97	30.00	-	-	CHDPE
CB-10	CB-15	DS-1110	2215691.13	483139.09	3x3	18.00	11.52	-	-	-	-	11.52	24.00	-	-	-	-	-	-	-	-	-	-	CHDPE
CB-11	CB-12	DS-1110	2215126.26	483129.46	2x2	18.00	9.90	-	-	-	-	9.90	18.00	-	-	-	-	-	-	-	-	-	-	CHDPE
CB-12	CI-2	DS-1110	2215166.96	483291.89	5x5	18.00	9.50	-	-	-	-	9.50	36.00	-	-	9.50	48.00	-	-	9.50	18.00	-	-	CHDPE
CB-18	MH-3	DS-1110	2216277.98	483170.5	3x3	19.00	13.10	-	-	-	-	13.10	24.00	-	-	-	-	-	-	-	-	-	-	CHDPE
MH-3	CB-13	DS-1110	2215304.5	483275	3x3	19.00	12.85	-	-	-	-	-	-	-	-	12.85	24	-	-	12.85	24.00	-	-	CHDPE
CB-13	CB-14	DS-1110	2216109.52	483324.17	4x4	18.00	12.36	12.36	24	-	-	-	-	-	-	12.36	36.00	-	-	-	-	-	-	CHDPE
CB-14	MH-2	DS-1110	2215951.67	483388.79	4x4	18.00	11.71	11.71	36.00	-	-	-	-	-	-	11.71	36.00	-	-	-	-	-	-	CHDPE
MH-2	CB-15	DS-1110	2215760.39	483411.67	5x5	18.00	11.48	11.48	36.00	-	-	-	-	-	-	-	-	-	-	11.48	48.00	-	-	CHDPE
CB-15	CB-16	DS-1110	2215726.95	483282.3	5x5	18.00	11.16	-	-	-	-	11.16	48.00	-	-	11.16	48.00	-	-	11.16	24.00	-	-	CHDPE
CB-16	CB-17	DS-1110	2215501	483340.62	5x5	18.00	10.59	10.59	48.00	-	-	-	-	-	-	10.59	48.00	-	-	-	-	-	-	CHDPE
CB-17	CB-12	DS-1110	2215189.06	483418.65	5x5	18.00	9.82	9.82	48.00	-	-	-	-	-	-	-	-	-	-	9.82	48.00	-	-	CHDPE
CB-19	MH-4	DS-1110	2217076.61	483501.86	3x3	19	13.9	-	-	-	-	-	-	13.9	24	-	-	-	-	-	-	-	-	CHDPE
MH-4	CH-2	DS-1110	2217002.06	483628.61	3x3	19	13.68	-	-	-	-	-	-	-	-	13.68	30	-	-	-	-	13.68	24	CHDPE

CULVERT DESIGN TABLE (SEE NOTE 3)

CULVERT ID	DRAWING NO.	INLET INVERT COORDINATES		OUTLET INVERT COORDINATES		INLET INVERT ELEVATION	OUTLET INVERT ELEVATION	NO. OF BARRELS	PIPE DIAMETER	END SECTION	PIPE MATERIAL
		NORTHING	EASTING	NORTHING	EASTING	FT	FT		IN		
CO-1	DS-1110	2216445.76	483741.99	2216345.57	483765.79	12.42	12.15	2	42	PROJECTING	CHDPE
CO-2	DS-1110	2215373.44	484005.93	2215271.83	484026.33	9.96	9.77	2	42	PROJECTING	CHDPE
CO-4	DS-1110	2217985.92	482733.46	2218094.53	482691.64	13.19	13.00	2	48	PROJECTING	CHDPE
CO-5	DS-1110	2217816.27	482026.94	2217928.43	482033.31	13.22	13.00	2	36	PROJECTING	CHDPE
CO-6	DS-1110	2216122.38	482447.99	2216093.60	482358.36	14.09	13.86	1	42	PROJECTING	CHDPE
CO-7	DS-1110	2215906.51	482055.69	2215827.48	481739.40	12.79	12.00	1	54	PROJECTING	CHDPE
CO-8	DS-1110	2215759.17	482835.27	2215751.50	482804.47	13.96	13.89	1	36	PROJECTING	CHDPE
CO-9	DS-1110	2215556.91	482028.80	2215505.74	481824.88	11.85	11.39	1	54	PROJECTING	CHDPE
CO-10	DS-1110	2215661.92	482971.96	2215627.38	482875.36	13.97	13.68	1	30	PROJECTING	CHDPE
CO-11	DS-1110	2215422.57	482076.12	2215372.14	481861.34	11.59	11.04	1	48	PROJECTING	CHDPE
CO-12	DS-1110	2215164.56	483292.50	2214969.94	483341.31	9.50	9.00	1	48	PROJECTING	CHDPE
CO-13	DS-1110	2216999.57	483628.51	2216914.02	483625.12	13.90	13.68	1	30	PROJECTING	CHDPE

ROUND CONCRETE AND CORRUGATED METAL PIPE

D	Opening Area (SF) Number of Pipes				Dimensions							Dimensions X			
	1	2	3	4	A	B	C	E	F	G	S	0°	15°	30°	45°
15"	1.23	2.46	3.69	4.92	1'-11"	1'-2"	4'-0"	1'-10"	1'-2"	0'-6"	2'-7"	2'-7"	2'-8"	3'-0"	3'-8"
18"	1.77	3.54	5.31	7.08	2'-2"	1'-3"	4'-6"	1'-11"	1'-3"	1'-0"	2'-10"	2'-10"	2'-11"	3'-3"	4'-0"
24"	3.14	6.28	9.42	12.56	2'-8"	1'-4"	5'-6"	2'-0"	1'-4"	2'-0"	3'-5"	3'-5"	3'-6"	3'-11"	4'-10"
30"	4.91	9.82	14.73	19.64	3'-2"	1'-6"	6'-6"	2'-2"	1'-6"	3'-0"	4'-3"	4'-3"	4'-5"	4'-11"	6'-0"
36"	7.07	14.14	21.21	28.28	3'-8"	1'-8"	7'-6"	2'-4"	1'-8"	4'-0"	5'-1"	5'-1"	5'-3"	5'-10"	7'-2"
42"	9.62	19.24	28.86	38.48	4'-2"	1'-10"	8'-6"	2'-6"	2'-0"	5'-0"	6'-0"	6'-0"	6'-3"	6'-11"	8'-6"
48"	12.57	25.14	37.71	50.28	4'-8"	2'-1"	9'-6"	2'-9"	2'-0"	6'-0"	6'-9"	6'-9"	7'-0"	7'-10"	9'-7"
54"	15.90	31.80	47.70	63.60	5'-2"	2'-6"	10'-6"	3'-2"	2'-3"	7'-0"	7'-8"	7'-8"	7'-11"	8'-10"	10'-10"

STRAIGHT CONCRETE ENDWALLS SINGLE AND MULTIPLE PIPE

NOTES

1. VERTICAL DATUM IS BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 - NAVD88 (US FEET)
   HORIZONTAL DATUM IS BASED ON FLORIDA STATE PLANE, EAST ZONE - NAD83 (US FEET).
2. SEE DRAWING DS-1110 AND DS-1102 FOR GRADING AND STORMWATER DRAINAGE LAYOUT.
3. INTERNAL CONVEYANCE DEVICES AND APPURTENANCES SHOWN ON THIS DETAIL SHEET ARE PROVIDED FOR CONCEPTUAL AND PERMITTING PURPOSES ONLY AND ARE INTENDED TO DESIGNATE THE OVERALL PROJECT DESIGN PHILOSOPHY. THE DEPICTED FEATURES ARE NOT INTENDED TO REPRESENT FINAL LAYOUT, CONFIGURATION, DESIGN, OR SIZING WITH THE EXCEPTION OF SWALES THAT ARE MODELED AS TREATMENT SWALES. THE FINAL DESIGN OF THE INTERNAL CONVEYANCE SYSTEM, INCLUDING DEVICE SELECTION, LAYOUT, HYDRAULIC SIZING, MATERIALS, AND CONNECTION LOCATIONS, SHALL BE DEVELOPED AND CONFIRMED DURING DETAILED DESIGN BASED ON FINAL SITE ARRANGEMENT, OPERATIONAL REQUIREMENTS, SITE CONDITIONS, AND APPLICABLE REGULATORY AND PERMITTING CRITERIA.

ISSUED FOR PERMIT

THE DISTRIBUTION AND USE OF THE NATIVE FORMAT CAD FILE OF THIS DRAWING IS UNCONTROLLED. THE USER SHALL VERIFY TRACEABILITY OF THIS DRAWING TO THE LATEST CONTROLLED VERSION.

NO	DATE	REVISIONS AND RECORD OF ISSUE	DRN	DES	CHK	PDE	APP
3	06/07/2026	ISSUED FOR CLIENT REVIEW	JDM	AIX	OC	JCB	JCB
2	05/01/2026	ISSUED FOR INFORMATION	JDM	AIX	OC	JCB	JCB
1	03/18/2026	ISSUED FOR INFORMATION	JDM	AIX	OC	JCB	JCB
0	03/10/2026	ISSUED FOR INFORMATION	JDM	AIX	OC	JCB	JCB

200' 100' 0 200' 400'
SCALE 1"=200'

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OVERLAND PARK, KANSAS 66211
FLORIDA REGISTRATION NO. 8132

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ENG. DESIGNER	DRAWN
CHECKED	DATE

JEA
SJRPP UNIT 3
PROPOSED STORMWATER MANAGEMENT SECTIONS AND DETAILS

PROJECT 424014-DS-1104
DRAWING NUMBER
REV 3
CODE
AREA

ANSI E 44x34
C:\Users\JCB\Desktop\DS-1110 10-2023 ENGLISH
8/10/2026 10:31 AM

NOTES

1. VERTICAL DATUM IS BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 - NAVD88 (US FEET).
   HORIZONTAL DATUM IS BASED ON FLORIDA STATE PLANE, EAST ZONE - NAD83 (US FEET).
2. REFER TO 424014-DS-1111 FOR GRADING AND DRAINAGE DETAILS.
3. REFER TO 424014-DS-1104 FOR STORMWATER MANAGEMENT DETAILS.
4. THE GRADING SHOWN HEREIN IS INTENDED TO CONVEY THE OVERALL GRADING DESIGN PHILOSOPHY, DELINEATE PERMITTED DRAINAGE SUB BASINS, AND ESTABLISH NOMINAL GRADES FOR PERMITTING PURPOSES. THE GRADING DEPICTED IS CONCEPTUAL IN NATURE AND DOES NOT REPRESENT FINAL, CONSTRUCTION LEVEL, GRADING. FINAL GRADING WILL BE REFINED DURING DETAILED DESIGN TO ACCOMMODATE SITE CONDITIONS, CONSTRUCTABILITY, AND FINALIZED INFRASTRUCTURE LAYOUTS. DRAINAGE BASIN LIMITS AND FLOW PATTERNS SHALL BE MAINTAINED CONSISTENT WITH THE AS-PERMITTED CONDITION TO THE MAXIMUM EXTENT PRACTICABLE.
5. OIL CONTENT METERING TO BE PROVIDED ON THE DISCHARGE OF EACH OIL/WATER SEPARATOR (OWS). THE METER SHALL CONTINUOUSLY MONITOR EFFLUENT OIL CONCENTRATION AND PROVIDE AN ALARM SIGNAL TO THE PLANT DCS WHEN OIL CONCENTRATION APPROACHES 15 PPM. UPON ALARM, PLANT OPERATORS SHALL ISOLATE THE OWS DISCHARGE BY CLOSING THE DISCHARGE ISOLATION VALVE AND EVALUATE THE SYSTEM FOR MAINTENANCE, CLEANING, OR OTHER CORRECTIVE ACTIONS NECESSARY TO REDUCE OIL CONCENTRATION TO ACCEPTABLE OPERATING LEVELS PRIOR TO RESTORING DISCHARGE.

LEGEND

- CULVERTS
- EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- PROPOSED MAJOR CONTOURS
- PROPOSED MINOR CONTOURS
- EXISTING ROAD CL
- PROPOSED ROAD
- GRADE SURFACE FLOW INDICATOR
- CATCH BASIN
- MANHOLE
- RIPRAP APRON

ISSUED FOR PERMIT

THE DISTRIBUTION AND USE OF THE NATIVE FORMAT CAD FILE OF THIS DRAWING IS UNCONTROLLED. THE USER SHALL VERIFY TRACEABILITY OF THIS DRAWING TO THE LATEST CONTROLLED VERSION.

NO	DATE	REVISIONS AND RECORD OF ISSUE	DRN	DES	CHK	PDE	APP
3	08/07/2026	ISSUED FOR CLIENT REVIEW	JDM	AIX	OC	JCB	JCB
2	05/01/2026	ISSUED FOR INFORMATION	JDM	AIX	OC	JCB	JCB
1	03/18/2026	ISSUED FOR INFORMATION	JDM	AIX	OC	JCB	JCB
0	03/10/2026	ISSUED FOR INFORMATION	JDM	AIX	OC	JCB	JCB

SCALE 1"=150'

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PROJECT	JEA SJRPP UNIT 3
DRAWING NUMBER	424014-DS-1110
REV	3
TITLE	PROPOSED GRADING AND DRAINAGE PLAN
DESIGNER	
DRAWN	
CHECKED	
DATE	
CODE	
AREA	

ANSI E 44x34
USER: CHOSHA
FILE: 424014-DS-1110.DGN 10-2023 CHOSHA
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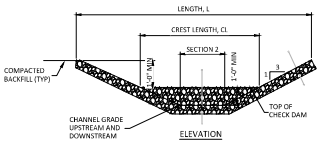
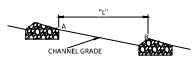
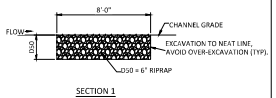


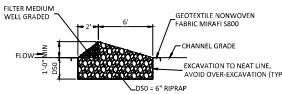
ELEVATION



SPACING BETWEEN CHECK DAMS



SECTION 1



SECTION 2

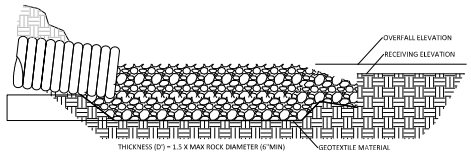
ROCK CHECK DAM INSTALLATION NOTES:

1. SEE PLAN VIEW FOR LOCATION OF CHECK DAMS.
2. CHECK DAMS INDICATED ON INITIAL SWMP SHALL BE INSTALLED AFTER CONSTRUCTION FENCE, BUT PRIOR TO ANY UPSTREAM LAND DISTURBING ACTIVITIES.
3. RIPRAP UTILIZED FOR CHECK DAMS SHOULD BE OF APPROPRIATE SIZE FOR THE APPLICATION. TYPICAL TYPES OF RIPRAP USED FOR CHECK DAMS ARE TYPE M (D50 6") OR TYPE L (D50 9").
4. RIPRAP PAD SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 6".
5. THE ENDS OF THE CHECK DAM SHALL BE A MINIMUM OF 1'-0" HIGHER THAN THE CENTER OF THE CHECK DAM.

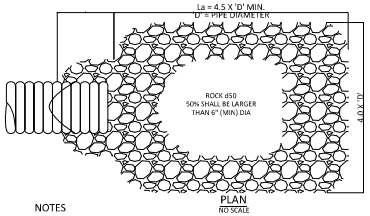
ROCK CHECK DAM MAINTENANCE NOTES:

1. INSPECTION SHALL BE FREQUENT (AT MINIMUM WEEKLY AND BEFORE AND AFTER ANY RAINFALL THAT EXCEEDS 1/2") AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMP'S IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. SEDIMENT ACCUMULATED UPSTREAM OF THE CHECK DAMS SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS WITHIN 1/2 OF THE HEIGHT OF THE CREST.
4. CHECK DAMS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
5. WHEN CHECK DAMS ARE REMOVED, EXCAVATIONS SHALL BE FILLED WITH SUITABLE COMPACTED BACKFILL. DISTURBED AREA SHALL BE SEEDED AND MULCHED AND COVERED WITH GEOTEXTILE OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

ROCK CHECK DAM IN DRAINAGE WAY
NO SCALE



SECTION
NO SCALE



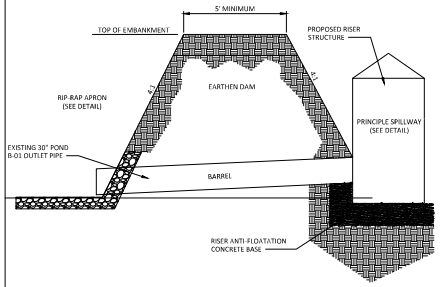
PLAN
NO SCALE

NOTES
1. 'La' = LENGTH OF APRON. DISTANCE 'La' SHALL BE OF SUFFICIENT LENGTH TO DISSPATE ENERGY.
2. APRON SHALL BE SET AT A ZERO GRADE AND ALIGNED STRAIGHT.
3. GEOTEXTILE MATERIAL SHALL BE MIRAFI S800 FABRIC OR APPROVED EQUAL.

DETAIL FOR BMP OUTLET PROTECTION RIPRAP
NO SCALE

CONVEYANCE SWALE DESIGN SUMMARY TABLE

CHANNEL ID	APPROX. CHANNEL LENGTH	APPROX. INLET INVERT ELEVATION	APPROX. OUTLET INVERT ELEVATION	AVERAGE SLOPE (%)	SHAPE	CHANNEL LINING	AVERAGE DESIGN DEPTH "B"	MINIMUM BOTTOM WIDTH "A"	AVERAGE TOP WIDTH	SIDE SLOPES	MODELED FOR TREATMENT?
	FT	FT	FT	%			FT	FT	FT	FT/FT	
CH-1	2295.20	13.89	5.50	0.20	Trapezoidal	SOD	4.00	6.00	33	4	YES
CH-2	591.78	13.68	12.12	0.25	Trapezoidal	SOD	4.00	11.00	53	4	YES
CH-3	878.26	12.12	9.96	0.25	Trapezoidal	SOD	4.00	11.00	53	4	YES
CH 4	709.12	9.77	8.00	0.25	Trapezoidal	SOD	4.00	11.00	43	4	YES
CH 5	1254.02	15.70	13.10	0.20	Trapezoidal	SOD	3.50	11.00	39	4	NO
CH 7	960.12	15.74	14.05	0.25	Trapezoidal	SOD	4.00	6.00	38	4	NO
CH-8	836.07	13.89	11.85	0.25	Trapezoidal	SOD	4.00	7.00	47	4	NO
CH-9	839.37	11.89	11.39	0.25	Trapezoidal	SOD	4.00	6.00	46	4	NO
CH-10	1243.51	15.86	13.22	0.20	Trapezoidal	SOD	4.00	9.50	41.5	4	YES



B-01 POND CONNECTION DETAIL
PROPOSED OUTLET STRUCTURE
CONNECTION TO EXISTING CULVERT

CONVEYANCE SWALE OUTLET PROTECTION RIPRAP SUMMARY TABLE

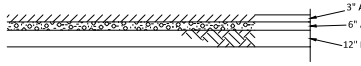
CHANNEL ID	CHANNEL BOTTOM WIDTH	WIDTH 4 X D	LA LENGTH 4.5 X D	RIPRAP DEPTH	AGGREGATE DIA. D50	RIPRAP AREA
	FT	FT	FT	FT	FT	SQYD
CH-1	6	24	27	1	0.5	72
CH-2	11	44	50	1	0.5	242
CH-3	11	44	50	1	0.5	242
CH-4	11	44	50	1	0.5	242
CH-5	11	44	50	1	0.5	242
CH 7	6	24	27	1	0.5	72
CH 8	7	28	32	1	0.5	98
CH 9	6	24	27	1	0.5	72
CH-10	10	38	43	1	0.5	181

CULVERT RIPRAP SUMMARY TABLE

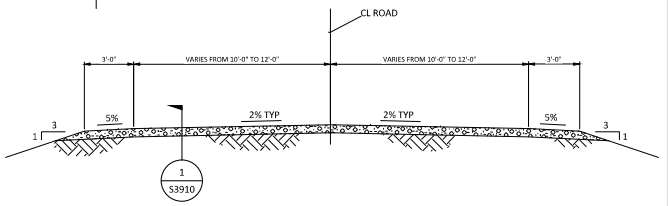
CULVERT ID	CULVERT DIAM. D	NUMBER OF BARRELS	WIDTH 4 X D	LA LENGTH 4.5 X D	RIPRAP DEPTH	AGGREGATE DIA. D50	RIPRAP AREA
	IN	FT	FT	FT	FT	FT	SQYD
CO-1	30	2.00	20.00	22.50	1	0.5	50
CO-2	42	2.00	28.00	31.50	1	0.5	98
CO-4	48	2.00	32.00	36.00	1	0.5	128
CO-5	36	2.00	24.00	27.00	1	0.5	72
CO-6	42	1.00	14.00	15.75	1	0.5	25
CO-7	54	1.00	18.00	20.25	1	0.5	41
CO-8	36	1.00	12.00	13.50	1	0.5	18
CO-9	54	1.00	18.00	20.25	1	0.5	41
CO-10	30	1.00	10.00	11.25	1	0.5	13
CO-11	48	1.00	16.00	18.00	1	0.5	32
CO-12	48	1.00	16.00	18.00	1	0.5	32
CO-13	30	1.00	10.00	11.25	1	0.5	13

BASIN SPILLWAY RIPRAP SUMMARY TABLE

BASIN ID	TOP WIDTH	APPROX. RIPRAP WIDTH	AGGREGATE DIA. D50	RIPRAP DEPTH	RIPRAP AREA
	FT	FT	FT	FT	SQYD
B-01	50	10	0.5	1	56
B-02	60	10	0.5	1	67



SECTION 1
SEE THIS DWG
NO SCALE



TYPICAL AGGREGATE SURFACE ROAD SECTION
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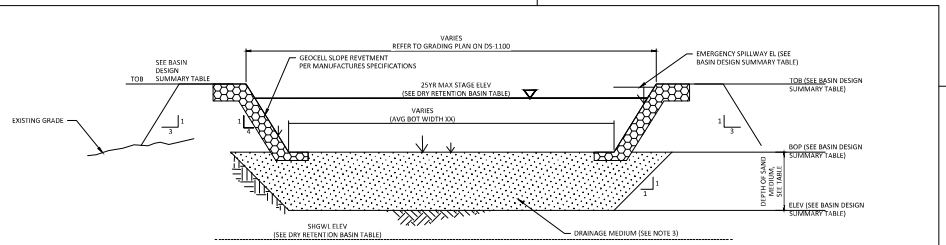
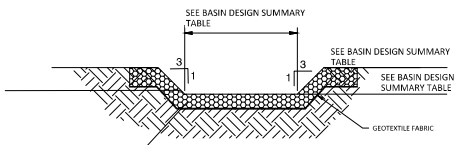
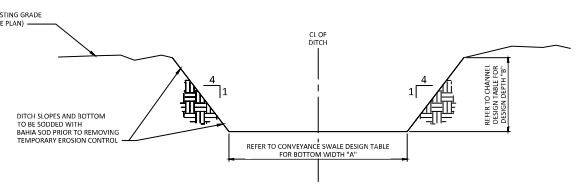


PERMANENT DRY RETENTION POND - SECTION 1
NO SCALE



EMERGENCY SPILLWAY DETAIL
NO SCALE

1. SEE SEDIMENT BASIN DESIGN SUMMARY TABLE, SECTION "SPILLWAY" FOR SPILLWAY DETAILS SUCH AS CREST ELEVATION AND LENGTH.



SECTION 3
CONVEYANCE SWALE
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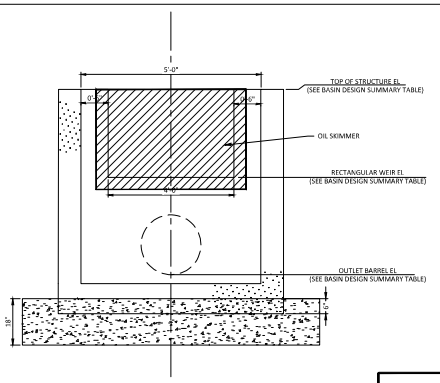
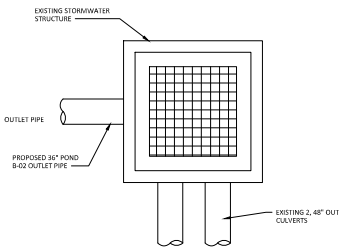


SECTION

P-1 STORMWATER DISCHARGE STRUCTURE DETAIL
NO SCALE

1. AN 18" THICK CONCRETE BASE WITH A MINIMUM LENGTH EQUAL TO TWICE THE WIDTH OF THE RISER DIAMETER SHALL BE USED TO ANCHOR THE RISER. THE RISER PIPE MUST BE EMBEDDED AT LEAST 6 INCHES INTO THE CONCRETE.



B-02 POND CONNECTION DETAIL
PROPOSED OUTLET PIPE CONNECTION
TO EXISTING STORMWATER STRUCTURE

NOTES
1. ELEVATIONS ARE REPORTED AS NAVD 88.
2. SEE DRAWING DS-1110 AND DS-1102 FOR GRADING AND STORMWATER DRAINAGE LAYOUT.
3. IN SITU MATERIAL SHALL BE REMOVED AND REPLACED WITH A SAND DRAINAGE MEDIUM TO THE DEPTH SPECIFIED IN THE BASIN SUMMARY TABLE. THE SAND MEDIUM SHALL HAVE A MINIMUM VOID RATIO OF 20%.
4. STORMWATER RETENTION BASINS HAVE BEEN DESIGNED BASED ON A SOIL INFILTRATION RATE OF 0.25 AND 0.8 IN/HR FOR B-01 AND B-02 RESPECTIVELY. THE CONTRACTOR SHALL PROTECT BASIN AREAS FROM SEDIMENT INFLOW DURING CONSTRUCTION AND SHALL REMOVE ANY ACCUMULATED SEDIMENT FROM THE BASINS UPON COMPLETION OF CONSTRUCTION. PRIOR TO PROJECT CLOSEOUT, THE CONTRACTOR SHALL PERFORM FIELD INFILTRATION TESTING WITHIN EACH STORMWATER RETENTION BASIN TO VERIFY THAT A MINIMUM INFILTRATION RATE OF 0.25 AND 0.8 IN/HR FOR B-01 AND B-02 RESPECTIVELY IS ACHIEVED.

DRY RETENTION BASIN SUMMARY TABLE

BASIN ID	SAND INFILTRATION MEDIUM		25-YEAR HIGHWATER ELEVATION NAVD88	SHGWL ELEVATION NAVD88	STORAGE		RISER				SPILLWAY						BARREL			
	BOTTOM OF SAND MEDIUM ELEVATION	BOTTOM OF BASIN ELEVATION			RETENTION VOLUME REQUIRED	RETENTION VOLUME PROVIDED	CONCRETE RISER CUTOFF WALL STRUCTURE SIZE	4-FT WIDE RECTANGULAR WEIR ELEVATION	RISER CREST ELEVATION	RISER MATERIAL	SPILLWAY CREST ELEVATION	SPILLWAY CREST LENGTH	SPILLWAY SIDE SLOPES	TOP OF EMBANKMENT ELEVATION	TOP OF EMBANKMENT WIDTH (MIN)	PIPE LENGTH	PIPE DIAMETER	PIPE MATERIAL	INVERT IN	INVERT OUT
	FT	FT	FT	FT	AC-FT	AC-FT	FtxFt	FT	FT		FT	FT	F:F	FT	FT	FT	IN		FT	FT
B-01	5.6	6.80	11.35	3.0	18.32	18.97	5x5	8.50	11.50	CONCRETE BOX	12.50	30.00	10	13.50	10.00	163.15	30.00	RCP- EXISTING PIPE TO REMAIN	6.50	2.85
B-02	11	12.06	16.44	8.9	8.00	9.23	5x5	14.50	16.00	CONCRETE BOX	17.00	40.00	10	18.00	10.00	144.85	36.00	RCP	12.00	4.22

NOTES

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1	03/18/2026	ISSUED FOR INFORMATION	JDM	AJX	OC	JCB	JCB
0	03/10/2026	ISSUED FOR INFORMATION	JDM	AJX	OC	JCB	JCB

NO SCALE

BLACK & VEATCH CORPORATION
11401 LAMAR AVENUE
OVERLAND PARK, KANSAS 66211
FLORIDA REGISTRATION NO. 8132

BLACK & VEATCH
Engineering | Construction

ENG. DESIGNER	DRAWN
CHECKED	DATE

PROJECT	JEA SJRPP UNIT 3
DRAWING NUMBER	424014-DS-1111
REV	3
	GRADING & DRAINAGE PLAN SECTIONS AND DETAILS
CODE	
AREA	

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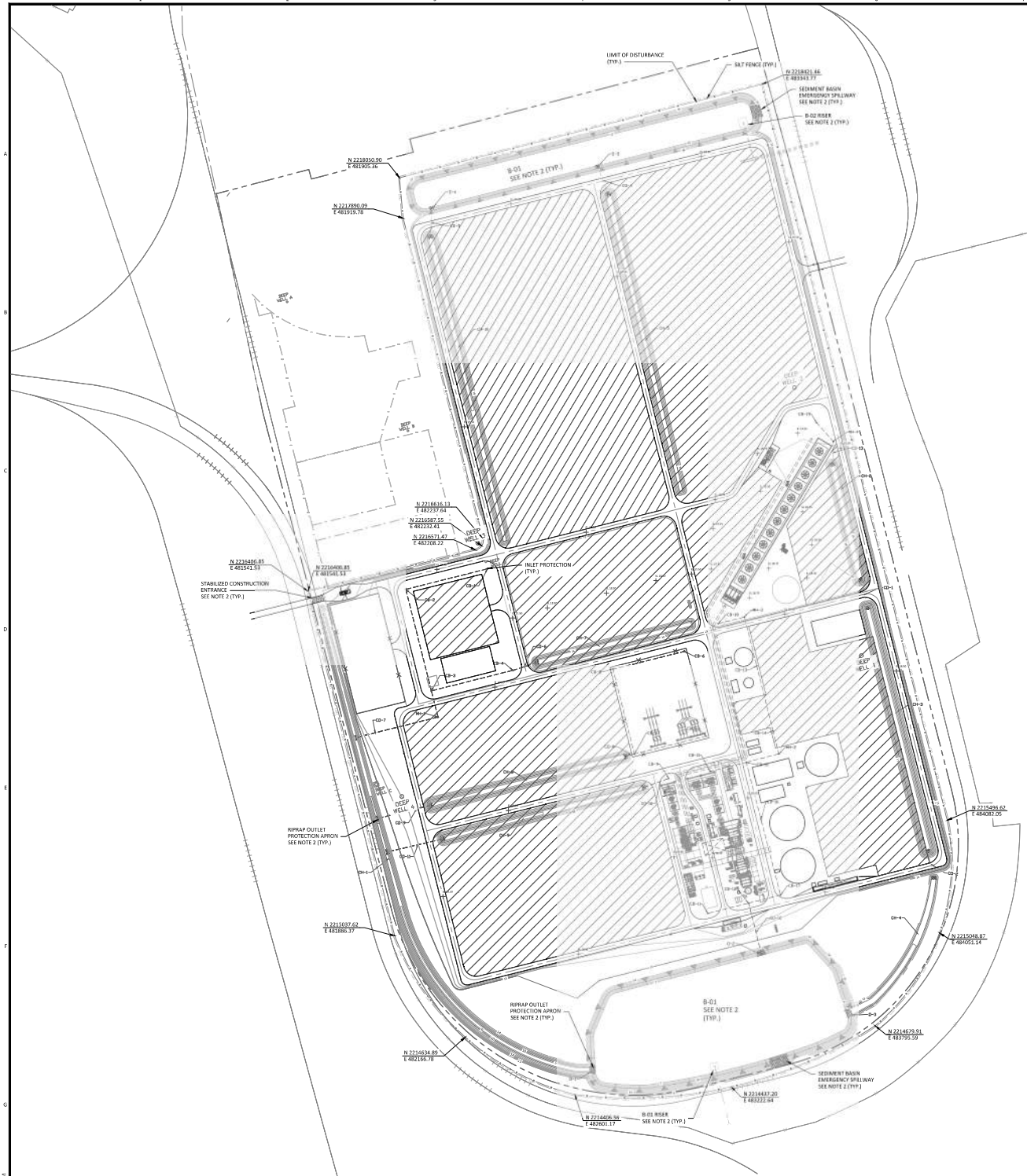

NOTES

1. ELEVATIONS ARE REPORTED AS NAVD88.
2. REFER TO 424014-DS-1121 FOR EROSION CONTROL DETAILS.

LEGEND

- LOD — LIMIT OF DISTURBANCE
- SILT FENCE
- CATCH BASIN WITH INLET PROTECTION
- STABILIZED CONSTRUCTION ENTRANCE
- LAYDOWN AREAS
- RIPRAP
- SEDIMENT BASIN OUTFALL STRUCTURE

JAMES C. BARRY JR. LICENSE 66824 STATE OF FLORIDA REGISTERED ENGINEER

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0	03/10/2026	ISSUED FOR INFORMATION	JDM	AIX	OC	JCB	JCB

SCALE 1":150'

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11401 LAMAR AVENUE
OVERLAND PARK, KANSAS 66211
FLORIDA REGISTRATION NO. 8132

ENG. DESIGNER	DRAWN
CHECKED	DATE

JEA
SJRPP UNIT 3
EROSION AND SEDIMENT CONTROL PLAN

PROJECT	424014-DS-1120
DRAWING NUMBER	
REV	3
CODE	
AREA	

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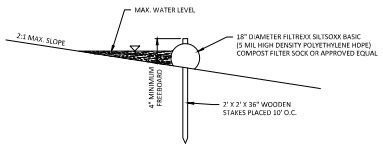
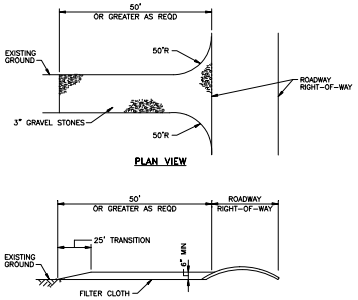


STAKING DETAIL FOR FILTER SOCK CHECK DAM
NO SCALE



TYPICAL STABILIZED CONSTRUCTION ENTRANCE
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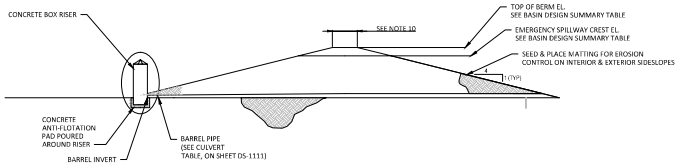
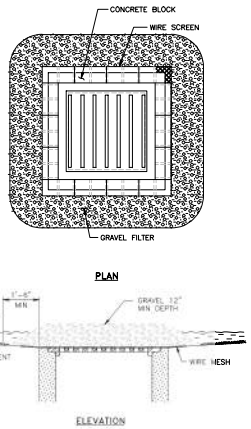


SEDIMENT BASIN DETAIL
NO SCALE

NOTE: SEE SEDIMENT BASIN SKIMMER STRUCTURE AND PIPE TABLES (THIS DRAWING) FOR POND-SPECIFIC INFORMATION

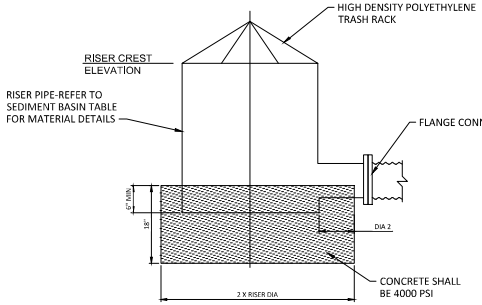
SKIMMER SEDIMENT BASIN AND ROCK CHECK DAM NOTES:

1. BUILD RIDGE HIGHER THAN DESIGN AND COMPACT WITH WHEELS OF CONSTRUCTION EQUIPMENT. COMPACTED RIDGE MUST BE AT OR ABOVE DESIGN GRADE AT ALL POINTS.
2. VEGETATE DITCH AND BERM IMMEDIATELY AFTER CONSTRUCTION. STABILIZATION METHOD SHALL BE SEED SUPPLEMENTED WITH EROSION CONTROL BLANKETS.
3. INSPECT ROLLED EROSION CONTROL PRODUCTS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT REPAIR IMMEDIATELY. MONITOR AND REPAIR THE ROLLED EROSION CONTROL BLANKET AS NECESSARY UNTIL GORUND COVER IS ESTABLISHED.
4. RIPIRAP OUTLET APRON AT EMERGENCY SPILLWAY SHALL EXTEND FOR 20' PAST TOE OF SLOPE, AND BE EQUAL IN WIDTH TO THE SPILLWAY WIDTH. RIPRAP OUTLET APRON AT BARREL SHALL BE PER TYPICAL CULVERT RIPRAP OUTLET PROTECTION DETAIL, SHEET DS-1111.
5. IN ORDER TO REDUCE VELOCITY AND HELP PREVENT CHANNEL DEGREDATION, INSTALL CHECK DAMS ALONG DIVERSION DITCHES ANYWHERE THE BOTTOM SLOPE EXCEEDS 0.03 FT/FT.
6. KEY THE STONE INTO THE DITCH BANKS AND EXTEND IT BEYOND THE ABUTMENTS A MINIMUM OF 1.5 FT. TO AVOID WASHOUTS FROM OVERFLOW AROUND THE DAM.
7. SET SPACING BETWEEN DAMS TO ASSURE THAT THE ELEVATION AT THE TOP OF THE LOWER DAM IS THE SAME AS THE TOE ELEVATION OF THE UPPER DAM.
8. INSPECT CHECK DAMS AND CHANNELS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. CLEAN OUT SEDIMENT, STRAW, LIMBS, OR OTHER DEBRIS THAT COULD CLOG THE CHANNEL WHEN NEEDED. IF SIGNIFICANT EROSION OCCURS BETWEEN DAMS, ADDITIONAL MEASURES CAN BE TAKEN SUCH AS, INSTALLING A PROTECTIVE RIPRAP LINE IN THAT PORTION OF THE CHANNEL.
9. THE MINIMUM TOP WIDTH OF THE EMBANKMENT SHALL BE 10FT.
10. SPILLWAY SHALL BE LINED WITH A 30 MILL POND PVC LINER OR WOVEN STABILIZATION FABRIC AND 12" THICK OF MEDIAN 8" DIA RIPRAP OVERTOP. LINING AND RIPRAP SHALL BE AS WIDE AS THE SPILLWAY AND SHALL EXTEND FROM THE INVERT ELEVATION OF THE BASIN TO STABLE THE GROUND OUTSIDE THE BASIN. LINING SHALL BE SECURED TO THE SPILLWAY.
11. CONTRACTOR SHALL CLEAN OUT THE OUTLET END OF THE CULVERT BARREL TO ENSURE THE INVERT ELEVATION ALIGNS WITH THE ELEVATION SPECIFIED IN THE SEDIMENT BASIN SUMMARY TABLE.

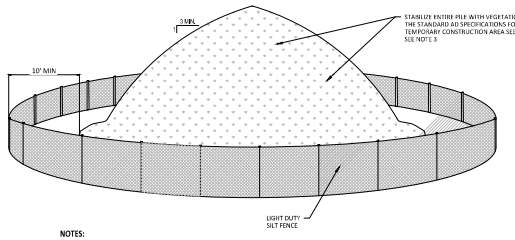


GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER
NOT TO SCALE

NOTE: PRE-FABRICATED INLET SEDIMENT FILTERS MAY BE USED IN LIEU OF THE GRAVEL INLET FILTER DETAIL SHOWN, PROVIDED THE SELECTED DEVICE MEETS OR EXCEEDS FLORIDA EROSION AND SEDIMENT CONTROL BMP REQUIREMENTS AND IS INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.



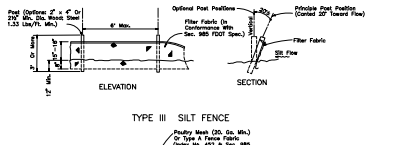
SEDIMENT BASIN RISER DETAIL
NO SCALE



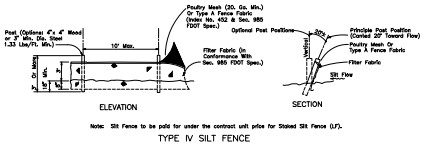
NOTES:

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY, STABILIZED AND LOCATED AWAY FROM KNOWN WORK AREAS TO PREVENT RELOCATION.
2. MAXIMUM STOCKPILE HEIGHT SHALL SHALL BE 6 FEET.
3. EACH SOIL STOCKPILE SHALL BE SURROUNDED WITH SILT FENCING. INSTALLED PER SILT FENCE DETAIL, THEN STABILIZED IN ACCORDANCE WITH THE SPECIFICATION FOR TEMPORARY CONSTRUCTION AREA SEEDING WITHIN 7 DAYS OF COMPLETION.
4. A PERIMETER DIKE/SWALE SHALL BE LOCATED UP SLOPE OF THE TOPSOIL STOCKPILE TO DIVERT STORMWATER AROUND THE STOCKPILE IF LOCATED IN AREA OF CONCENTRATED FLOW.

STABILIZED SOIL STOCKPILE DETAIL
NOT TO SCALE

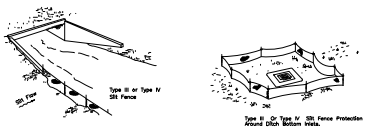


TYPE III SILT FENCE



Note: Silt Fence to be paid for under the contract unit price for Staked Silt Fence (LF).

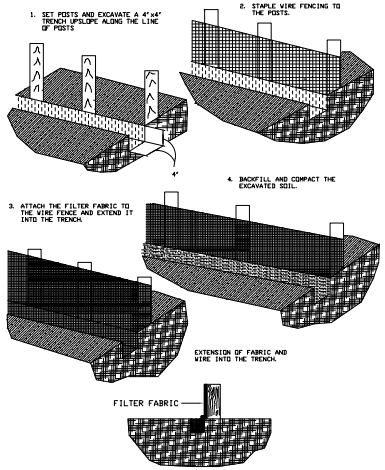
TYPE IV SILT FENCE



Do not deploy in a manner that silt fences will act as a dam across permanent flowing watercourses. Silt fences are to be used at upland locations and turbidity barriers used at permanent bodies of water.

SILT FENCE APPLICATIONS

Note: Spacing for Type III Fence to be in accordance with Chart 1, Plate D-606 and ditch instructions at drainage structures above.



CONSTRUCTION DETAILS FOR SILT FENCES
NOT TO SCALE

SEDIMENT BASIN SUMMARY TABLE

SEDIMENT BASIN ID	SAND INFILTRATION MEDIUM		STORAGE		CLEANOUT			RISER				SPILLWAY					BARREL				
	BOTTOM OF SAND MEDIUM ELEVATION	BOTTOM OF BASIN ELEVATION	SEDIMENT STORAGE REQUIRED	SEDIMENT STORAGE PROVIDED	SEDIMENT CLEANOUT VOLUME	DEWATERING ORIFICE DIAM.	DEWATERING ORIFICE ELEVATION	CONCRETE RISER OUTFALL STRUCTURE SIZE	4-FT WIDE RECTANGULAR WEIR ELEVATION	RISER CREST ELEVATIO N	RISER MATERIAL	SPILLWAY CREST ELEVATIO N	SPILLWAY CREST LENGTH	SPILLWAY SIDE SLOPES	TOP OF EMBANK MENT ELEVATIO N	TOP OF EMBANK MENT WIDTH (MIN)	PIPE LENGTH	PIPE DIAMETER	PIPE MATERIAL	INVERT IN	INVERT OUT
	FT	FT	AC-FT	AC-FT	CF	IN	FT	FTxFT	FT	FT		FT	FT	FT/FT	FT	FT	FT	IN		FT	FT
B-01	5.6	8.60	9.19	21.88	200,244	4	6.91	5x5	8.50	11.50	CONCRETE BOX	11.50	30.00	10	13.04	10.00	163.15	30.00	RCP - EXISTING PIPE TO REMAIN	6.60	2.85
B-02	11	12.00	4.66	9.23	301,597	4	12.48	5x5	14.50	16.00	CONCRETE BOX	17.00	40.00	10	18.00	10.00	144.85	36.00	RCP	12.00	4.22

SEEDING MIXTURES, RATES AND DATES

Site Conditions	Seeding Mixtures	Seeding Rate Per Acre	Seeding Rate Per 1000 Ft²	Seeding Dates N. Fla.	Comments
High Maintenance Lawns					
General Use	1. Bahiagrass	40-60 lbs	1 lb	2/15-8/31	Use 50% scarified seed.
	2. Bahiagrass Bermudagrass (hulled)	40-60 lbs 8-12 lbs	1 lb 4 oz	2/15-8/15	Use 50% scarified Bahia seed.
	3. Bahiagrass with one of the following:	20-30 lbs	.5 lb		Use 50% scarified Bahia seed.
	Southern White Clover	3 lbs	1.2 oz	9/1-1/1	Innoculate legumes.
	Annual White Sweetclover	8 lbs	3 oz	9/1-1/1	
	Crimson Clover	12 lbs	4.5 oz	9/1-1/1	
	Arrowleaf Clover	8 lbs	3 oz	9/1-1/1	
	Alyce Clover	8 lbs	3 oz	2/15-7/15	
	Hairy Indigo	4 lbs	1.5 oz	2/15-7/15	
	Aschynomene	12 lbs	4.5 oz	2/15-7/15	
Slopes	1. Sericea lespedeza	a.40-50 lbs b. 75 lbs	1.2 lbs 1.7 lbs	1/1-7/15 7/15-1/1	For scarified seed. For unhulled seed.
	2. Sericea lespedeza with one of the following:				Use seeding rate specified above.
	Bahiagrass	15 lbs	7 oz	2/15-8/15	
	Tall Fescue	20 lbs	8 oz	10/1-11/15	Best adapted to N. Florida
	Weeping Lovegrass	3 lbs	1.2 oz	2/15-8/15	
Droughty Areas	1. Weeping Lovegrass	5 lbs	2 oz	2/15-8/15	Gives quick summer cover.
	2. Weeping Lovegrass with one of the following:				
	a. Bahiagrass (50% scarified seed)	5 lbs	2 oz	2/15-8/15	
	b. Bermudagrass (Hulled)	30-40 lbs	12 oz	2/15-8/15	
	c. Hairy panicum	8-12 lbs	4 oz	2/15-8/15	
	d. Serica lespedeza	8-12 lbs	4 oz	2/15-8/15	Use seeding rate and dates specified above.

EROSION & SEDIMENT CONTROL MAINTENANCE SCHEDULE

THE FOLLOWING PROCEDURES WILL BE USED TO MAINTAIN EROSION AND SEDIMENTATION CONTROLS:

1. A RECORD OF THE RAINFALL AMOUNTS AND DATES SHALL BE KEPT BY THE CONTRACTOR.
2. SILT FENCES SHALL BE INSPECTED FOR DEPTH OF ACCUMULATED SEDIMENT, TEARS, ATTACHMENT TO POST AND STABILITY.
3. COMPOST FILTER SOCK SHALL BE INSPECTED PER DETAILS ON SHEET DS-1121.
4. FOR SPECIFIC MAINTENANCE REQUIREMENTS FOR EACH SPECIFIC EROSION CONTROL BMP, REFER TO DETAIL SHEET DS-1123.
5. TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS AND HEALTHY GROWTH.
6. INSPECT DOWNSTREAM DRAINAGE PATHS FROM THE SITE TO DETERMINE IF ANY SEDIMENT HAD BEEN DISPOSED OFFSITE.
7. INSPECT SURFACED AREAS FOR BARE SPOTS AND WASHOUTS.
8. THE CONTRACTOR WILL SELECT INDIVIDUALS TO BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE, REPAIRS AND REPORTING. THE DESIGNATED INSPECTORS WILL RECEIVE THE NECESSARY TRAINING FROM THE CONTRACTOR TO PROPERLY INSPECT AND MAINTAIN THE CONTROLS IN GOOD WORKING ORDER.
9. AN INSPECTION FORM WILL BE COMPLETED AFTER EACH INSPECTION.
10. WHEN EROSION CONTROL BMP'S ARE REMOVED EXCAVATIONS SHALL BE FILLED WITH SIX TABLE COMPACTED BACKFILL. DISTURBED AREAS SHALL BE SEEDED AND MULCHED OR OTHERWISE APPROPRIATELY STABILIZED.

NOTES

1. SEE DRAWINGS DS-1120 FOR EROSION CONTROL PLANS.
2. EROSION AND SEDIMENT CONTROL MEASURE DETAILS CAN BE ALTERED AS NEEDED BY THE PROJECT SITE MANAGER WITH THE APPROVAL OF THE ENGINEER. RECORDS OF CHANGES SHALL BE MAINTAINED ON THE DRAWINGS AND SWPPP THROUGH THE END OF CONSTRUCTION. IF DESIGN CHANGE IS DEEMED NECESSARY, THE PROJECT FIELD MANAGER SHALL CONTACT THE DESIGN ENGINEER TO DISCUSS DESIGN CHANGE/SOLUTION.
3. INSTALL A STABILIZED CONSTRUCTION ENTRANCE WITH FILTER FABRIC UNDERLINER AT THE ACCESS ROAD ENTRANCE AND ANY SECONDARY ENTRANCES. SEE DETAIL ON THIS DRAWING.
4. CONTRACTOR SHALL PROVIDE DUST CONTROL AS NEEDED.
5. ALL TEMPORARY CONSTRUCTION FACILITIES AND AREAS SHALL BE RESTORED TO PRE-EXISTING DRAINAGE PATHS AND SURFACING CONDITIONS AT THE END OF CONSTRUCTION.
6. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO THE PAVED ROADWAYS. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.

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NO SCALE

BLACK & VEATCH CORPORATION
11401 LAMAR AVENUE
OVERLAND PARK, KANSAS 66211
FLORIDA REGISTRATION NO. 8132

BLACK & VEATCH

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BRD. ENGINEER	BRD. DRAWN
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JEA
SJRPP UNIT 3
EROSION CONTROL SECTIONS AND DETAILS

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