# POND SITING REPORT

Florida Department of Transportation District Five

I-75 (S.R.93) from South of S.R. 44 to S.R. 200 Marion County, Florida

Financial Management Number: 452074-2

ETDM Number: 14541

#### May 2024

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Florida Department of Transportation (FDOT) pursuant to 23 USC § 327 and a Memorandum of Understanding dated May 26, 2022, and executed by the Federal Highway Administration and FDOT.





The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated May 26, 2022 and executed by FHWA and FDOT.

# **Pond Siting Report Marion and Sumter Counties**

745

May 2024

FPID: 452074-2

# PROFESSIONAL ENGINEER CERTIFICATION

I hereby certify that I am a registered professional engineer in the State of Florida practicing engineering with Burgess & Niple, Inc. and that I have supervised the preparation of and approve the analysis, findings, opinions, conclusions, and technical advice hereby reported for:

PROJECT: Interstate 75 (I-75) from South of State Road (S.R.) 44 to S.R. 200

ETDM Number: 14541

Financial Project ID: 452074-2

Federal Aid Project Number: N/A

PROJECT DOCUMENT: Pond Siting Report - Marion County

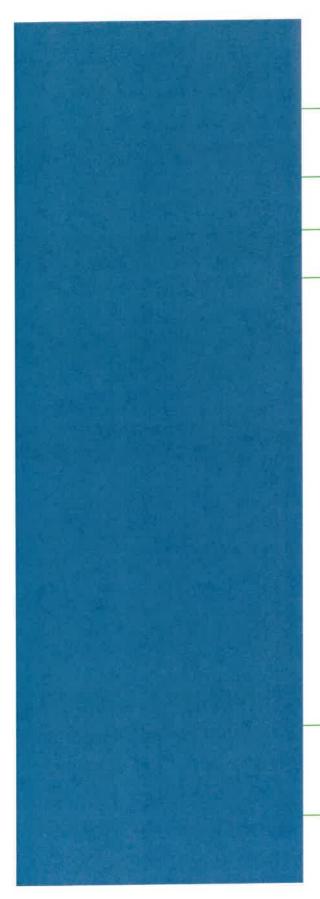
This pond siting report contains engineering information that fulfills the purpose and need for the I-75 Project Development & Environment Study for the Southern Section of I-75, beginning south of S.R. 44 and extending north to S.R. 200. I acknowledge that the procedures and references used to develop the results contained in this report are standard to the professional practice of transportation engineering as applied through professional judgment and experience.

I hereby certify that I am a registered professional engineer in the State of Florida practicing with Burgess & Niple, Inc., and that I have prepared or approved the evaluation, findings, opinions, conclusions, or technical advice for this project.

> This document has been signed and sealed by Carlton D. Spirio, Jr., P.E. on the date beneath the signature.

Printed copies of this document are not considered red and Burgess & Niple, Inc 1511 North Westshore Boulevard, Suite 500

Tampa, Florida 33607 Carlton Donald Spirio, Jr. PE No. 47649



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#### Introduction

The purpose of this Report is to provide documentation for the pond siting efforts required to address the stormwater management needs to preserve the historic drainage patterns throughout the project corridor involving the proposed roadway improvements to I-75. The project limits begin just north of the Turnpike interchange with I-75 and extend northward to S.R. 200. This project area has been divided into 34 drainage basins based on the overland topography and other features that influence the drainage patterns throughout this portion of I-75. This report summarizes the research efforts and data reconnaissance involving the existing drainage conditions, along with the hydrology and hydraulic criteria used to assess three (3) pond site alternatives within each of the drainage basins identified throughout the project.

The project corridor crosses the jurisdictional limits for both the St. Johns River and Southwest Florida Water Management Districts. The southern drainage basins, Basins 0 through 8, are within Sumter County, which is part of the jurisdictional limits for the Southwest Florida Water Management District (SWFWMD). The remainder of the drainage basins, Basins 9 through 32, are in Marion County. The I-75 corridor in Marion County serves as the boundary between the jurisdictional limits for both the St. John River Water Management District (SJRWMD) and the Southwest Florida Water Management District (SWFWMD). While the Statewide Environmental Resource Permit (SWERP) criteria awaits ratification by the Legislature to adopt consistent performance standards across Florida for water quality criteria, the current water quality and quantity criteria are different for both Water Management Districts. Therefore, the required water quality treatment and attenuation volumes for the drainage basins were computed in accordance with appropriate criteria for both Water Management Districts. Please refer to Table 1 for the specific design criteria requirements for both Water Management Districts. There are no Impaired Water Bodies nor Outstanding Florida Waters (OFWs) directly associated with the waterbodies that cross through this portion of I-75; however, Lake Panasoffkee is a designated OFW downstream of the I-75 Turnpike interchange area. Overall, there no additional water quality treatment volumes required to address sensitive watershed criteria long this portion of I-75.

Design Element	ign Element Criteria	
SWFWMD	·	
Water Quality	Wet Detention = 1" over DCIA	B.O.R. Chapter 5.2 & 5.8
	On-line = 0.5" over DCIA	B.O.R. Chapter 5.7 & 5.8
Water Quantity	Open Basin = pre vs post comparison 25-Yr/24-Hr, 9" peak rate	B.O.R. Chapter 4.2
	Closed Basin = pre vs post comparison 100-Yr/24-Hr, 10.5" peak rate	B.O.R. Chapter 4.2
Outstanding Florida Water	Additional 50% water quality volume	B.O.R. Chapter 5.2e
Floodplain	No net reduction of flood storage volume	B.O.R. Chapter 4.4
SJRWMD		<u> </u>
Water Quality	Wet Detention = greater of 1" over DA or 2.5" over DCIA	P.I.M. Chapter 8.2

#### Table 1 Water Management District Design Criteria

	Wet Detention PP ≤ 14-day average residence time, 21- day non-littoral zone	P.I.M. Chapter 8.5
	Wet Detention Max depth = 12' and mean depth 2' to 8'	P.I.M. Chapter 8.8
	On-line retention = greater of 1" rainfall runoff or 1.25" over DCIA	P.I.M. Chapter 5.2
Water Quantity	Open Basin = pre vs post comparison 25-Yr/24-Hr, 9" peak rate	P.I.M. Chapter 3.2.1
	Closed Basin = pre vs post comparison 25-Yr/96-Hr, 12" peak rate	P.I.M. Chapter 3.2.1
Outstanding Florida Water	Additional 50% water quality volume	P.I.M. Chapter 5.2.2

## **Existing Drainage Characteristics**

The existing drainage for SR 93 (I-75) from south of SR 44 to SR 200 was assessed by conducting field reviews throughout the corridor and reviewing existing as-built plans and other available construction plans, Straight Line Diagrams (SLDs), Geographic Information System (GIS) maps, and Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs). Further, existing permit information was obtained from the Florida Department of Environmental Protection (FDEP), the St. John's River Florida Water Management District (SJRWMD) and the Southwest Florida Water Management District (SWFWMD).

Based on our research of this segment of I-75, the roadway crosses through two (2) major watersheds, both the Withlacoochee River and Ocklawaha River Basins. The Withlacoochee Basin is within the jurisdictional boundaries of SWFWMD and the Ocklawaha Basin is in the SJRWMD service area. Additionally, the project crosses seven (7) separate Water Basin ID's (WBID's) associated with the Withlacoochee River and the Ocklawaha River Watersheds. None of the WBID's are considered impaired within the vicinity of the I-75 corridor. The Ocklawaha River is an Outstanding Florida Water (OFW); however, the project does not directly discharge to this waterbody. Since the project limits extend through both SWFWMD and SJRWMD, interagency agreements are anticipated to determine the appropriate reviewing agency for this project. A BMAP exists for the Withlacoochee Basin and is pending for the Ocklawaha Basin. Our priority will be to maximize the interchanges for stormwater management. There are several sub-basins to both of these watersheds, which include Big Jones Creek (WBID 1324) within the Withlacoochee Basin (HUC 03100208) and Silver River Drain (WBID 2772B) within the Ocklawaha Basin (HUC 03080102). Due to the length of this project, approximately 33 subbasins were delineated along the I-75 corridor based on the historical drainage patterns and receiving waterbodies associated within the project limits. Much of the project drains to designated "Closed" Basins; however, the southern portion of the project, in Sumter County, consists of "Open Basins" that drain south into the Withlacoochee Basin through Lake Panasoffkee.

The land use within the southern project is primarily agriculture with some rural residential, industrial, commercial, mixed use, wooded and conservation. While the northern segment is mostly rural land on the east side of I-75 within significant portions of medium residential on the west side with scattered low residential, public, and municipal, and some preservation lands.

Stormwater runoff is collected and conveyed primarily by roadside ditches that often serve as both conveyance and linear stormwater management systems. Several sections of I-75 have been improved in the past and stormwater controls were added to the roadway ditches to provide beneficial treatment, intended to mitigate for the added impervious area to this roadway. Additionally, several infield areas associated with the various interchanges along this section of I-75 also provide stormwater management for both the mainline and connecting sides streets. There are many cross drains, side drains and small closed storm drain systems that convey and discharge runoff into numerous outfalls. Some subbasins have multiple isolated depressions and outfalls within the primary basin. Therefore, runoff is stored locally until it percolates into the ground or stages high enough to pop-off into an adjacent sub-basin.

#### **Proposed Roadway Improvements**

The proposed roadway improvements to I-75 will require new stormwater management controls to mitigate for the existing permitted systems and to address the roadway widening for the interim and ultimate roadway configurations. The interim design approach is to design new Auxiliary lanes that will begin at the interchange on-ramps and extend to the next interchange, where these lanes will become the off-ramp lanes.



The ultimate roadway typical section for I-75 consists of 12-lanes, four (4) General Use lanes and two (2) Express Lanes in each direction. Stormwater runoff from the proposed roadway improvements will be collected and conveyed in both open and closed storm drain systems and routed to stormwater management facilities located throughout the I-75 corridor for treatment and attenuation. Offsite drainage patterns will remain unchanged and runoff that currently drains towards the FDOT right of way will be collected and conveyed by diversion ditches that preserve the existing drainage patterns and discharge to the existing receiving waterbodies, where feasible, otherwise, the offsite flow will be incorporated into the stormwater management system for the specific subbasin.

This pond siting evaluation was prepared to provide information on potential stormwater management facilities that serve as viable hydraulic options in managing runoff from the proposed roadway improvements. Based on this information, we evaluated the existing overland topography, existing soils data, FEMA designated Floodplain areas and land uses along both side of I-75 to identify hydraulically feasible pond site alternatives to manage the stormwater runoff for the ultimate build-out of I-75. Additional considerations included seasonal high groundwater table elevation (SHWT), wetland jurisdictional boundaries, designated floodplain boundaries, contamination screenings, cultural

resources investigations, geologic (karst) features, and a thorough review of the corridor and surrounding areas.

The approach to the preliminary pond sizing included providing treatment volume for the additional impervious area and not the entire FDOT right of way area. However, the proposed pond site alternatives were also sized conservatively to account for the ultimate I-75 roadway typical section condition having a 300-feet wide right-of-way footprint throughout this portion of the project. Therefore, it was assumed that 90-percent of the ultimate build-out typical section would consist of impervious area due to the safety requirements associated with the expanded interstate corridor. Dry retention ponds are proposed in all basins due to the "Closed Basin" characteristics noted throughout much of the project. The southern limits of the project with Sumter County, will be evaluated for wet detention since this area is within an "Open Basin" with positive outfall to the Withlacoochee River. The preliminary pond sizes have been calculated accounting for attenuation based on volumetric differences in runoff predicted by the National Resources Conservation Service (NRCS) equation for runoff for the 100-year, 240-hour storm. However, the calculations do not consider percolation of the soil below the pond bottom. Therefore, some of the ponds may be able to provide less volume than the calculations illustrate due to high permeability rates and vertical separation between the pond bottom and the water table/confining layer.

Based on this information, the general design strategy for the pond site alternatives and stormwater conveyance is as follows:

- Maintain the existing drainage patterns, cross drain locations and sizes, and outfall locations.
- Provide treatment volume for the proposed additional impervious area and not the entire rightof-way.
- Identify three (3) pond site alternatives, at a minimum, for each drainage basin.
- Each pond site alternative is designed to retain 100-year/10-day volume to satisfy the Closed Basin criteria.
- Dry retention is the preferred stormwater management strategy.
- For the purposes of the pond siting efforts, no geotechnical data was collected for the proposed pond alternatives.
- Design considerations will include considerations for the existing the karst conditions associated with the shallow clay and limestone subsurface throughout Marion County

All of the pond site alternatives are displayed on the Pond Right-of-Way Sheets in Appendix A. The following sections provide more detailed information for each of the basins along the corridor.

### **Drainage Basin and Pond Siting Descriptions**

#### **BASIN 9**

Basin 9 extends approximately from STA 1512+00 to 1464+00 (5,550 ft). There is a Station Equation at the Sumter/Marion County Lines that alters the stationing along I-75 as follows: STA 1525+64.00(Back)/STA 1422+88.98(Ahead). Runoff contributing areas from this basin consists of the roadway right-of-way between those stations and offsite contributions from both sides of I-75. The existing onsite basin area is

38.22 acres, of which 11.11 acres are impervious area. In the existing conditions, runoff from Basin 9 flows to conveyance swales along both sides of I-75.

Basin 9 is a Closed Basin; therefore, there is no positive outfall for this basin. The low point along the existing edge of pavement is located near STA 1437+30. There is an existing 36" cross drain near STA 1438+80 connecting the swales on both sides of the road. Additionally, there are six (6) cross drains that convey the runoff from one side of the road to the roadside swales.

Three (3) pond site alternatives were evaluated on either side of I-75 to address the stormwater management needs for this basin. The preliminary sizing calculations are provided in Appendix B of this Report. Based on the evaluation criteria used to assess each pond site alternative, Pond 9-2 on the west side of I-75 between Stations 1445+00 and 1455+00 is the recommended alternative. Please refer to Table 2 for the Pond Siting Evaluation Matrix and the parameters used to assess each potential pond site. Similarly, the low edge of pavement for this basin is approximately elevation 62.0-feet, NAVD, near Station 1437+30. The preliminary pond results produced a peak stage elevation of 59.0-feet, NAVD. Therefore, the proposed pond has the hydraulic capacity to manage the stormwater runoff from this basin and minimizes the potential for the Hydraulic Grade Line (HGL) to directly cause roadway flooding.

#### **BASIN 10**

Basin 10 extends approximately from STA 1464+00 to 1505+50 (4,150 ft). Runoff contributing areas from this basin consists of the roadway right-of-way between those stations and offsite contributions from both sides of I-75. The existing onsite basin area is 28.66 acres, of which 8.40 acres are impervious area. In the existing conditions, runoff from Basin 10 flows to conveyance swales along both sides of I-75.

Basin 10 is a Closed Basin therefore there is no positive outfall for this basin. The low point along the existing edge of pavement is located near STA 1473+90. There is an existing 24" cross drain near STA 1473+00 connecting the swales on both sides of the road. Additionally, there are three (3) cross drains that convey the runoff from one side of the road to the roadside swales.

Three (3) pond site alternatives were evaluated on either side of I-75 to address the stormwater management needs for this basin. The preliminary sizing calculations are provided in Appendix B of this Report. Based on the evaluation criteria used to assess each pond site alternative, Pond 10-3 on the west side of I-75 between Stations 1464+00 and 1472+00 is the recommended alternative. Please refer to Table 2 for the Pond Siting Evaluation Matrix and the parameters used to assess each potential pond site. Similarly, the low edge of pavement for this basin is approximately elevation 63.0-feet, NAVD, near Station 1473+90. The preliminary pond results produced a peak stage elevation of 59.0-feet, NAVD. Therefore, the proposed pond has the hydraulic capacity to manage the stormwater runoff from this basin and minimizes the potential for the Hydraulic Grade Line (HGL) to directly cause roadway flooding.

#### **BASIN 11**

Basin 11 extends approximately from STA 1505+50 to 1545+00 (3,950 ft). Runoff contributing areas from this basin consists of the roadway right-of-way between those stations and offsite contributions from both sides of I-75. The existing onsite basin area is 27.14 acres, of which 7.96 acres are impervious area. In the existing conditions, runoff from Basin 11 flows to conveyance swales along both sides of I-75.

Basin 11 is a Closed Basin therefore there is no positive outfall for this basin. The low point along the existing edge of pavement is located near STA 1540+00. There is an existing 30" cross drain near STA

1539+00 connecting the swales on both sides of the road. Additionally, there are three (3) cross drains that convey the runoff from one side of the road to the roadside swales.

Three (3) pond site alternatives were evaluated on either side of I-75 to address the stormwater management needs for this basin. However, due to coordination issues with property owners in Basin 12 and the willingness of the property owner to sell their land as part of Pond Alternative 11-1, a new pond alternative was developed to address stormwater management in both Basin 11 and 12. The preliminary sizing calculations are provided in Appendix B of this Report. Currently, Pond Alternative 11-1 is the preferred site, which is on the east side of I-75 between Stations 1525+00 and 1532+00. If Basin 12 is included into Basin 11 based on the willingness of the property owner to work with FDOT, Pond Alternative 11-4/12-4 on the east side of I-75 between Stations 1525+00 and 1539+00 will become the preferred alternative for both basins. Please refer to Table 2 for the Pond Siting Evaluation Matrix and the parameters used to assess each potential pond site. Similarly, the low edge of pavement for this basin is approximately elevation 61.0-feet, NAVD, near Station 1540+00. The preliminary pond results produced a peak stage elevation of 59.0-feet, NAVD. Therefore, the proposed pond has the hydraulic capacity to manage the stormwater runoff from this basin and minimizes the potential for the Hydraulic Grade Line (HGL) to directly cause roadway flooding.

#### **BASIN 12**

Basin 12 extends approximately from STA 1545+00 to 1596+50 (5,150 ft). Runoff contributing areas from this basin consists of the roadway right-of-way between those stations and offsite contributions from both sides of I-75. The existing onsite basin area is 41.80 acres, of which 10.40 acres are impervious area. In the existing conditions, runoff from Basin 12 flows to conveyance swales along both sides of I-75. Ocala Weigh Station starts from near STA 1550+00. There are 6 regular ponds around the weigh station that are within offsite areas of Basin 12.

Basin 12 is a Closed Basin therefore there is no positive outfall for this basin. The low point along the existing edge of pavement is located near STA 1544+00. There is an existing 30" cross drain near STA 1588+00 connecting the swales on both sides of the road.

Three (3) pond site alternatives were evaluated on either side of I-75 to address the stormwater management needs for this basin. The preliminary sizing calculations are provided in Appendix B of this Report. Currently, Pond Alternative 12-1 is the preferred site, which is on the east side of I-75 between Stations 1542+00 and 1549+50. If Basin 12 is included into Basin 11 based on the willingness of the property owner to work with FDOT, Pond Alternative 11-4/12-4 on the east side of I-75 between Stations 1525+00 and 1539+00 will become the preferred alternative for both basins. Please refer to Table 2 for the Pond Siting Evaluation Matrix and the parameters used to assess each potential pond site. Since this is a shared basin and combines with Basin 14, the pond HGL of 59.0-feet, NAVD, is well below the low edge of pavement, which is approximately 61-feet, NAVD.

#### **BASIN 13**

Basin 13 extends approximately from STA 1596+50 to 1642+50 (4,600 ft). Runoff contributing areas from this basin consists of the roadway right-of-way between those stations and offsite contributions from both sides of I-75. The existing onsite basin area is 37.80 acres, of which 9.29 acres are impervious area. In the existing conditions, runoff from Basin 13 flows to conveyance swales along both sides of I-75. There are also 2 linear ponds in the median, interconnected by MES, that accept stormwater runoff from both sides of I-75 road.

Basin 13 is a Closed Basin; therefore, there is no positive outfall for this basin. The low point along the existing edge of pavement is located near STA 1596+50. There is no cross drain or side drain in this basin.

Three (3) pond site alternatives were evaluated on the west side of I-75 to address the stormwater management needs for this basin. The preliminary sizing calculations are provided in Appendix B of this Report. Based on the evaluation criteria used to assess each pond site alternative, Pond 13-1 on the west side of I-75 between Stations 1605+00 and 1619+00 is the recommended alternative. Please refer to Table 2 for the Pond Siting Evaluation Matrix and the parameters used to assess each potential pond site. Similarly, the low edge of pavement for this basin is approximately elevation 69.0-feet, NAVD, near Station 1596+50. The preliminary pond results produced a peak stage elevation of 67.0-feet, NAVD. Therefore, the proposed pond has the hydraulic capacity to manage the stormwater runoff from this basin and minimizes the potential for the Hydraulic Grade Line (HGL) to directly cause roadway flooding.

#### **BASIN 14**

Basin 14 extends approximately from STA 1642+50 to 1669+80 (approximately 2,730 ft). Runoff contributing areas from this basin consists of the roadway right-of-way between those stations and offsite contributions from both sides of I-75. The Existing onsite basin area is 18.80 acres, of which 5.52 acres are impervious areas. In the existing conditions, runoff from Basin 14 flows to conveyance swales along both sides of I-75.

Basin 14 is a Closed Basin therefore there is no positive outfall for this basin. There is an existing 30" cross drain near STA 1655+90 connecting the swales on both sides of the road.

Three (3) pond site alternatives were evaluated on either side of I-75 to address the stormwater management needs for this basin. However, due to various hardships within both Basins 14 and 15, two (2) of the sites 14-1 and 14-3 have been sized to include Basin 15. Pond Site Alternative 14-2 is the only standalone site within Basin 14, which is on the west side of I-75. The preliminary sizing calculations are provided in Appendix B of this Report. Pond Alternative 14-1/15-1 on the east side of I-75 between Stations 1650+00 and 1658+00 is the recommended alternative. Please refer to Table 2 for the Pond Siting Evaluation Matrix and the parameters used to assess each potential pond site. Similarly, the low edge of pavement for this basin is approximately elevation 72.0-feet, NAVD, near Station 1655+90. The preliminary pond results produced a peak stage elevation of 59.0-feet, NAVD. Therefore, the proposed pond has the hydraulic capacity to manage the stormwater runoff from this basin and minimizes the potential for the Hydraulic Grade Line (HGL) to directly cause roadway flooding.

#### **BASIN 15**

Basin 15 extends approximately from STA 1669+80 to 1684+80 (approximately 2,500 ft). Runoff contributing areas from this basin consists of the roadway right-of-way between those stations and offsite contributions from both sides of I-75. The Existing onsite basin area is 16.35 acres, of which 3.03 acres are impervious areas. Runoff from Basin 15 flows southward through conveyance swales and depression areas along both sides of the limited access right of way into Basin 14 and continues to the low storage area within the basin.

Basin 15 is a Closed Basin therefore there is no positive outfall for this basin.

Three (3) pond site alternatives were evaluated on either side of I-75 to address the stormwater management needs for this basin. As previously mentioned in the Basin 14 write-up, both Basins 14 and 15, share two (2) of the pond site alternatives 14-1/15-1 and 14-3/15-3 have been sized to include both

basins. Pond Site Alternative 15-2 is the only standalone site within Basin 15, which is on the west side of I-75. The preliminary sizing calculations are provided in Appendix B of this Report. Pond Alternative 14-1/15-1 on the east side of I-75 between Stations 1650+00 and 1658+00 is the recommended alternative. Please refer to Table 2 for the Pond Siting Evaluation Matrix and the parameters used to assess each potential pond site. Since this is a shared basin and combines with Basin 14, the pond HGL of 59.0-feet, NAVD, is well below the low edge of pavement, which is approximately 72.0-feet, NAVD.

#### **BASIN 16**

Basin 16 contains the northern half of the I-75/Hwy 484 interchange and extends from STA 1684+80 to 1722+00 (3,720 ft). The onsite roadway right-of-way between those stations and offsite contributions from the west side of the I-75. The existing onsite basin area is 31.45 acres, of which 7.52 acres are impervious area. In the existing conditions, runoff from Basin 16 flows to conveyance swales and depression areas along both sides of I-75. The northern half of the bridge and the surrounding areas discharge to Basin 16. The southern half discharges to the adjacent basin (Basin 15).

Basin 16 is a Closed Basin; therefore, there is no positive outfall for this basin. The low point along the existing edge of pavement is located near STA 1704+95. There is an existing 30" cross drain near STA 1695+95 that conveys the runoff from the west side of the road to the roadside swales.

Three (3) pond site alternatives were evaluated on either side of I-75 to address the stormwater management needs for this basin. The preliminary sizing calculations are provided in Appendix B of this Report. Pond Alternative 16-3 on the east side of I-75 between Stations 1734+00 and 1740+00 is the recommended alternative. Please refer to Table 2 for the Pond Siting Evaluation Matrix and the parameters used to assess each potential pond site. Similarly, the low edge of pavement for this basin is approximately elevation 76.0-feet, NAVD, near Station 1704+95. The preliminary pond results produced a peak stage elevation of 72.0-feet, NAVD. Therefore, the proposed pond has the hydraulic capacity to manage the stormwater runoff from this basin and minimizes the potential for the Hydraulic Grade Line (HGL) to directly cause roadway flooding.

#### BASIN 17

Basin 17 is located north of Hwy 484 and extends approximately from STA 1722+00 to 1768+00 (4,600 ft). Runoff contributing areas from this basin consists of the roadway right-of-way between those stations and offsite contributions from both sides of the I-75. The existing onsite basin area is 56.94 acres, of which 9.29 acres are impervious area. Flood Compensation is estimated at 3.65 acres-ft. In the existing conditions, runoff from Basin 17 flows to conveyance swales along both sides of I-75.

Basin 17 is a Closed Basin therefore there is no positive outfall for this basin. The low point along the existing edge of pavement is located near STA 1756+80. There is an existing 30" cross drain near STA 1756+80 connecting the swales on both sides of the road.

Three (3) pond site alternatives were evaluated on either side of I-75 to address the stormwater management needs for this basin. The preliminary sizing calculations are provided in Appendix B of this Report. Pond Alternative 17-2 on the west side of I-75 between Stations 1742+50 and 1750+00 is the recommended alternative. Please refer to Table 2 for the Pond Siting Evaluation Matrix and the parameters used to assess each potential pond site. Similarly, the low edge of pavement for this basin is approximately elevation 57.0-feet, NAVD, near Station 1756+80. The preliminary pond results produced a peak stage elevation of 53.0-feet, NAVD. Therefore, the proposed pond has the hydraulic capacity to

manage the stormwater runoff from this basin and minimizes the potential for the Hydraulic Grade Line (HGL) to directly cause roadway flooding.

#### BASIN 18

Basin 18 is located near Cross Seminole Trail and extends approximately from STA 1768+00 to 1792+00 (2,400 ft). Runoff contributing areas from this basin consists of the roadway right-of-way between those stations and offsite contributions from both sides of the I-75. The existing onsite basin area is 32.15 acres, of which 4.88 acres are impervious area. Flood Compensation is estimated at 2.97 acres-ft. In the existing conditions, runoff from Basin 18 flows to conveyance swales along both sides of I-75 and an offsite depression area on the west side of the road near STA 1788+00. Cross Seminole Trail bridges over I-75 near STA 1789+00. The bridge and a portion of the Trail are within onsite areas of Basin 18.

Basin 18 is a Closed Basin therefore there is no positive outfall for this basin. The low point along the existing edge of pavement is located near STA 946+00. There are two (2) cross drains that convey the runoff from one side of the road to the roadside swales.

Three (3) pond site alternatives were evaluated on either side of I-75 to address the stormwater management needs for this basin. The preliminary sizing calculations are provided in Appendix B of this Report. Based on our discussion with the District Drainage Office, the approach for both Basins 18 and 19 is to pursue Line Easements through SJRWMD and prevent significant impacts to the adjacent State TIFF Land associated Cross Seminole Trail. These Line Easements would essentially allow the FDOT to document the increased stormwater runoff created by the I-75 roadway widening that will be discharged directly through the existing TIFF Easement Line without impacting the preservation area within the TIFF property. This approach has been permitted in the past for other District 5 roadway project that also involved State TIFF property. However, the preferred pond site is currently Pond Alternative 18-4, which is located on the east side of I-75 between Stations 1768+00 and 1792+00. Please refer to Table 2 for the Pond Siting Evaluation Matrix and the parameters used to assess each potential pond site.

#### **BASIN 19**

Basin 19 is located northwest of Cross Seminole Trail and extends approximately from STA 1792+00 to 1821+50 (2,950 ft). Runoff contributing areas from this basin consists of the roadway right-of-way between those stations and offsite contributions from both sides of the I-75. The existing onsite basin area is 25.00 acres, of which 5.86 acres are impervious area. In the existing conditions, runoff from Basin 19 flows to conveyance swales along both sides of I-75.

Basin 19 is a Closed Basin therefore there is no positive outfall for this basin. The low point along the existing edge of pavement is located near STA 1802+90. There is an existing 24" cross drain near STA 1802+90 connecting the swales on both sides of the road.

Three (3) pond site alternatives were evaluated on either side of I-75 to address the stormwater management needs for this basin. The preliminary sizing calculations are provided in Appendix B of this Report. Based on our discussion with the District Drainage Office, the approach for both Basins 18 and 19 is to pursue Line Easements through SJRWMD and prevent significant impacts to the adjacent State TIFF Land associated Cross Seminole Trail. These Line Easements would essentially allow the FDOT to document the increased stormwater runoff created by the I-75 roadway widening that will be discharged directly through the existing TIFF Easement Line without impacting the preservation area within the TIFF property. This approach has been permitted in the past for other District 5 roadway project that also involved State TIFF property. However, the preferred pond site is currently Pond Alternative 19-4, which

is located on the west side of I-75 between Stations 1803+00 and 1810+00 is the recommended alternative. Please refer to Table 2 for the Pond Siting Evaluation Matrix and the parameters used to assess each potential pond site.

#### **BASIN 20**

Basin 20 extends approximately from STA 1821+50 to 1835+00 (1,350 ft). Runoff contributing areas from this basin consists of the roadway right-of-way between those stations and offsite contributions from both sides of the I-75. The existing onsite basin area is 9.30 acres, of which 2.73 acres are impervious area. In the existing conditions, runoff from Basin 20 flows to conveyance swales along both sides of I-75.

Basin 20 is a Closed Basin therefore there is no positive outfall for this basin. The low point along the existing edge of pavement is located near STA 1834+00. There is an existing 24" cross drain near STA 1825+90 connecting the swales on both sides of the road.

Three (3) pond site alternatives were evaluated on either side of I-75 to address the stormwater management needs for this basin. The preliminary sizing calculations are provided in Appendix B of this Report. Pond Alternative 20-2 on the east side of I-75 between Stations 1829+00 and 1834+00 is the recommended alternative. Please refer to Table 2 for the Pond Siting Evaluation Matrix and the parameters used to assess each potential pond site. Similarly, the low edge of pavement for this basin is approximately elevation 87.0-feet, NAVD, near Station 1834+00. The preliminary pond results produced a peak stage elevation of 84.0-feet, NAVD. Therefore, the proposed pond has the hydraulic capacity to manage the stormwater runoff from this basin and minimizes the potential for the Hydraulic Grade Line (HGL) to directly cause roadway flooding.

#### **BASIN 21**

Basin 21 extends approximately from STA 1835+00 to 1857+00 (2,200 ft). Runoff contributing areas from this basin consists of the roadway right-of-way between those stations and offsite contributions from both sides of the I-75. The existing onsite basin area is 23.42 acres, of which 4.44 acres are impervious area. Flood Compensation is estimated at 1.13 acres-ft. In the existing conditions, runoff from Basin 21 flows to conveyance swales along both sides of I-75.

Basin 21 is a Closed Basin therefore there is no positive outfall for this basin. The low point along the existing edge of pavement is located near STA 1837+00. There are two (2) existing cross drains connecting the swales on both sides of the road.

Three (3) pond site alternatives were evaluated on either side of I-75 to address the stormwater management needs for this basin. The preliminary sizing calculations are provided in Appendix B of this Report. Pond Alternative 21-1 on the east side of I-75 between Stations 1851+00 and 1863+00 is the recommended alternative. Please refer to Table 2 for the Pond Siting Evaluation Matrix and the parameters used to assess each potential pond site. Similarly, the low edge of pavement for this basin is approximately elevation 88.0-feet, NAVD, near Station 1837+00. The preliminary pond results produced a peak stage elevation of 85.0-feet, NAVD. Therefore, the proposed pond has the hydraulic capacity to manage the stormwater runoff from this basin and minimizes the potential for the Hydraulic Grade Line (HGL) to directly cause roadway flooding.

Basin 22 extends approximately from STA 1857+00 to 1889+00 (3,200 ft). Runoff contributing areas from this basin consists of the roadway right-of-way between those stations and offsite contributions from both sides of the I-75. The existing onsite basin area is 14.14 acres, of which 6.46 acres are impervious area. Flood Compensation is estimated at 0.48 acres-ft. In the existing conditions, runoff from Basin 22 flows to conveyance swales along both sides of I-75 and a linear median pond starting from approximately STA 1872+00. The linear pond continues north to the adjacent Basin 23.

Basin 22 is a Closed Basin therefore there is no positive outfall for this basin. The low point along the existing edge of pavement is located near STA 1875+00. There is an existing 30" cross drain near STA 1865+50 connecting the swales on both sides of the road.

Three (3) pond site alternatives were evaluated on either side of I-75 to address the stormwater management needs for this basin. The preliminary sizing calculations are provided in Appendix B of this Report. Pond Alternative 22-1 on the east side of I-75 between Stations 1874+00 and 1879+00 is the recommended alternative. Please refer to Table 2 for the Pond Siting Evaluation Matrix and the parameters used to assess each potential pond site. Similarly, the low edge of pavement for this basin is approximately elevation 90.0-feet, NAVD, near Station 1875+00. The preliminary pond results produced a peak stage elevation of 87.0-feet, NAVD. Therefore, the proposed pond has the hydraulic capacity to manage the stormwater runoff from this basin and minimizes the potential for the Hydraulic Grade Line (HGL) to directly cause roadway flooding.

#### **BASIN 23**

Basin 23 extends approximately from STA 1889+00 to 1905+00 (1,600 ft). Runoff contributing areas from this basin consists of the roadway right-of-way between those stations and offsite contributions from both sides of the I-75. The existing onsite basin area is 13.81 acres, of which 3.64 acres are impervious area. Flood Compensation is estimated at 1.61 acres-ft. In the existing conditions, runoff from Basin 23 flows to conveyance swales along both sides of I-75 and median linear ponds. There are 3 linear ponds within this basin that are separated by concrete berms.

Basin 23 is a Closed Basin therefore there is no positive outfall for this basin. The low point along the existing edge of pavement is located near STA 1898+90. There is an existing 24" cross drain connecting the swales on both sides of the road and the linear pond near STA 1898+90.

Three (3) pond site alternatives were evaluated on either side of I-75 to address the stormwater management needs for this basin. The preliminary sizing calculations are provided in Appendix B of this Report. Pond Alternative 23-1 on the east side of I-75 between Stations 1894+00 and 1898+00 is the recommended alternative. Please refer to Table 2 for the Pond Siting Evaluation Matrix and the parameters used to assess each potential pond site. Similarly, the low edge of pavement for this basin is approximately elevation 87.0-feet, NAVD, near Station 1898+90. The preliminary pond results produced a peak stage elevation of 81.0-feet, NAVD. Therefore, the proposed pond has the hydraulic capacity to manage the stormwater runoff from this basin and minimizes the potential for the Hydraulic Grade Line (HGL) to directly cause roadway flooding.

Basin 24 extends approximately from STA 1905+00 to 1925+00 (2,000 ft). Runoff contributing areas from this basin consists of the roadway right-of-way between those stations and offsite contributions from both sides of the I-75. The existing onsite basin area is 14.00 acres, of which 4.04 acres are impervious area. In the existing conditions, runoff from Basin 24 flows to conveyance swales along both sides of I-75 and a linear median pond. The bulk of the linear pond is in the adjacent Basin 23 and the northern part extends into Basin 24 for about 400 ft ending near STA 1909+00.

Basin 24 is a Closed Basin therefore there is no positive outfall for this basin. The low point along the existing edge of pavement is located near STA 1910+90. There is an existing 30" cross drain connecting the swales on both sides of the road near STA 1910+90.

Three (3) pond site alternatives were evaluated on either side of I-75 to address the stormwater management needs for this basin. The preliminary sizing calculations are provided in Appendix B of this Report. Pond Alternative 24-1 on the east side of I-75 between Stations 1911+00 and 1918+00 is the recommended alternative. Please refer to Table 2 for the Pond Siting Evaluation Matrix and the parameters used to assess each potential pond site. Similarly, the low edge of pavement for this basin is approximately elevation 87.0-feet, NAVD, near Station 1910+90. The preliminary pond results produced a peak stage elevation of 82.0-feet, NAVD. Therefore, the proposed pond has the hydraulic capacity to manage the stormwater runoff from this basin and minimizes the potential for the Hydraulic Grade Line (HGL) to directly cause roadway flooding.

#### **BASIN 25**

Basin 25 extends approximately from STA 1925+00 to 1940+80 (1,580 ft). Runoff contributing areas from this basin consists of the roadway right-of-way between those stations and offsite contributions from both sides of the I-75. The existing onsite basin area is 10.92 acres, of which 3.20 acres are impervious area. Flood Compensation is estimated at 1.79 acres-ft. In the existing conditions, runoff from Basin 25 flows to conveyance swales along both sides of I-75 and a depression area near STA 1928+00.

Basin 25 is a Closed Basin therefore there is no positive outfall for this basin. The low point along the existing edge of pavement is located near STA 1938+00. There is an existing 30" cross drain connecting the swales on both sides of the road near STA 1937+90.

Three (3) pond site alternatives were evaluated on either side of I-75 to address the stormwater management needs for this basin. The preliminary sizing calculations are provided in Appendix B of this Report. Pond Alternative 25-1/26-1 on the east side of I-75 between Stations 1935+00 and 1941+50 is the recommended alternative. Please refer to Table 2 for the Pond Siting Evaluation Matrix and the parameters used to assess each potential pond site. Similarly, the low edge of pavement for this basin is approximately elevation 87.0-feet, NAVD, near Station 1938+00. The preliminary pond results produced a peak stage elevation of 78.0-feet, NAVD. Therefore, the proposed pond has the hydraulic capacity to manage the stormwater runoff from this basin and minimizes the potential for the Hydraulic Grade Line (HGL) to directly cause roadway flooding.

Basin 26 extends approximately from STA 1940+80 to 1963+60 (2,280 ft). Runoff contributing areas from this basin consists of the roadway right-of-way between those stations and offsite contributions from both sides of the I-75. The existing onsite basin area is 15.74 acres, of which 4.61 acres are impervious area. There is a Rest Area on both sides of the road from near STA 1118+00 to 1146+00. In the existing conditions, runoff from Basin 26 flows to conveyance swales along both sides of I-75 and inline ponds serving both Basin 26 and the Rest Area. Most of the Rest Area lies within the offsite areas. Only the Rest Area's parking lot closest to the road is within Basin 26 onsite areas.

There are 4 inline ponds serving both this basin and the Rest Area: 2 ponds on each side of the road. The inline ponds are near STA 1943+95 and 1954+95 on the east side, and STA 1953+95 and 1964+95 on the west side.

Basin 26 is a Closed Basin therefore there is no positive outfall for this basin. The low point along the existing edge of pavement is located near STA 1972+75. There is an 18" cross drain that conveys the runoff from the west side of the road to the roadside swales near STA 1951+95.

Three (3) pond site alternatives were evaluated on the east side of I-75 to address the stormwater management needs for this basin. The preliminary sizing calculations are provided in Appendix B of this Report. As noted in Basin 25, Pond Alternative 25-1/26-1 on the east side of I-75 between Stations 1935+00 and 1941+50 is the recommended alternative. Please refer to Table 2 for the Pond Siting Evaluation Matrix and the parameters used to assess each potential pond site. Since this is a shared basin and combines with Basin 25, the pond HGL of 78.0-feet, NAVD, is well below the low edge of pavement, which is approximately 87.0-feet, NAVD.

#### **BASIN 27**

Basin 27 extends approximately from STA 1963+60 to 1993+00 (2,940 ft). Runoff contributing areas from this basin consists of the roadway right-of-way between those stations and offsite contributions from both sides of the I-75. The existing onsite basin area is 13.88 acres, of which 4.07 acres are impervious area. Flood Compensation is estimated at 1.71 acres-ft. In the existing conditions, runoff from Basin 27 flows to conveyance swales along both sides of I-75.

Basin 27 is a Closed Basin therefore there is no positive outfall for this basin. The low point along the existing edge of pavement is located near STA 1965+75. There is an existing 30" cross drain connecting the swales on both sides of the road near STA 1976+90.

Three (3) pond site alternatives were evaluated on either side of I-75 to address the stormwater management needs for this basin. The preliminary sizing calculations are provided in Appendix B of this Report. Pond Alternative 27-3 on the east side of I-75 between Stations 1974+00 and 1980+00 is the recommended alternative. Please refer to Table 2 for the Pond Siting Evaluation Matrix and the parameters used to assess each potential pond site. Similarly, the low edge of pavement for this basin is approximately elevation 75.0-feet, NAVD, near Station 1965+75. The preliminary pond results produced a peak stage elevation of 71.0-feet, NAVD. Therefore, the proposed pond has the hydraulic capacity to manage the stormwater runoff from this basin and minimizes the potential for the Hydraulic Grade Line (HGL) to directly cause roadway flooding.

Basin 28 extends approximately from STA 1993+00 to 2016+20 (2,320 ft). Runoff contributing areas from this basin consists of the roadway right-of-way between those stations and offsite contributions from both sides of the I-75. The existing onsite basin area is 16.08 acres, of which 4.72 acres are impervious area. Flood Compensation is estimated at 2.23 acres-ft. In the existing conditions, runoff from Basin 28 flows to conveyance swales along both sides of I-75.

Basin 28 is a Closed Basin therefore there is no positive outfall for this basin. The low point along the existing edge of pavement is located near STA 2001+50. There is an existing 24" cross drain connecting the swales on both sides of the road near STA 2001+50. Additionally, there are two (2) 20" cross drains that convey the runoff from the west side of the road to the roadside swales.

Three (3) pond site alternatives were evaluated on either side of I-75 to address the stormwater management needs for this basin. The preliminary sizing calculations are provided in Appendix B of this Report. Pond Alternative 28-1 on the east side of I-75 between Stations 2001+00 and 2007+00 is the recommended alternative. Please refer to Table 2 for the Pond Siting Evaluation Matrix and the parameters used to assess each potential pond site. Similarly, the low edge of pavement for this basin is approximately elevation 79.0-feet, NAVD, near Station 2001+50. The preliminary pond results produced a peak stage elevation of 78.0-feet, NAVD. Therefore, the proposed pond has the hydraulic capacity to manage the stormwater runoff from this basin and minimizes the potential for the Hydraulic Grade Line (HGL) to directly cause roadway flooding.

#### **BASIN 29**

Basin 29 extends approximately from STA 2016+20 to 2043+00 (2,680 ft). Runoff contributing areas from this basin consists of the roadway right-of-way between those stations and offsite contributions from east side of the I-75. The existing onsite basin area is 18.36 acres, of which 5.38 acres are impervious area. Flood Compensation is estimated at 2.15 acres-ft. In the existing conditions, runoff from Basin 29 flows to conveyance swales along both sides of I-75.

Basin 28 is a Closed Basin therefore there is no positive outfall for this basin. The low point along the existing edge of pavement is located near STA 2016+20. There is an existing 24" cross drain connecting the swales on both sides of the road near STA 2029+00.

Three (3) pond site alternatives were evaluated on either side of I-75 to address the stormwater management needs for this basin. The preliminary sizing calculations are provided in Appendix B of this Report. Pond Alternative 29-1 on the east side of I-75 between Stations 2013+00 and 2017+00 is the recommended alternative. Please refer to Table 2 for the Pond Siting Evaluation Matrix and the parameters used to assess each potential pond site. Similarly, the low edge of pavement for this basin is approximately elevation 80.0-feet, NAVD, near Station 2016+20. The preliminary pond results produced a peak stage elevation of 79.0-feet, NAVD. Therefore, the proposed pond has the hydraulic capacity to manage the stormwater runoff from this basin and minimizes the potential for the Hydraulic Grade Line (HGL) to directly cause roadway flooding.

Basin 30 extends approximately from STA 2043+00 to 2091+00 (4,800 ft). Runoff contributing areas from this basin consists of the roadway right-of-way between those stations and offsite contributions from both sides of the I-75. The existing onsite basin area is 33.06 acres, of which 9.70 acres are impervious area. Flood Compensation is estimated at 5.19 acres-ft. In the existing conditions, runoff from Basin 30 flows to conveyance swales and low-lying areas along both sides of I-75.

Basin 30 is a Closed Basin; therefore, there is no positive outfall for this basin. The low point along the existing edge of pavement is located near STA 2091+00. There is an existing cross drain connecting the swales on both sides of the road near STA 2052+00 that consists of an 18" pipe on the east side and a 24" pipe on the west side.

Three (3) pond site alternatives were evaluated on either side of I-75 to address the stormwater management needs for this basin. The preliminary sizing calculations are provided in Appendix B of this Report. Pond Alternative 30-3 on the west side of I-75 between Stations 2072+00 and 2080+00 is the recommended alternative. Please refer to Table 2 for the Pond Siting Evaluation Matrix and the parameters used to assess each potential pond site. Similarly, the low edge of pavement for this basin is approximately elevation 82.0-feet, NAVD, near Station 2091+00. The preliminary pond results produced a peak stage elevation of 78.0-feet, NAVD. Therefore, the proposed pond has the hydraulic capacity to manage the stormwater runoff from this basin and minimizes the potential for the Hydraulic Grade Line (HGL) to directly cause roadway flooding.

#### **BASIN 31**

Basin 31 extends approximately from STA 2091+00 to 2126+80 (3,580 ft). Runoff contributing areas from this basin consists of the roadway right-of-way between those stations and offsite contributions from both sides of the I-75. The existing onsite basin area is 24.69 acres, of which 7.24 acres are impervious area. Flood Compensation is estimated at 11.35 acres-ft. In the existing conditions, runoff from Basin 31 flows to conveyance swales along both sides of I-75.

Basin 31 is a Closed Basin therefore there is no positive outfall for this basin. The low point along the existing edge of pavement is located near STA 2106+80. There is an existing 36" cross drain connecting the swales on both sides of the road near STA 2106+80.

Three (3) pond site alternatives were evaluated on either side of I-75 to address the stormwater management needs for this basin. The preliminary sizing calculations are provided in Appendix B of this Report. Pond Alternative 31-1 on the west side of I-75 between Stations 2108+00 and 2118+00 is the recommended alternative. Please refer to Table 2 for the Pond Siting Evaluation Matrix and the parameters used to assess each potential pond site. Similarly, the low edge of pavement for this basin is approximately elevation 75.0-feet, NAVD, near Station 2106+80. The preliminary pond results produced a peak stage elevation of 73.0-feet, NAVD. Therefore, the proposed pond has the hydraulic capacity to manage the stormwater runoff from this basin and minimizes the potential for the Hydraulic Grade Line (HGL) to directly cause roadway flooding.

Basin 32 extends approximately from STA 2126+80 to 2159+00 (3,220 ft). Basin 32 contains half of I-75/SR 200 interchange and I-75/SW 43<sup>rd</sup> St. Runoff contributing areas from this basin consists of the roadway right-of-way between those stations and offsite contributions from both sides of the I-75. The existing onsite basin area is 31.28 acres, of which 6.51 acres are impervious area. Flood Compensation is estimated at 9.24 acres-ft. In the existing conditions, runoff from Basin 32 flows to conveyance swales along both sides of I-75. The northern half of the interchange discharges to the adjacent basin (Basin 33).

There are 2 inline ponds on the east side of I-75 ramp to SR 200 near STA 2146+00 and STA 2150+00 that receive stormwater discharge from the road and are within this basin's onsite areas.

Basin 32 is a Closed Basin therefore there is no positive outfall for this basin. The low point along the existing edge of pavement is located near STA 2146+50. There is an existing 24" cross drain connecting the swales on both sides of the road near STA 2145+80.

Three (3) pond site alternatives were evaluated on either side of I-75 to address the stormwater management needs for this basin. The preliminary sizing calculations are provided in Appendix B of this Report. Pond Alternative 32-3 on the east side of I-75 between Stations 2139+00 and 2144+00 is the recommended alternative. Please refer to Table 2 for the Pond Siting Evaluation Matrix and the parameters used to assess each potential pond site. Similarly, the low edge of pavement for this basin is approximately elevation 76.0-feet, NAVD, near Station 2146+50. The preliminary pond results produced a peak stage elevation of 74.0-feet, NAVD. Therefore, the proposed pond has the hydraulic capacity to manage the stormwater runoff from this basin and minimizes the potential for the Hydraulic Grade Line (HGL) to directly cause roadway flooding.

#### **Floodplain Considerations**

We have reviewed the Federal Emergency Management Agency's (FEMA) National Flood Hazard Layer (NFHL) Viewer and noted numerous designated flood hazard areas throughout the project limits. The Flood Insurance Rate Maps (FIRMs) are dated either 2013 or 2017 and the designations are primary Zone A (areas prone to flooding with a Base Flood Elevation and Zone AE (area with established Base Flood Elevations). For the Interim Auxiliary Lane roadway typical section, all floodplain impacts will be mitigated for within the existing right-of-way through compensatory volume provided within the roadway ditches throughout the I-75 project corridor. Whereas the ultimate roadway typical section is expected to impact all designated floodplain areas identified within the I-75 right-of-way. The floodplain compensation will be sized to provide equivalent flood volumes in a "cup to cup" manner to ensure the existing impacts maintain the historic stages that exist throughout the corridor. All floodplain compensation will be accomplished within the preferred pond site alternatives associated with each encroachment. The anticipated floodplain impacts were estimated using the FEMA floodplain GIS layers and 2' contour maps, and volumes will be replaced by balancing cut/fill either within the R/W, or by the addition of equivalent compensatory volume within the proposed stormwater management facilities. The floodplain

impacts are identified with "Cross Hatching" on the FEMA Floodplain/Soils Maps in Appendix C and summarized in the following table.

Finally, a modified Location Hydraulics Report will be prepared under separate cover in support of the proposed roadway improvements to I-75. Modifications to existing drainage structures such as extending cross drains and median drains included in this project will result in an insignificant change in their capacity to carry floodwater. These modifications will cause minimal increases in flood heights and flood limits which will not result in any significant adverse impacts on the natural and beneficial floodplain values or any significant change in flood risks or damage. There will be no significant change in the potential for interruption or termination of emergency service or emergency evacuation routes as the result of modifications to existing drainage structures. Therefore, it has been determined that this encroachment is not significant.

Pond Alt.	Predominate	Hydraulic	Floodplain	Wetland	Construction	Right-of-Way	Pond
	Hydrologic	Considerations	Involvement	Impacts	Costs	Costs	Rank
	Soil Group						
	(HSG)						
9-1	A	2	1	1	1	3	-
9-2	A	1	1	1	1	2	1
9-3	A	2	1	1	1	3	-
10-1	А	2	1	1	1	3	-
10-2	А	1	1	1	1	3	-
10-3	А	1	1	1	1	1	1
11-1	А	1	1	1	1	1	1
11-2	А	1	1	1	2	2	-
11-3	А	1	1	1	2	2	-
12-1	А	1	1	1	1	1	1
12-2	А	1	1	1	2	2	-
12-3	А	1	1	1	1	2	-
13-1	А	1	1	1	2	1	1
13-2	А	1	1	1	2	2	-
13-3	А	1	1	1	2	2	-
14-1	А	1	1	1	2	2	-
14-2	А	2	2	1	2	3	-
14-3	А	1	1	1	1	3	-
14-1/15-1	А	1	1	1	2	2	1
14-3/15-3	А	1	1	1	2	2	-
15-1	C	2	1	1	2	2	-
15-2	C	2	1	1	2	3	-
15-3	С	2	1	1	1	3	-
16-1	A	1	1	1	2	3	-
16-2	A	1	1	1	2	3	-
16-3	А	1	1	1	1	2	1
17-1	А	2	1	1	2	3	-

Table 2 – Pond Evaluation Matrix

17-2	A	2	1	1	2	3	1
17-3	А	1	1	1	2	3	-
18-1	А	2	1	1	2	3	-
18-2	А	1	1	1	2	3	-
18-3	А	1	1	1	2	3	-
18-4	А	1	1	1	1	1	1
18	А				State TIFF Land		-
19	А				State TIFF Land		-
19-1	А	2	2	2	2	3	-
19-2	А	1	1	1	2	3	-
19-3	А	1	1	1	2	3	-
19-4	A	1	1	1	1	1	1
20-1	A	1	1	1	2	3	-
20-2	A	1	1	1	2	1	1
20-3	A	1	1	1	1	2	-
21-1	A	1	1	1	1	2	1
21-2	A	1	1	1	2	3	-
21-3	A	1	2	2	2	3	_
22-1	A	1	1	1	1	2	1
22-2	A	1	1	1	2	3	-
22-3	A	1	1	1	2	2	-
23-1	A	1	1	1	2	1	1
23-2	A	1	1	1	3	3	-
23-3	A	1	1	1	2	3	_
23-3	A	1	1	1	1	2	1
24-2	A	1	1	1	3	3	-
24-3	A	1	1	1	2	2	-
25-1	A	1	1	1	1	2	-
25-2	A	1	1	1	1	2	-
25-3	A	1	1	1	3	3	-
25-1/26-1	A	1	1	1	2	2	1
26-1	A	1	1	1	1	2	-
26-2	A	1	1	1	1	3	_
26-3	A	2	1	1	1	1	_
27-1	A	1	2	1	2	3	_
27-2	A	1	2	1	2	2	_
27-3	A	1	2	1	1	2	1
28-1	A	1	2	1	2	2	1
28-2	A	1	1	1	2	3	-
28-3	A	1	2	1	2	3	-
28-3	A	1	2	1	2	2	1
29-2	A A	1	1	2	2	3	-
29-2	A A	1	1	1	2	3	-
30-1		1	1	2	2	2	
30-1 30-1A	A	1	2	1	1	2	-
	A				2		-
30-1B	A	1	1	1	2	2	-

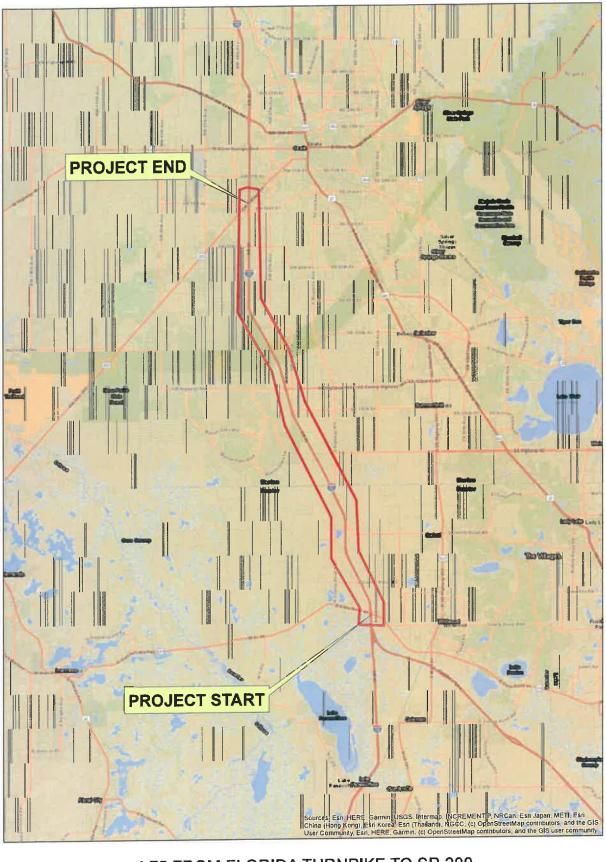
30-2	А	1	2	2	2	2	-
30-3	А	1	1	1	2	2	1
31-1	А	1	1	1	2	2	1
31-2	А	1	2	2	2	2	-
31-3	А	1	1	1	2	3	-
32-1	А	1	2	1	2	3	-
32-2	А	1	1	1	2	3	-
32-3	А	1	2	1	1	2	1

#### Matrix Legend:

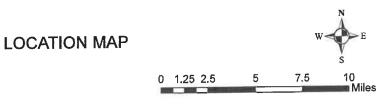
<u>**Rating 1**</u> – "Best Case" conditions with little influence on either the environmental or costs associated with the Pond Site Alternative.

<u>**Rating 2**</u> – Anticipate environmental impacts and additional costs above the standard for the selected Pond Site Alternative.

<u>**Rating 3**</u> – Impacts to the hydraulics and environmental conditions will require significant mitigation. Similarly, construction and right-of-way costs are expected to double as compared to the standard costs.

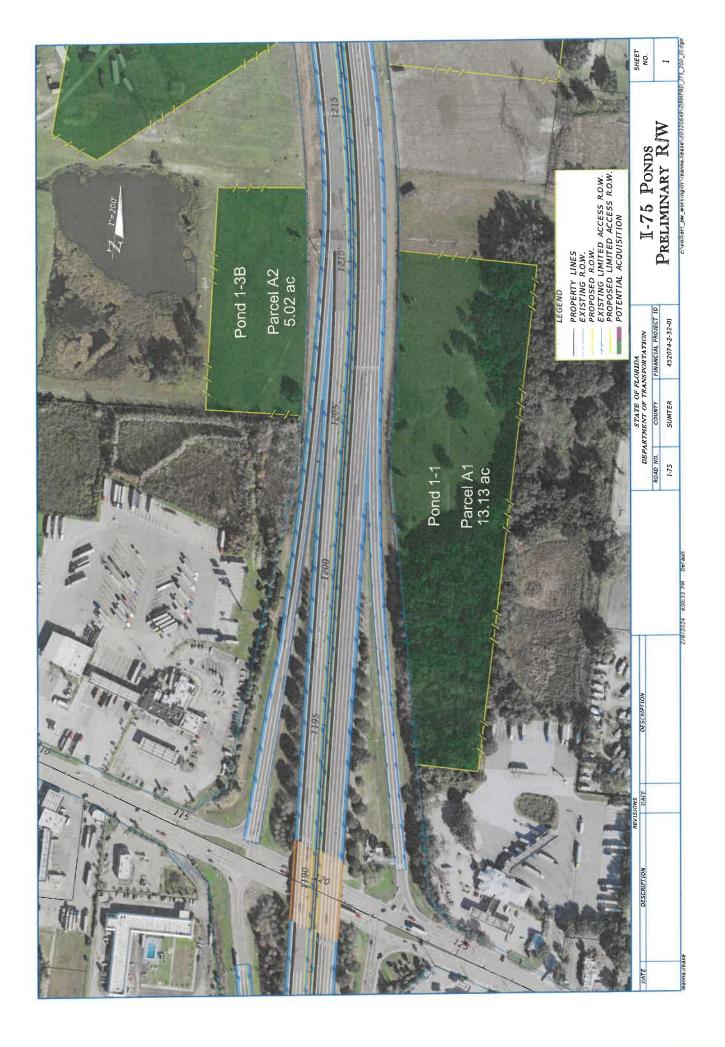


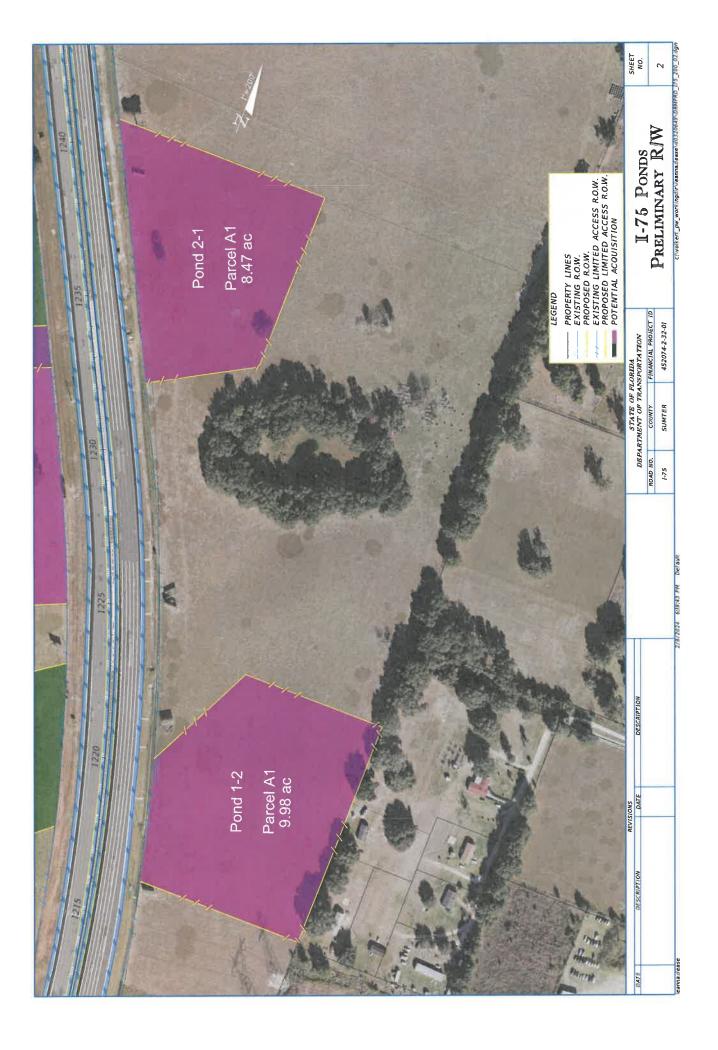
I-75 FROM FLORIDA TURNPIKE TO SR 200

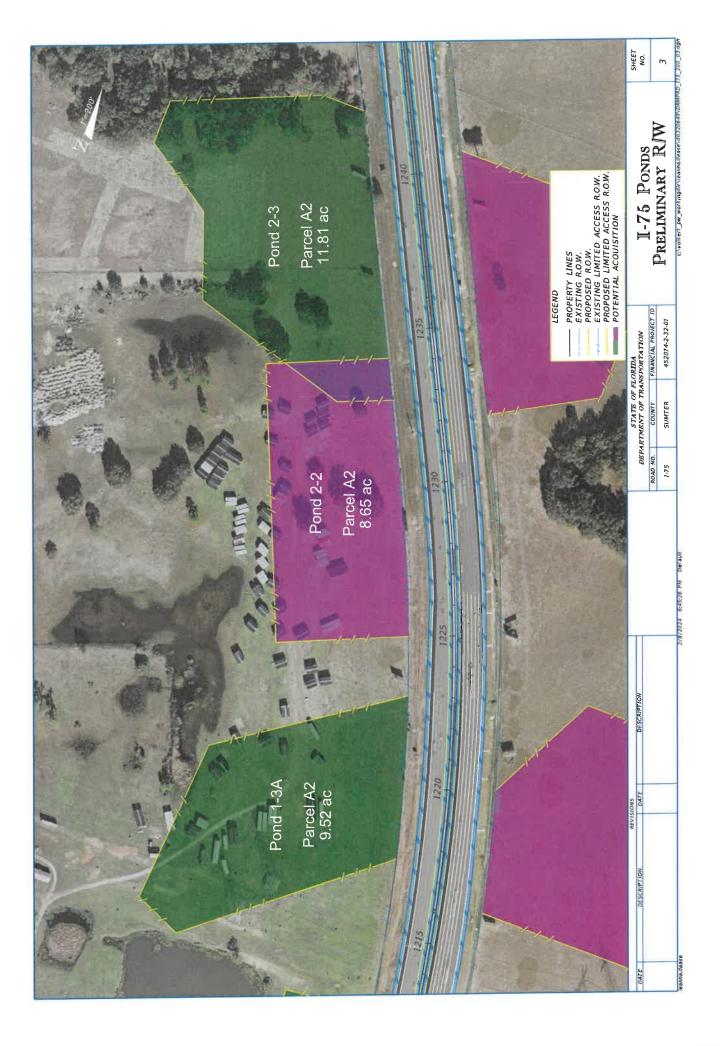


APPENDIX A I-75 Ponds Preliminary Right-of-Way



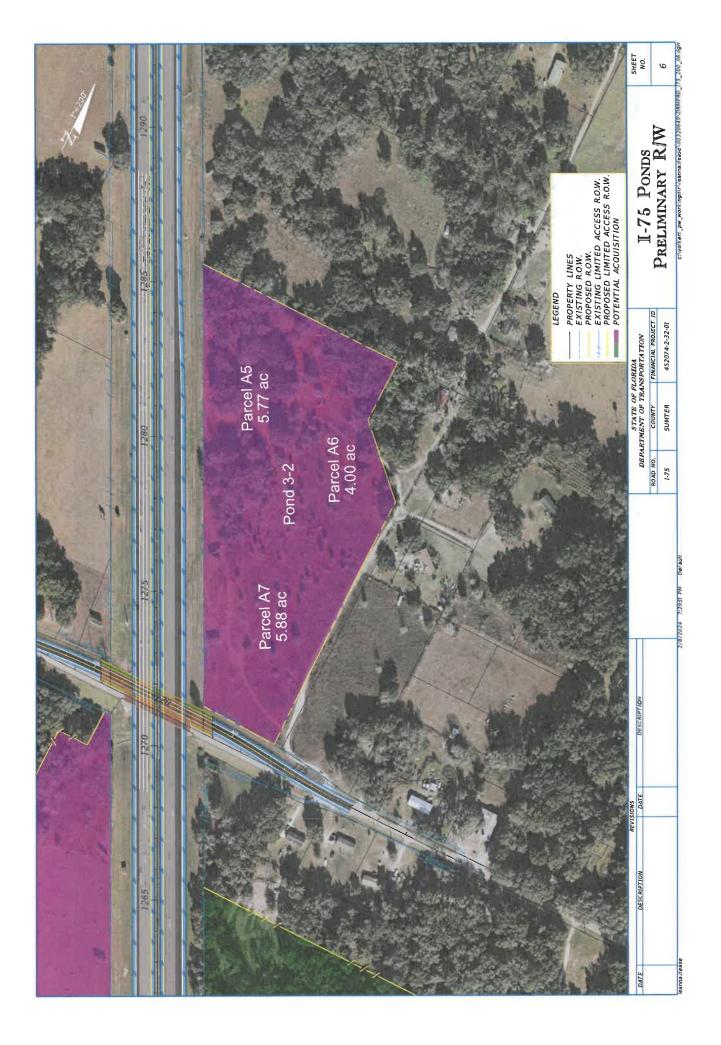










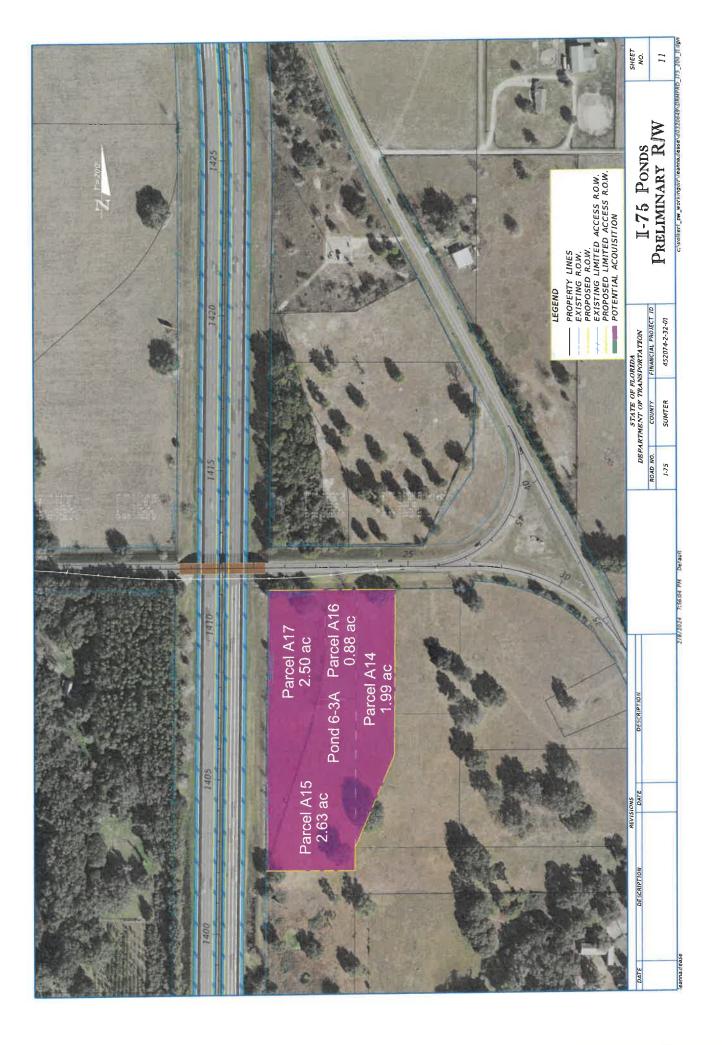






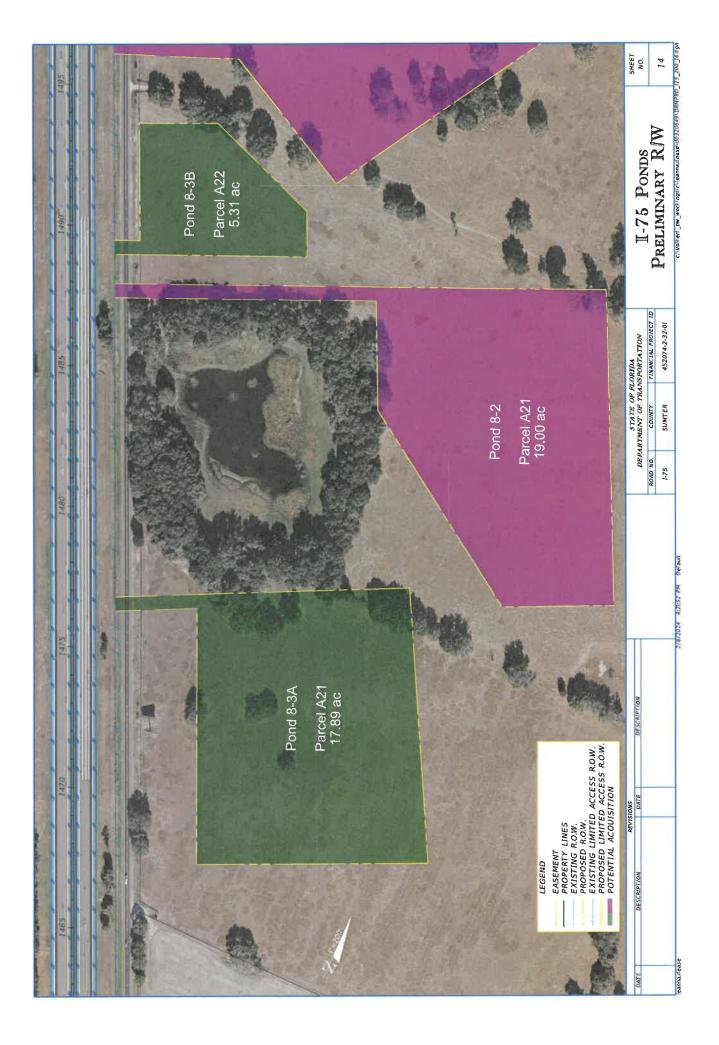




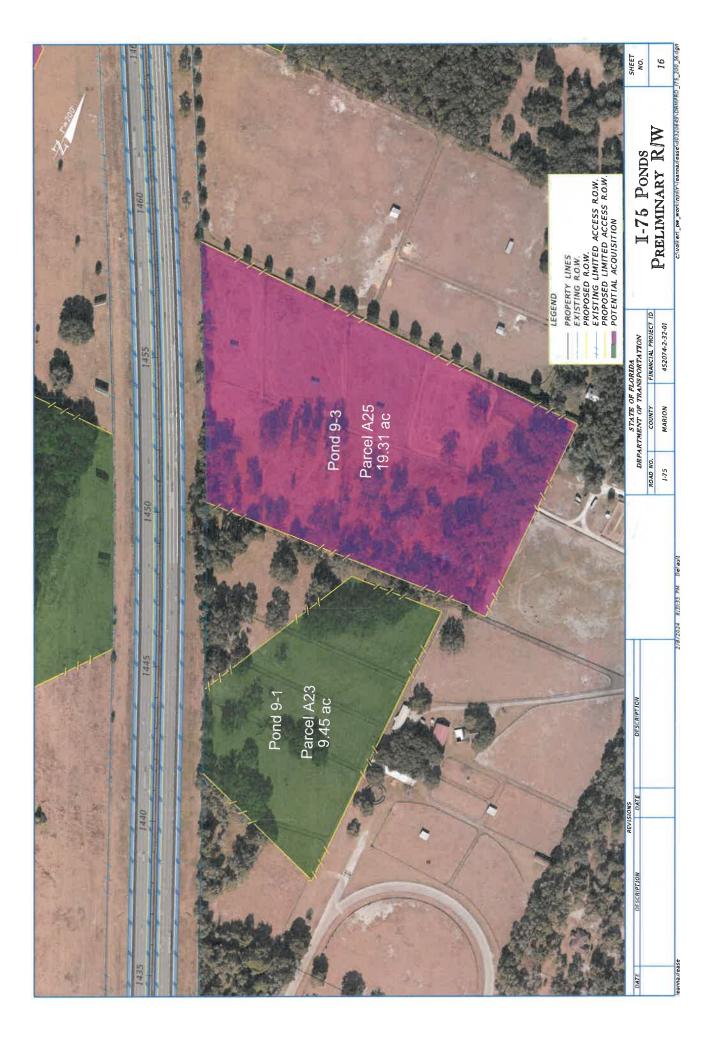


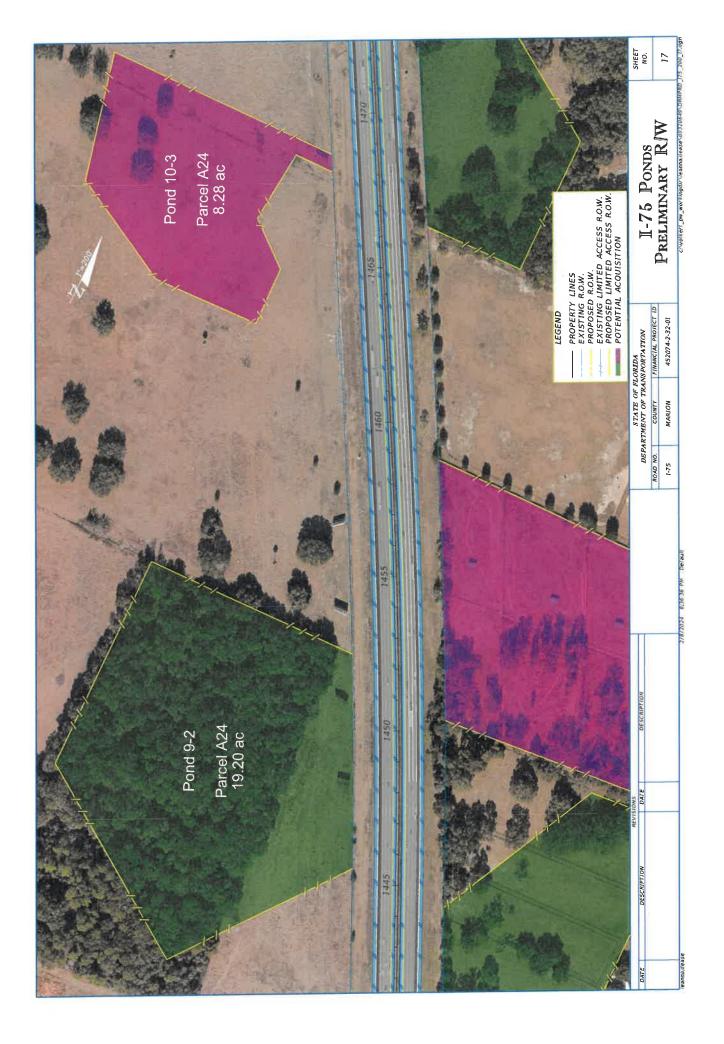


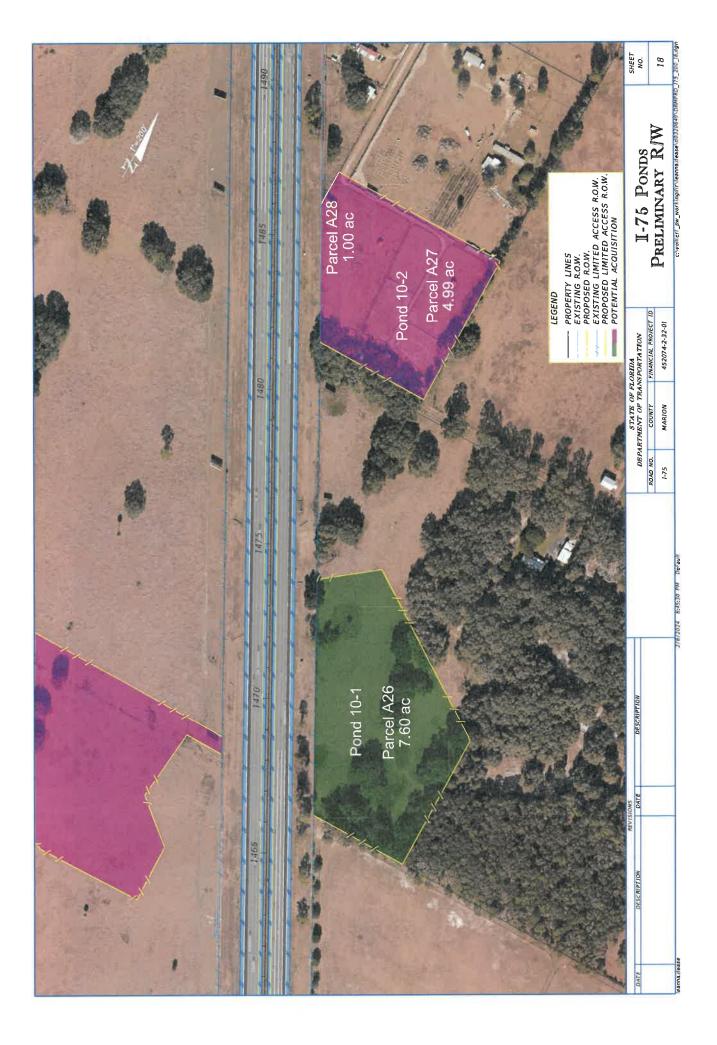




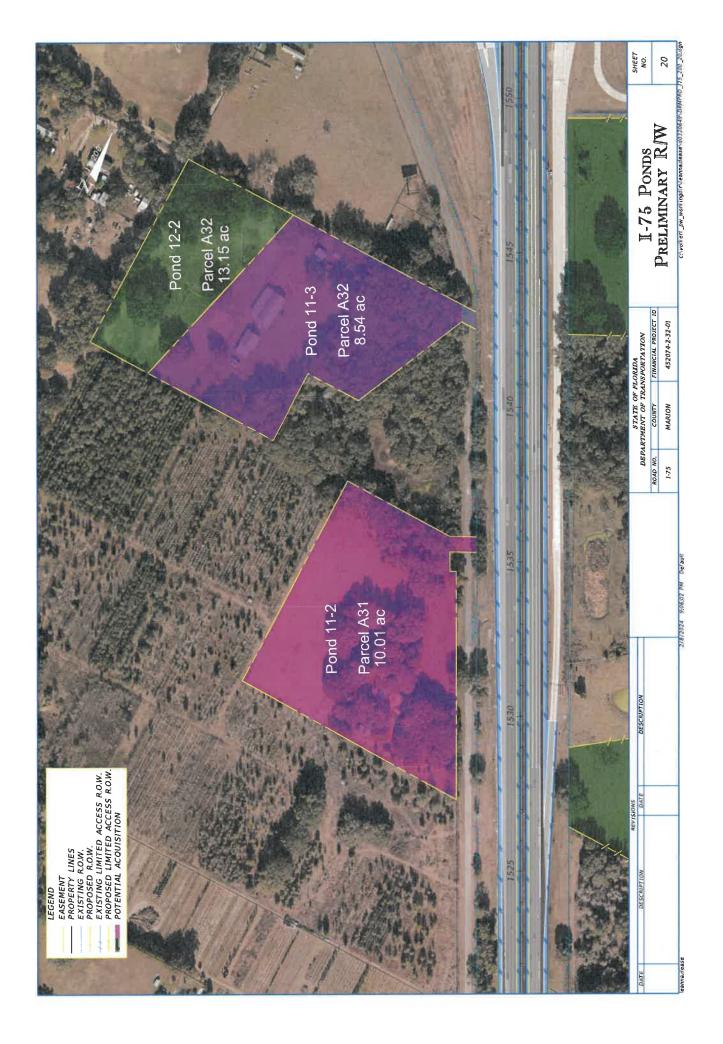


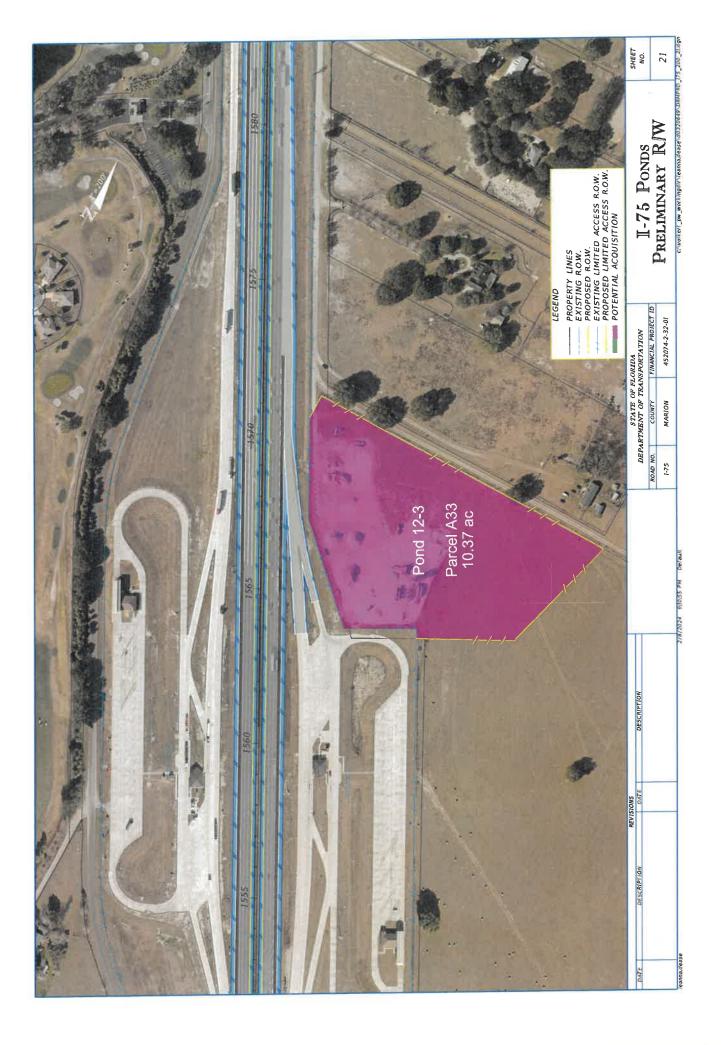


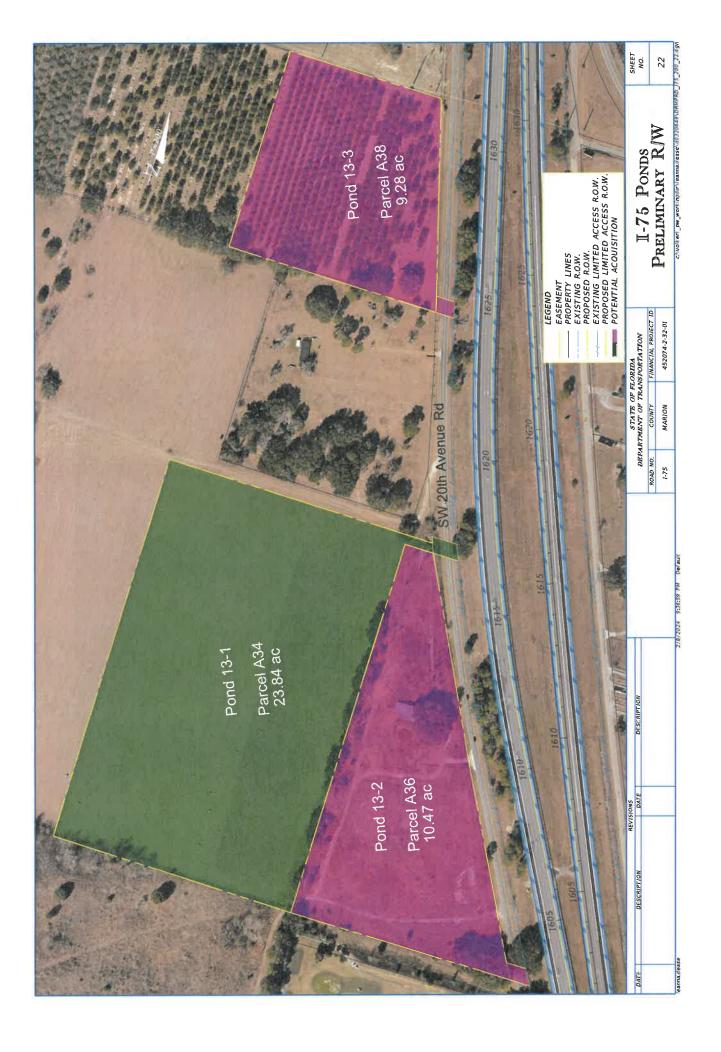








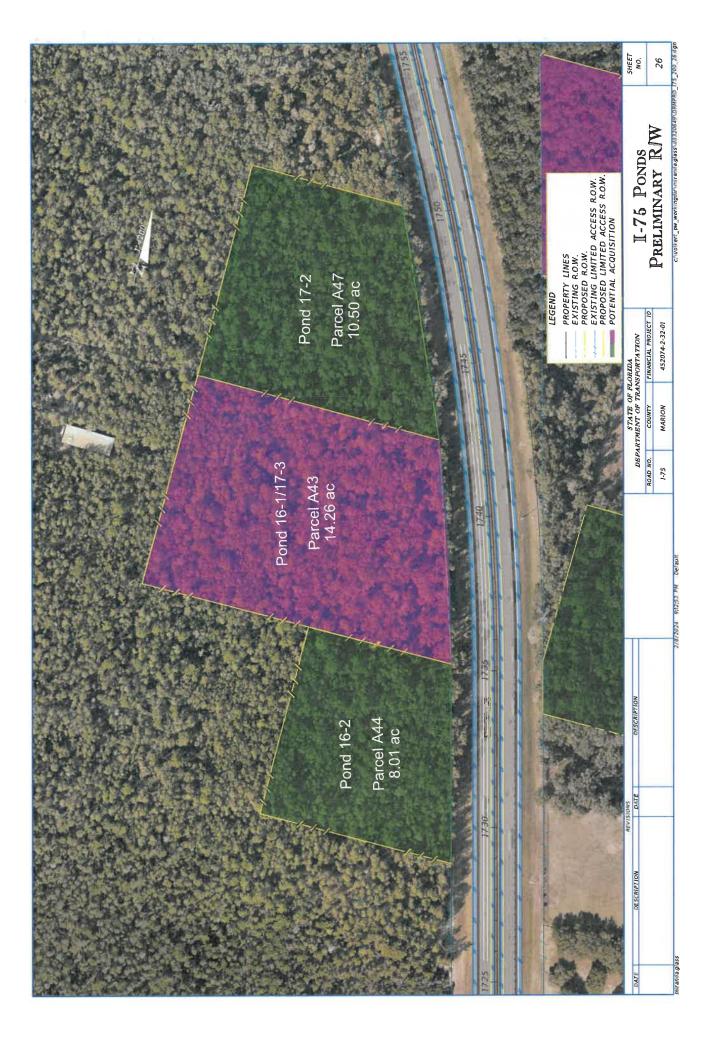




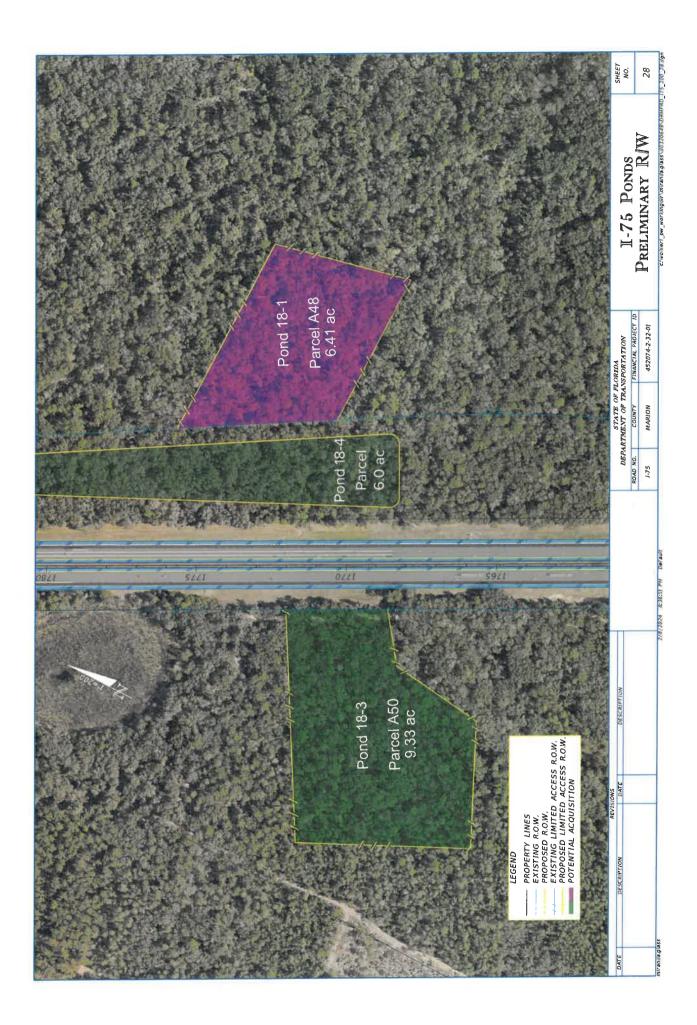


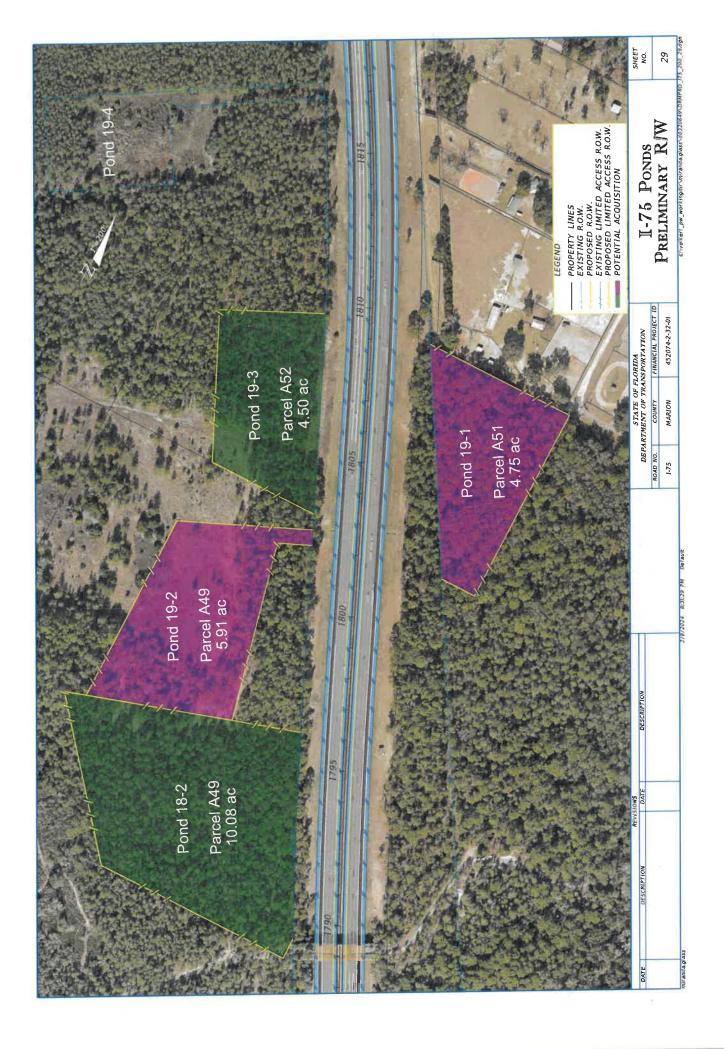


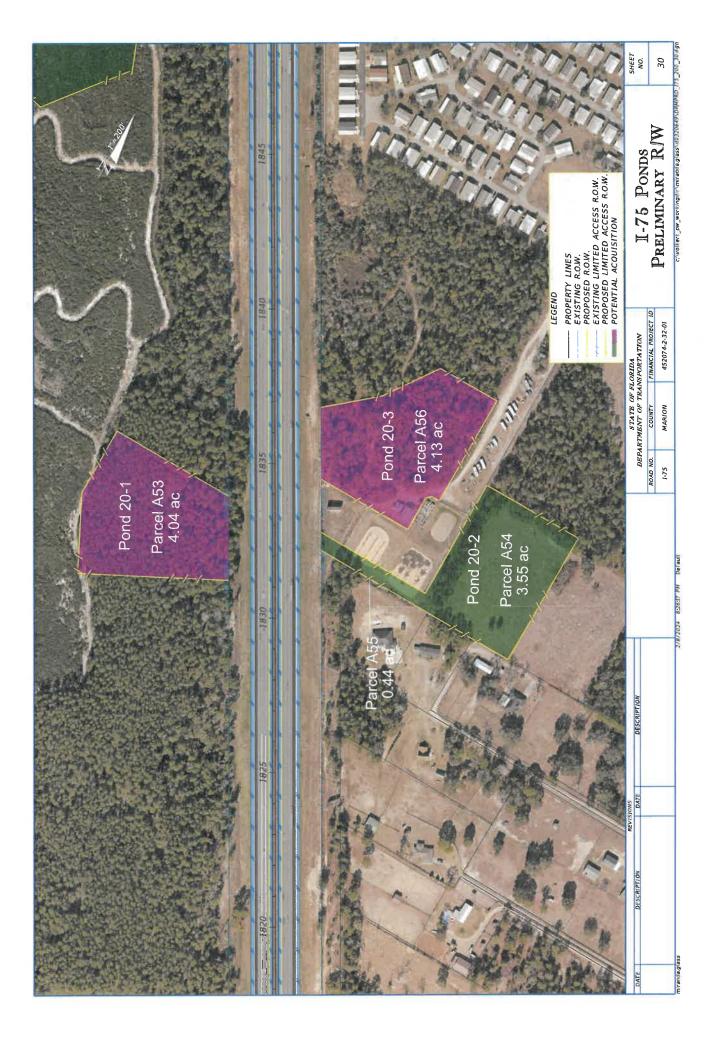




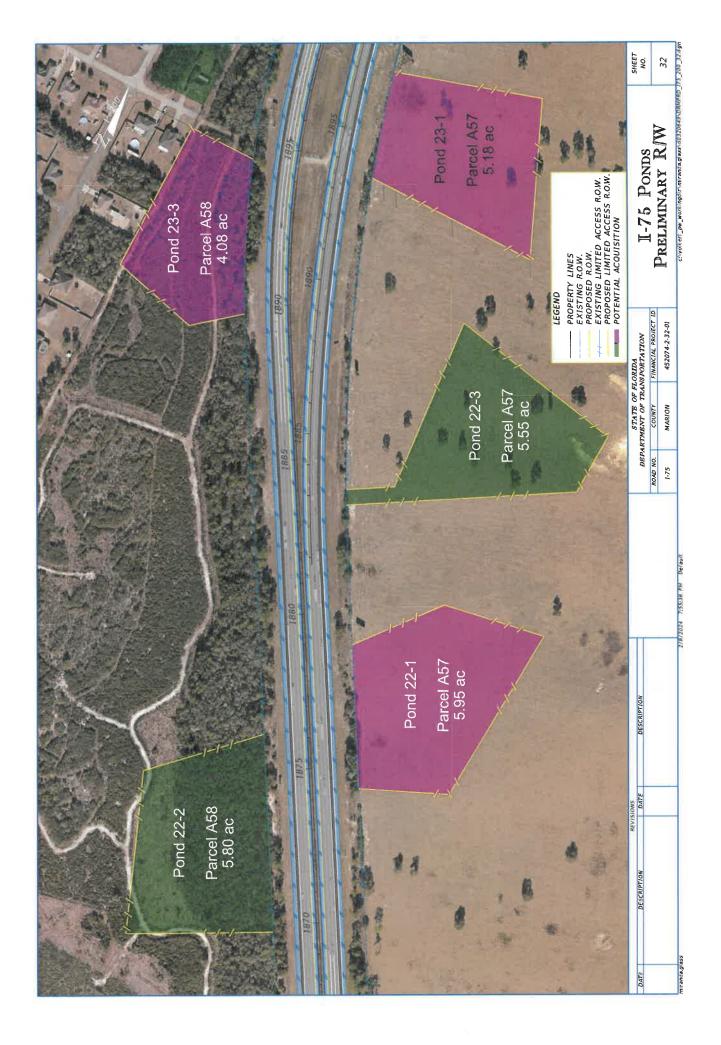




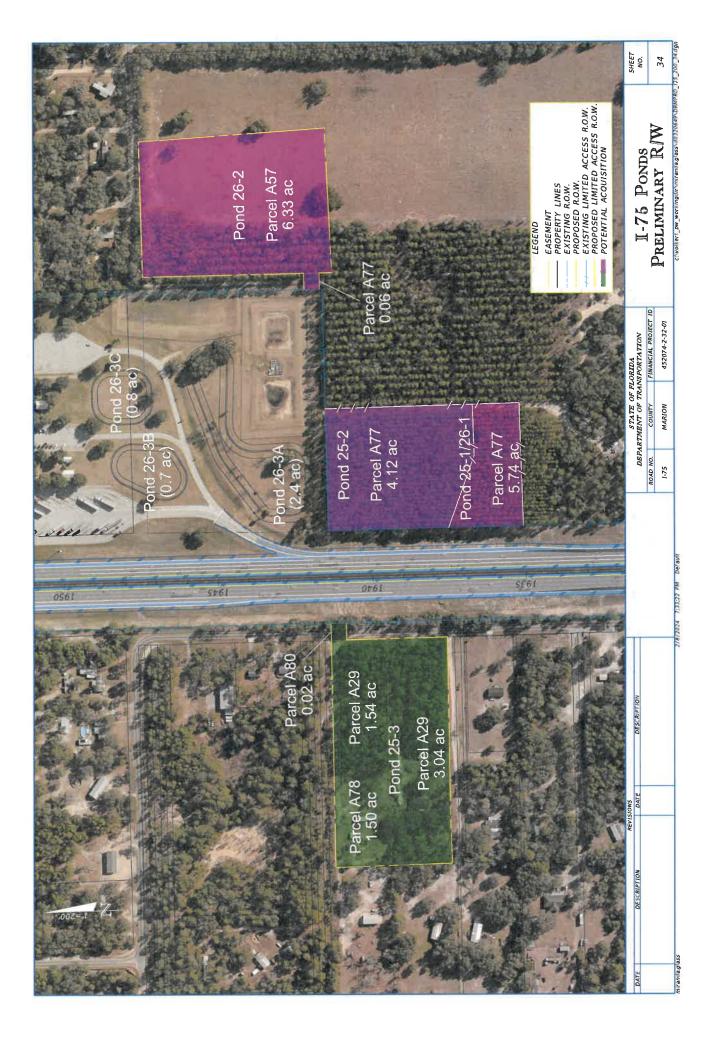




























APPENDIX B Pond Sizing Worksheets



# POND SIZING CALCULATIONS I-75 Pond Siting FPID: 452074-2-32-01

		Р	ond Name: Date:	9-1 2/28/	2024		Full	Туріса	al Section Wi	dth
PRE-DEVELOPMENT RU	JNOFF PA	RAME	TERS							
Onsite Basin Area	38.22	ac					E	Basin Lim	its	
Pond Parcel Area	8.50	ac					1409+00	to	1464+00	
Total Area	46.72	ac							umter/Mario	
Iotal Alea					Lines that	alters t	he I-75 Sta	tioning	as follows: S	TA
CURVE NUMBER CALCUA	TION:				1525+64.0	0 (AH),	/1422+88.9	8(BK)		
TYPE A SOILS TYPE B SOILS TYPE C SOILS TYPE D SOILS						ILS	CN*A	TOTAL AREA		
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		
Impvervious	11.11	98							1088.89	11.11
Grass	27.11	39							1057.25	27.11
Pond Site Pre Condition	8.50	39						+	331.50	8.50
									0.00	0.00
				-		-			0.00	0.00
									0.00	0.00
						+		++	0.00	0.00
TOTALS	46.72		0		0	-	0		2477.64	46.72
TUTALS	40.72	1			Ŭ		WEIGH	TED CN		53
Runo	<b>yr-240hr (P) =</b> NOAA Atlas 14 <b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S)	9.5					ntial Abstracti S = (1000/ ted Runoff Vo Peak Volume	CN) - 10 plume =	8.9 37.15	ac-ft
			4575DC							
POST-DEVELOPMENT		10	IEIEKS					Basin Lim	18-	
Onsite Basin Area	38.27	ac ac					E	sasin Lim		
Pond Parcel Area	8.50	ac					1409+00	to	1464+00	
Total Area	46.72	2 ac								
CURVE NUMBER CALCUA	TION:									

Onsite Basin Area	38.22	ac
Pond Parcel Area	8.50	ac
Total Area	46.72	ac

#### CUR

LAND USE	TYPE A SO	ILS	TYPE B SO	ILS	TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		TOTALTAN
Impervious	34.09	98							3340.91	34.09
	4.13	39							161.03	4.13
Grass		39							136.50	3.50
Pond Site (Pervious)	3.50								500.00	5.00
Pond Site (Impervious)	5.00	100						+	0.00	0.00
		++		+					0.00	0.00
		++							0.00	0.00
		++							0.00	0.00
TOTALS	46.72	+ +	0		0		0	Î	4138.44	46.72
TOTALS	40.72			<u> </u>			WEIGH	TED CN		89

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 15.4 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 1.3 S = (1000/CN) - 10

Estimated Runoff Volume = 60.13 ac-ft Peak Volume = A x Q

## POND SIZING CALCULATIONS I-75 Pond Siting FPID: 452074-2-32-01

Pond Name: 9-1 Date: 2/28/2024

### POND SIZING ESTIMATION

### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		38.22 ac	
Weighted C		0.87	
Total Impervious	0.95	34.09 ac	
Total Pervious	0.20	4.13 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		2.77 ac-ft	hichever is greater)
Required Treatment (1/2" over Area)		1.59 ac-ft 🖵 💜	incriever is greatery
		2.77 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		37.15 ac-ft	
Proposed Runoff Volume		60.13 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volum	e	22.98 ac-ft	
Floodplain Com	pensation	0.00 ac-ft	
TOTAL	STORAGE	22.98 ac-ft	
3) Estimated Pond Configuration:			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:	H) 4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	6.0 ft	Assumed Contr	ol EL 54.00 ft

#### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	621 ft
WTOP OF SLOPE	311 ft
Area	4.43 ac

#### 5) Minimum Site Dimensions (Considering Maintenance Berm and 20% Factor of Safety)

LSITE	794 ft
WSITE	421 ft
Area	7.67 ac

	<u>Contour</u>	<u>Area</u>	<u>Storage</u>	<u>Cumulative</u>	Notes
GIS	54	164786	0.0	0.0	
GIS	60	225022	1169424.0	1169424.0	

Pond

<u>9-1</u>

Cumulative Ret (ac-ft) Below Freeboard 26.85

> Pond Area 5.2

## POND SIZING CALCULATIONS

I-75 Pond Siting

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and the second se

# FPID: 452074-2-32-01

-

		P	ond Name:	9-2			Full	Typic	al Section Wi	dth
			Date:	2/28/	/2024					
PRE-DEVELOPMENT RU	JNOFF PA	RAME	TERS							
Onsite Basin Area	38.22	ас					В	asin Lin	nits	
Pond Parcel Area	19.00	ас					1409+00	to	1464+00	
Total Area	57.22 ac				There is a Station Equation at the Sumter/Marion County Lines that alters the I-75 Stationing as follows: STA					
CURVE NUMBER CALCUA	TION:				1525+64.00				, 45 1010115. 5	
	TYPE A SOI	LS	TYPE B SO	ILS	TYPE C SO	ILS	TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UNIA	TOTALAREA
Impvervious	11.11	98						1	1088.89	11.11
Grass	27.11	39							1057.25	27.11
Pond Site Pre Condition	19.00	39							741.00	19.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	57.22		0		0		0		2887.14	57.22
							WEIGH	TED CN		50
Rainfall Depth for 100	<b>yr-240hr (P) =</b> NOAA Atlas 14		in			Poten	tial Abstraction S = (1000/0	• •		
Runo	ff Depth (Q) =	9.0	in			Estima	ted Runoff Vo	lume =	42.97	ac-ft

 $Q = (P - 0.2S)^2/(P + 0.8S)$ 

### **POST-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	38.22	ас
Pond Parcel Area	19.00	ас
Total Area	57.22	ас

Peak Volume = A x Q

**Basin Limits** 

1409+00 1464+00 to

#### **CURVE NUMBER CALCUATION:**

LAND USE	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UN <sup>-</sup> A	IOTAL AREA
Impervious	34.09	98							3340.91	34.09
Grass	4.13	39			ji				161.03	4.13
Pond Site (Pervious)	7.50	39							292.50	7.50
Pond Site (Impervious)	11.50	100							1150.00	11.50
					1				0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	57.22		0	Î	0		0		4944.44	57.22
in the second							WEIGH	TED CN		86

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 15.1 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 1.6 S = (1000/CN) - 10

Estimated Runoff Volume = 72.24 ac-ft Peak Volume = A x Q

Pond Name: 9-2 Date: 2/28/2024

### POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W Weighted C Total Impervious Total Pervious Outstanding FL Water (Y/N)[multiply x 1.5] Required Treatment (Runoff from 1" Rainfall) Required Treatment (1/2" over Area)	0.95 0.20	38.22 ac 0.87 34.09 ac 4.13 ac N 2.77 ac-ft 1.59 ac-ft 2.77 ac-ft	(whichever	is greater)
2) Estimated Peak Attenuation Volume (EPAV):				
Existing Runoff Volume Proposed Runoff Volume EPAV = Proposed Runoff - Existing Runoff Volume	9	42.97 ac-ft 72.24 ac-ft <b>29.26 ac-ft</b>		
Floodplain Comp	ensation	0.00 ac-ft		
TOTAL : 3) Estimated Pond Configuration:	STORAGE	29.26 ac-ft		
		e haand		1.0 ft
Maintenance Berm Width	20.0 ft 2.0	Freeboard Side Slope		4.0
L/W Ratio	2.0 1.5 ft	Wet/Dry	, (2.11)	Dry
Maximum Treatment Volume Depth Maximum Pond Depth Below Freeboard	3.0 ft	Assumed (	Control EL	57.00 ft

## 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	961 ft
WTOP OF SLOPE	480 ft
Area	10.59 ac

LSITE	1201 ft
WSITE	624 ft
Area	17.21 ac

	<u>Contour</u>	Area	<u>Storage</u>	Cumulative
GIS	57	452297	0.0	0.0
GIS	60	486132	1407643.5	1407643.5

Pond

<u>9-2</u>

Cumulative Ret (ac-ft) Below Freeboard 32.32

Pond Area

11.2

I-75 Pond Siting

FPID: 452074-2-32-01

Pond Name:	9-3	Full	Typical Section Width
Date:	2/28/2024		

## PRE-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	38.22	ас
Pond Parcel Area	19.00	ас
Total Area	57.22	ас

1409+00to1464+00There is a Station Equation at the Sumter/Marion CountyLines that alters the I-75 Stationing as follows: STA1525+64.00 (AH)/1422+88.98(BK)

**Basin Limits** 

### **CURVE NUMBER CALCUATION:**

	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	Ch A							
		98							1088.89	11.11
Impvervious	11.11								1057.25	27.11
Grass	27.11	39						+	741.00	19.00
Pond Site Pre Condition	19.00	39						+	0.00	0.00
								+		0.00
									0.00	
									0.00	0.00
									0.00	0.00
		+							0.00	0.00
TOTALS	57.22		0		0	1	0		2887.14	57.22
TOTALS	57.22		0			-	WEIGH	TED CN		50

### Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

**Runoff Depth (Q) =** 9.0 in Q =  $(P - 0.2S)^2/(P + 0.8S)$ 

### Potential Abstraction (S) = 9.8 S = (1000/CN) - 10

Estimated Runoff Volume = 42.97 ac-ft Peak Volume = A x Q

## POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	38.22	ас
Pond Parcel Area	19.00	ас
Total Area	57.22	ас

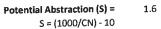
Basin Limits						
1409+00	to	1464+00				

#### **CURVE NUMBER CALCUATION:**

	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	T CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	ULA	
	34.09	98							3340.91	34.09
Impervious									161.03	4.13
Grass	4.13	39							292.50	7.50
Pond Site (Pervious)	7.50	39						++		11.50
Pond Site (Impervious)	11.50	100						+	1150.00	
									0.00	0.00
		++							0.00	0.00
		+ +							0.00	0.00
		+							0.00	0.00
TOTALS	57.22	++	0		0		0		4944.44	57.22
TUTALS	51.22		<u>J</u>	J			WEIGH	TED CN		86

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 15.1 in Q =  $(P - 0.2S)^2/(P + 0.8S)$



Estimated Runoff Volume = 72.24 ac-ft Peak Volume = A x Q

Pond Name: 9-3 Date: 2/28/2024

### POND SIZING ESTIMATION

### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		38.22 ac	
Weighted C		0.87	
Total Impervious	0.95	34.09 ac	
Total Pervious	0.20	4.13 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		ے 2.77 ac-ft	(whichever is greater)
Required Treatment (1/2" over Area)		1.59 ac-ft 🔎	(wittenever is Breater)
		2.77 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		42.97 ac-ft	
Proposed Runoff Volume		72.24 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volume		29.26 ac-ft	

Floodplain Compensation	0.00 ac-ft

3) Estimated Pond Configuration:

Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	3.0 ft	Assumed Control EL	57.00 ft

29.26 ac-ft

TOTAL STORAGE

### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	961 ft
WTOP OF SLOPE	480 ft
Area	10.59 ac

LSITE	1201 ft
WSITE	624 ft
Area	17.21 ac

|--|

<u>Pond</u> 9-3

Cumulative Ret (ac-ft) Below Freeboard 34.13

Pond Area

11.8

## I-75 Pond Siting

### FPID: 452074-2-32-01

		P	ond Name:	10-1			Full	Typica	al Section Wi	dth
			Date:	2/28/	2024					
RE-DEVELOPMENT RU	JNOFF PA	RAME	TERS							
Onsite Basin Area	28.66	ac					В	asin Lim	its	
ond Parcel Area	6.00	ас				1	1464+00	to	1505+50	
otal Area	34.66	ac								
CURVE NUMBER CALCUA	TION:									
	TYPE A SO	ILS	TYPE B SO	ILS	TYPE C 50	ILS	TYPE D SO	ILS	CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CN*A	IUTAL AREA
mpvervious	8.38	98							821.62	8.3
Grass	20.28	39							790.77	20.2
ond Site Pre Condition	6.00	39							234.00	6.0
									0.00	0.0
			1						0.00	0.0
									0.00	0.0
									0.00	0.0
			· · · · · · · · · · · · · · · · · · ·						0.00	0.0
TOTALS	34.66		0		0		0		1846.39	34.6
							WEIGH	TED CN		5
	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFE P						<b>ted Runoff Vo</b> Peak Volume		27.70	ac-ft
Onsite Basin Area	28.66						в	asin Lim	ite	
								1		
Pond Parcel Area	6.00						640+50	to	682+10	
Total Area	34.66	ft <sup>2</sup>								
CURVE NUMBER CALCUA	TION:									
LAND USE	TYPE A SO	ILS	TYPE B SO	ILS	TYPE C SO	ILS	TYPE D SO	ILS	CN*A	TOTAL AREA
LAND USL	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		
mpervious	25.79	98							2526.94	25.7
irass	2.87	39							112.12	2.8
	2.50	39							97.50	2.5
ond Site (Pervious)	2.50	100							350.00	3.5
	3.50			1					0.00	0.0
	3.50									
	3.50								0.00	
	3.50								0.00 0.00	0.0
ond Site (Impervious)									0.00 0.00 0.00	0.0 0.0
Pond Site (Pervious) Pond Site (Impervious) TOTALS			0		0		0		0.00 0.00	0.0 0.0 0.0 34.6 8

S = (1000/CN) - 10

Estimated Runoff Volume = 44.80 ac-ft Peak Volume = A x Q

Rainfall Depth for 100yr-240hr (P) = 16.9 NOAA Atlas 14

> **Runoff Depth (Q) =** 15.5 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

## Pond Name: 10-1 Date: 2/28/2024

### POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

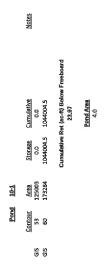
Area Inside R/W		28.66 ac			
Weighted C		0.87			
Total Impervious	0.95	25.79 ac			
Total Pervious	0.20	2.87 ac			
Outstanding FL Water (Y/N)[multiply x 1.5]		N			
Required Treatment (Runoff from 1" Rainfall)		2.09 ac-ft	} (whichever is greater)		
Required Treatment (1/2" over Area)		1.19 ac-ft 🚽	(1111011010		
		2.09 ac-ft			
nated Peak Attenuation Volume (EPAV):					
Existing Runoff Volume		27.70 ac-ft			
Proposed Runoff Volume		44.80 ac-ft			
EPAV = Proposed Runoff - Existing Runoff Volum	e	17.09 ac-ft			
Floodplain Com	pensation	0.00 ac-ft			
TOTAL	STORAGE	19.18 ac-ft			
nated Pond Configuration:					
Maintenance Berm Width	20.0	ft Freeboar	d	1.0 ft	
	2.0	Side Slop	es (1:H)	4.0	
	1.5	ft Wet/Dry		Dry	
	7.0	ft Assumed	Control EL	53.00 ft	
·					
	Weighted C Total Impervious Total Pervious Outstanding FL Water (Y/N)[multiply x 1.5] Required Treatment (Runoff from 1" Rainfall) Required Treatment (1/2" over Area) mated Peak Attenuation Volume (EPAV): Existing Runoff Volume Proposed Runoff Volume EPAV = Proposed Runoff - Existing Runoff Volume Floodplain Com	Weighted C       Total Impervious       0.95         Total Pervious       0.20         Outstanding FL Water (Y/N)[multiply x 1.5]       Required Treatment (Runoff from 1" Rainfall)         Required Treatment (1/2" over Area)         mated Peak Attenuation Volume (EPAV):         Existing Runoff Volume         Proposed Runoff Volume         EPAV = Proposed Runoff - Existing Runoff Volume         Floodplain Compensation         TOTAL STORAGE         mated Pond Configuration:         Maintenance Berm Width       20.0         L/W Ratio       2.0         Maximum Treatment Volume Depth       1.5	Weighted C       0.87         Total Impervious       0.95         Total Pervious       0.20         Outstanding FL Water (Y/N)[multiply x 1.5]       N         Required Treatment (Runoff from 1" Rainfall)       2.09 ac-ft         Required Treatment (1/2" over Area)       1.19 ac-ft         Inside Peak Attenuation Volume (EPAV):       2.09 ac-ft         Existing Runoff Volume       27.70 ac-ft         Proposed Runoff Volume       17.09 ac-ft         Floodplain Compensation       0.00 ac-ft         TOTAL STORAGE       19.18 ac-ft         mated Pond Configuration:       20.0 ft         Maintenance Berm Width       2.0 side Slope         L/W Ratio       2.0 side Slope         Maximum Treatment Volume Depth       1.5 ft	Weighted C       0.87         Total Impervious       0.95         Total Pervious       0.20         Outstanding FL Water (Y/N)[multiply x 1.5]       N         Required Treatment (Runoff from 1" Rainfall)       2.09 ac-ft         Required Treatment (1/2" over Area)       1.19 ac-ft         Imated Peak Attenuation Volume (EPAV):       2.09 ac-ft         Existing Runoff Volume       27.70 ac-ft         Proposed Runoff Volume       17.09 ac-ft         Floodplain Compensation       0.00 ac-ft         TOTAL STORAGE       19.18 ac-ft         mated Pond Configuration:       20.0 ft         Maintenance Berm Width       2.0 Side Slopes (1:H)         L/W Ratio       2.0         Maximum Treatment Volume Depth       1.5 ft	

## 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	535 ft
WTOP OF SLOPE	267 ft
Area	3.28 ac

LSITE	690 ft
WSITE	369 ft
Area	5.84 ac





## I-75 Pond Siting

## FPID: 452074-2-32-01

		Po	ond Name:	10-2			Full	Туріса	al Section Wi	dth
			Date:	2/28/3	2024					
RE-DEVELOPMENT RU		RAME	TERS							
	28.66		TENJ				В	asin Lim	its	
Insite Basin Area						11	1464+00	to	1505+50	
ond Parcel Area	6.00	ac					1404700	10	1505750	
otal Area	34.66	ас								
URVE NUMBER CALCUA	TION:									
	TYPE A SO	LS	TYPE B SOI	LS	TYPE C SO	ILS	TYPE D SO	ILS	CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UV-A	
npvervious	8.38	98		i i					821.62	8.3
rass	20.28	39							790.77	20.28
ond Site Pre Condition	6.00	39							234.00	6.0
									0.00	0.00
									0.00	0.0
									0.00	0.00
						+			0.00	0.00
					_				0.00	0.0
TOTALS	34.66		0		0		0		1846.39	34.6
Rainfall Depth for 100 N	<b>yr-240hr (P) =</b> IOAA Atlas 14						WEIGH tial Abstractic S = (1000/0	on (S) = CN) - 10	8.8	
Rainfall Depth for 100 N Runol Q = (P - 0.2	<b>yr-240hr (P) =</b> IOAA Atlas 14 ff <b>Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.85)	9.6	in			Estimat	tial Abstraction S = (1000/0 ted Runoff Vo Peak Volume	on (S) = CN) - 10 Hume = = A x Q	27.70	ac-ft
Rainfall Depth for 100 N Runof Q = (P - 0.2 POST-DEVELOPMENT F	<b>yr-240hr (P) =</b> IOAA Atlas 14 ff <b>Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.85)	9.6 ARAN	in			Estimat	tial Abstraction S = (1000/0 ted Runoff Vo Peak Volume	on (S) = CN) - 10 Hume =	27.70	
Rainfall Depth for 100 N Runol Q = (P - 0.2 POST-DEVELOPMENT F Dnsite Basin Area	yr-240hr (P) = IOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.85) RUNOFF P.	9.6 ARAN ft <sup>2</sup>	in			Estimat	tial Abstraction S = (1000/0 ted Runoff Vo Peak Volume	on (S) = CN) - 10 Hume = = A x Q	27.70	
Rainfall Depth for 100 N Runoi	yr-240hr (P) = IOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.85) RUNOFF P. 28.66	9.6 ARAN ft <sup>2</sup> ft <sup>2</sup>	in			Estimat	tial Abstractic S = (1000/0 ted Runoff Vo Peak Volume B	on (S) = CN) - 10 Hume = = A x Q asin Lim	27.70 a	
Rainfall Depth for 100 N Runof Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area	yr-240hr (P) = IOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.85) RUNOFF P 28.66 6.00 34.66	9.6 ARAN ft <sup>2</sup> ft <sup>2</sup>	in			Estimat	tial Abstractic S = (1000/0 ted Runoff Vo Peak Volume B	on (S) = CN) - 10 Hume = = A x Q asin Lim	27.70 a	
Rainfall Depth for 100 N Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area	yr-240hr (P) = IOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.85) RUNOFF P. 28.66 6.00 34.66 TION:	9.6 ARAN ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup>	in		TYPE C SO	Estimat	tial Abstractic S = (1000/0 ted Runoff Vo Peak Volume B	on (S) = :N) - 10 	27.70 a	
Rainfall Depth for 100 N Runof Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area	yr-240hr (P) = IOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.85) RUNOFF P. 28.66 6.00 34.66 TION:	9.6 ARAN ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup>	IETERS	LS CN	TYPE C SO AREA (ft²)	Estimat	tial Abstractic S = (1000/0 ted Runoff Vo Peak Volume B 640+50	on (S) = :N) - 10 	27.70 a	ac-ft Total area
Rainfall Depth for 100 N Runof Q = (P - 0.2 OOST-DEVELOPMENT F Onsite Basin Area Ond Parcel Area Otal Area URVE NUMBER CALCUA	yr-240hr (P) = IOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.85) RUNOFF P. 28.66 6.00 34.66 TION:	9.6 ARAN ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup>	in IETERS			Estimat	tial Abstractie S = (1000/C ted Runoff Vo Peak Volume B 640+50	on (S) = CN) - 10 Jume = = A x Q asin Lim to	27.70 bits 682+10 CN*A 2526.94	ac-ft Total Area 25.7
Rainfall Depth for 100 N Runof Q = (P - 0.2 OOST-DEVELOPMENT F Onsite Basin Area Ond Parcel Area Otal Area URVE NUMBER CALCUA LAND USE	yr-240hr (P) = IOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.85) RUNOFF P. 28.66 6.00 34.66 TION: TYPE A SO AREA (ft <sup>2</sup> )	9.6 ARAN ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> 	IETERS			Estimat	tial Abstractie S = (1000/C ted Runoff Vo Peak Volume B 640+50	on (S) = CN) - 10 Jume = = A x Q asin Lim to	27.70 bits 682+10 CN*A 2526.94 112.12	TOTAL AREA 25.7 2.8
Rainfall Depth for 100 N Runod Q = (P - 0.2 COST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area URVE NUMBER CALCUA LAND USE npervious rass	yr-240hr (P) = IOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.85) RUNOFF P. 28.66 6.00 34.66 TION: TYPE A SO AREA (ft <sup>2</sup> ) 25.79	9.6 ARAN ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> tt <sup>2</sup>	IETERS			Estimat	tial Abstractie S = (1000/C ted Runoff Vo Peak Volume B 640+50	on (S) = CN) - 10 Jume = = A x Q asin Lim to	27.70 bits 682+10 CN*A 2526.94 112.12 97.50	TOTAL AREA 25.7 2.8 2.5
Rainfall Depth for 100 N Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA LAND USE Nervious rass ond Site (Pervious)	yr-240hr (P) = IOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.85) RUNOFF P. 28.66 6.00 34.66 TION: TYPE A SO AREA (ft <sup>2</sup> ) 25.79 2.87	9.6 ARAN ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> tt <sup>2</sup> SN 98 39	IETERS			Estimat	tial Abstractie S = (1000/C ted Runoff Vo Peak Volume B 640+50	on (S) = CN) - 10 Jume = = A x Q asin Lim to	27.70 aits 682+10 CN*A 2526.94 112.12 97.50 350.00	TOTAL AREA 25.7 2.8 2.5 3.5
Rainfall Depth for 100 N Runod Q = (P - 0.2 COST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area URVE NUMBER CALCUA LAND USE npervious rass ond Site (Pervious)	yr-240hr (P) = IOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.85) RUNOFF P. 28.66 6.00 34.66 TION: TYPE A SO AREA (ft <sup>2</sup> ) 25.79 2.87 2.50	9.6 ARAN ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> tt <sup>2</sup> SN 98 39 39	IETERS			Estimat	tial Abstractie S = (1000/C ted Runoff Vo Peak Volume B 640+50	on (S) = CN) - 10 Jume = = A x Q asin Lim to	27.70 aits 682+10 CN*A 2526.94 112.12 97.50 350.00 0.00	TOTAL AREA 25.7 2.8 2.5 3.5 0.0
Rainfall Depth for 100 N Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA LAND USE Nervious rass ond Site (Pervious)	yr-240hr (P) = IOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.85) RUNOFF P. 28.66 6.00 34.66 TION: TYPE A SO AREA (ft <sup>2</sup> ) 25.79 2.87 2.50	9.6 ARAN ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> tt <sup>2</sup> SN 98 39 39	IETERS			Estimat	tial Abstractie S = (1000/C ted Runoff Vo Peak Volume B 640+50	on (S) = CN) - 10 Jume = = A x Q asin Lim to	27.70 aits 682+10 CN*A 2526.94 112.12 97.50 350.00 0.00 0.00	TOTAL AREA 25.7 2.8 2.5 3.5 0.0 0.0
Rainfall Depth for 100 N Runof Q = (P - 0.2 POST-DEVELOPMENT F Donsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA	yr-240hr (P) = IOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.85) RUNOFF P. 28.66 6.00 34.66 TION: TYPE A SO AREA (ft <sup>2</sup> ) 25.79 2.87 2.50	9.6 ARAN ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> tt <sup>2</sup> SN 98 39 39	IETERS			Estimat	tial Abstractie S = (1000/C ted Runoff Vo Peak Volume B 640+50	on (S) = CN) - 10 Jume = = A x Q asin Lim to	27.70 aits 682+10 CN*A 2526.94 112.12 97.50 350.00 0.000 0.000 0.000	TOTAL AREA 25.7 2.8 2.5 3.5 0.0 0.0 0.0 0.0
Rainfall Depth for 100 N Runod Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA LAND USE Nervious irass ond Site (Pervious)	yr-240hr (P) = IOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.85) RUNOFF P. 28.66 6.00 34.66 TION: TYPE A SO AREA (ft <sup>2</sup> ) 25.79 2.87 2.50	9.6 ARAN ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> tt <sup>2</sup> SN 98 39 39	IETERS			Estimat	tial Abstractie S = (1000/C ted Runoff Vo Peak Volume B 640+50	on (S) = CN) - 10 Jume = = A x Q asin Lim to	27.70 aits 682+10 CN*A 2526.94 112.12 97.50 350.00 0.00 0.00	ac-ft

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 15.5 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 1.2 S = (1000/CN) - 10

Estimated Runoff Volume = 44.80 ac-ft Peak Volume = A x Q

### PC

Onsite Basin Area	28.66 ft <sup>2</sup>
Pond Parcel Area	6.00 ft <sup>2</sup>
Total Area	34.66 ft <sup>2</sup>

## Pond Name: 10-2 Date: 2/28/2024

### POND SIZING ESTIMATION

### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

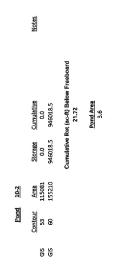
Area Inside R/W		28.66 ac	
Weighted C		0.87	
Total Impervious	0.95	25.79 ac	
Total Pervious		2.87 ac	
	0.20	200	
Outstanding FL Water (Y/N)[multiply x 1.5]		- N	
Required Treatment (Runoff from 1" Rainfall)		2.09 ac-ft (which	ever is greater)
Required Treatment (1/2" over Area)		1.19 ac-ft	
		2.09 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		27.70 ac-ft	
Proposed Runoff Volume		44.80 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volum	ne	17.09 ac-ft	
Floodplain Comp	ensation	0.00 ac-ft	
TOTAL	STORAGE	17.09 ac-ft	
3) Estimated Pond Configuration:			
e/			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
	7.0 ft	Assumed Control E	
Maximum fond Deptil below recebbard		, as a medi control E	
Maximum Pond Depth Below Freeboard	7.0 ft	Assumed Control E	L 53.00 ft

### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	507 ft
WTOP OF SLOPE	253 ft
Area	2.95 ac

LSITE	656 ft
WSITE	352 ft
Area	5.30 ac





## I-75 Pond Siting

## FPID: 452074-2-32-01

		P	ond Name:	10-3			Full	Typica	al Section Wi	ith
			Date:	2/28/	2024					
RE-DEVELOPMENT RU	<b>INOFF PA</b>	RAME	TERS							
nsite Basin Area	28.66	ac					В	asin Lim	its	
ond Parcel Area	7.00	ac				1	1464+00	to	1505+50	
otal Area	35.66	ac								
URVE NUMBER CALCUA	TION:									
LAND USE	TYPE A SO	-	TYPE B SO		TYPE C SO		TYPE D SO		CN*A	TOTAL AREA
LAND OSE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		
pvervious	8.38	98		$ \downarrow \downarrow$				$ \rightarrow $	821.62	8.3
ass	20.28	39		$ \rightarrow $					790.77	20.2
ond Site Pre Condition	7.00	39						$ \rightarrow $	273.00	7.0
				$ \rightarrow $		$\left  \right $		$\vdash$	0.00	0.0
						$\vdash$		$\vdash$	0.00	0.0
									0.00	0.0
				$\vdash$					0.00	0.0
TOTALS	35.66	1	0		0		0		1885.39	35.0
TOTALS	33.00	1	Ū			<u> </u>	WEIGH	TED CN	1000.001	
	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S RUNOFF P 28.66					Estima	ted Runoff Vo Peak Volume B			əc-ft
						1	-	( ) i	682+10	
ond Parcel Area	7.00	ft-					640+50	to	082+10	
otal Area	35.66	5 ft <sup>2</sup>								
URVE NUMBER CALCUA										
LAND USE	TYPE A SC	-	TYPE B SO		TYPE C SO		TYPE D SO		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	2526.04	25.5
pervious	25.79	98						$\vdash$	2526.94	25.7
ass	2.87	39 39						+	112.12	4.0
ond Site (Pervious)	4.00	100		+		$\vdash$			300.00	3.0
ond Site (Impervious)	3.00	100				$\vdash$		+	0.00	0.0
				<b>├</b> ──┤		+		++	0.00	0.0
				+-+		$\vdash$		$\vdash$		
									0.00	0.0
TOTALS	35.66		0		0		0			0.0

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 15.2 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 1.5 S = (1000/CN) - 10

Estimated Runoff Volume = 45.17 ac-ft Peak Volume = A x Q

## Pond Name: 10-3 Date: 2/28/2024

## POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		28.66 ac	
Weighted C		0.87	
Total Impervious	0.95	25.79 ac	
Total Pervious	0.20	2.87 ac	
	0.20	N	
Outstanding FL Water (Y/N)[multiply x 1.5]		2.09 ac.ft 7	
Required Treatment (Runoff from 1" Rainfall)		1.19 ac-ft	er is greater)
Required Treatment (1/2" over Area)		2.09 ac-ft	
		2.09 ac-tt	
2) Estimated Peak Attenuation Volume (EPAV):			
The second second second		28.26 ac-ft	
Existing Runoff Volume		45.17 ac-ft	
Proposed Runoff Volume	_	16.92 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volume	2	10.92 ac-it	
Floodplain Comp	onsation	0.00 ac-ft	
Floodplain Comp	Pensation	0.00 2010	
TOTAL	STORAGE	16.92 ac-ft	
3) Estimated Pond Configuration:			
S) Estimated Fond Comparation			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	6.0 ft	Assumed Control EL	58.50 ft
4) Estimated Pond Dimensions Including Freeboard			
LTOP OF SLOPE	538 ft		

# 5) Minimum Site Dimensions (Considering Maintenance Berm and 20% Factor of Safety)

WTOP OF SLOPE

Area

LSITE	693 ft
WSITE	371 ft
Area	5.90 ac

269 ft 3.32 ac Pond 10-3

	<u>Contour</u>	<u>Area</u>	<u>Storage</u>	<u>Cumulative</u>
GIS	58.5	1434085	0.0	0.0
GIS	60	1464365	2173837.5	2173837.5

Cumulative Ret (ac-ft) Below Freeboard 49.90

> Pond Area 33.6

## I-75 Pond Siting

## FPID: 452074-2-32-01

		P	ond Name:	1.00	1024		Full	Туріса	al Section Wi	dth
			Date:	2/28/	2024					
RE-DEVELOPMENT RU	JNOFF PA	RAME	TERS							
nsite Basin Area	27.14	ac					В	asin Lim	its	
ond Parcel Area	8.14	ac					1505+50	to	1545+00	
otal Area	35.28									
plai Area	55.20	ac								
URVE NUMBER CALCUA	TION:									
	TYPE A SO	ILS	TYPE B SO	ILS	TYPE C SO	LS	TYPE D SO	LS	CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		
npvervious	7.98	98							782.02	7.9
rass	19.16	39							747.25	19.1
ond Site Pre Condition	8.14	39							317.46	8.1
									0.00	0.0
									0.00	0.0
									0.00	0.0
									0.00	0.0
				<b></b>					0.00	35.2
TOTALS	35.28		0		0		0		1840./3	35.2
	NOAA Atlas 14	Ļ					WEIGH tial Abstraction S = (1000/C	on (S) = :N) - 10	9.1	
Runo Q = (P - 0.2 OST-DEVELOPMENT F	NOAA Atlas 14 <b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF P</b>	9.4 9.4	in			Estimat	tial Abstraction S = (1000/C ted Runoff Vo Peak Volume	on (S) = :N) - 10 lume = = A x Q	27.64	ac-ft
Runo Q = (P - 0.2 POST-DEVELOPMENT F	NOAA Atlas 14 <b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF P</b> 27.14	9.4 ARAN	in			Estimat	tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B	on <b>(S) =</b> CN) - 10 Iume = = A x Q asin Lim	27.64 a	
Runo Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area	NOAA Atlas 14 <b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF P</b>	9.4 ARAN	in			Estimat	tial Abstraction S = (1000/C ted Runoff Vo Peak Volume	on (S) = :N) - 10 lume = = A x Q	27.64	
Runo Q = (P - 0.7 POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area	NOAA Atlas 14 <b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF P</b> 27.14	9.4 ARAN ft <sup>2</sup> ft <sup>2</sup>	in			Estimat	tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B	on <b>(S) =</b> CN) - 10 Iume = = A x Q asin Lim	27.64 a	
Runo Q = (P - 0.2 P <b>OST-DEVELOPMENT F</b> Onsite Basin Area ond Parcel Area otal Area	NOAA Atlas 14 <b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF P</b> 27.14 8.14 35.28	9.4 ARAN ft <sup>2</sup> ft <sup>2</sup>	in			Estimat	tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B	on <b>(S) =</b> CN) - 10 Iume = = A x Q asin Lim	27.64 a	
Runo Q = (P - 0.7 POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area	NOAA Atlas 14 <b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF P</b> 27.14 8.14 35.28 <b>ATION:</b>	= 9,4 ARAN ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup>	in 1ETERS	116	TYPE C SO	Estimat	tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 1505+50	on <b>(S) =</b> :N) - 10 lume = = A x Q asin Lim to	27.64 a	ac-ft
Runo Q = (P - 0.7 POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area	NOAA Atlas 14 <b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF P</b> 27.14 8.14 35.28 <b>NTION:</b> <b>TYPE A SO</b>	9,4 <b>ARAN</b> <b>h</b> t <sup>2</sup> <b>h</b> t <sup>2</sup> <b>h</b> t <sup>2</sup> <b>h</b> t <sup>2</sup>	in IETERS		TYPE C SO	Estimat	tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 1505+50	on <b>(S) =</b> :N) - 10 lume = = A x Q asin Lim to	27.64 a	
Runo Q = (P - 0.7 POST-DEVELOPMENT F Donsite Basin Area ond Parcel Area otal Area URVE NUMBER CALCUA	NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P. 27.14 8.14 35.28 NTION: TYPE A SO AREA (ft <sup>2</sup> )	9,4 <b>ARAN</b> <b>t</b> t <sup>2</sup> <b>t</b> t <sup>2</sup>	in 1ETERS	ILS CN	TYPE C SO AREA (R <sup>2</sup> )	Estimat	tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 1505+50	on (5) = :N) - 10 lume = = A x Q asin Lin to	27.64 a	ac-ft Total area
Runo Q = (P - 0.7 POST-DEVELOPMENT F Donsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA LAND USE	NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P. 27.14 8.14 35.28 NTION: TYPE A SO AREA (ft <sup>2</sup> ) 24.48	9,4 <b>ARAN</b> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> <b>ILS</b> <b>CN</b> 98	in IETERS			Estimat	tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 1505+50	on (5) = :N) - 10 lume = = A x Q asin Lin to	27.64 hits 1545+00	ac-ft Total Area 24.4
N Runo Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA LAND USE NERVIOUS rass	NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P. 27.14 8.14 35.28 NTION: TYPE A SO AREA (ft <sup>2</sup> ) 24.48 2.66	<ul> <li>9,4</li> <li>ARAN</li> <li>ft<sup>2</sup></li> <li>ft<sup>2</sup></li> <li>ft<sup>2</sup></li> <li>ft<sup>2</sup></li> <li>state</li> <li>N</li> <li>98</li> <li>39</li> </ul>	in IETERS			Estimat	tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 1505+50	on (5) = :N) - 10 lume = = A x Q asin Lin to	27.64 hits 1545+00 CN*A 2399.38	TOTAL AREA 24.4 2.6
Runo Q = (P - 0.7 POST-DEVELOPMENT P Onsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA LAND USE NERVIOUS rass ond Site (Pervious)	NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P. 27.14 8.14 35.28 XTION: TYPE A SO AREA (ft <sup>2</sup> ) 24.48 2.66 3.00	9,4 <b>ARAN</b> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> <b>ILS</b> <b>CN</b> 98 39 39	in IETERS			Estimat	tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 1505+50	on (5) = :N) - 10 lume = = A x Q asin Lin to	27.64 hits 1545+00 cn*A 2399.38 103.60	TOTAL AREA 24.4 2.6 3.0
Runo Q = (P - 0.7 POST-DEVELOPMENT P Onsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA LAND USE NERVIOUS rass ond Site (Pervious)	NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P. 27.14 8.14 35.28 NTION: TYPE A SO AREA (ft <sup>2</sup> ) 24.48 2.66	<ul> <li>9,4</li> <li>ARAN</li> <li>ft<sup>2</sup></li> <li>ft<sup>2</sup></li> <li>ft<sup>2</sup></li> <li>ft<sup>2</sup></li> <li>state</li> <li>N</li> <li>98</li> <li>39</li> </ul>	in IETERS			Estimat	tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 1505+50	on (5) = :N) - 10 lume = = A x Q asin Lin to	27.64 hits 1545+00 2399.38 103.60 117.00	TOTAL AREA 24.4 2.6 3.0 4.0
Runo Q = (P - 0.2 POST-DEVELOPMENT P Donsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA LAND USE mpervious rass ond Site (Pervious)	NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P. 27.14 8.14 35.28 XTION: TYPE A SO AREA (ft <sup>2</sup> ) 24.48 2.66 3.00	9,4 <b>ARAN</b> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> <b>ILS</b> <b>CN</b> 98 39 39	in IETERS			Estimat	tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 1505+50	on (5) = :N) - 10 lume = = A x Q asin Lin to	27.64 hits 1545+00 2399.38 103.60 117.00 400.00	TOTAL AREA 24.4 2.6 3.0 4.0 0.0
Runo Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Fond Parcel Area Fotal Area CURVE NUMBER CALCUA	NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P. 27.14 8.14 35.28 XTION: TYPE A SO AREA (ft <sup>2</sup> ) 24.48 2.66 3.00	9,4 <b>ARAN</b> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> <b>ILS</b> <b>CN</b> 98 39 39	in IETERS			Estimat	tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 1505+50	on (5) = :N) - 10 lume = = A x Q asin Lin to	27.64 hits 1545+00 2399.38 103.60 117.00 400.00 0.00	TOTAL AREA 24.4 2.6 3.0 4.0 0.0 0.0
Runo Q = (P - 0.2 POST-DEVELOPMENT P Disite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA LAND USE Mervious irass ond Site (Pervious)	NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P. 27.14 8.14 35.28 XTION: TYPE A SO AREA (ft <sup>2</sup> ) 24.48 2.66 3.00	9,4 <b>ARAN</b> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> <b>ILS</b> <b>CN</b> 98 39 39	in IETERS			Estimat	tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 1505+50	on (5) = :N) - 10 lume = = A x Q asin Lin to	27.64 hits 1545+00 2399.38 103.60 117.00 400.00 0.00 0.00	ac-ft

Potential Abstraction (S) = 1.3 S = (1000/CN) - 10

Estimated Runoff Volume = 43.90 ac-ft Peak Volume = A x Q

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

**Runoff Depth (Q) =** 15.4 in  $Q = (P - 0.2S)^2/(P + 0.8S)$ 

Pond Name: 11-1 Date: 2/28/2024

### POND SIZING ESTIMATION

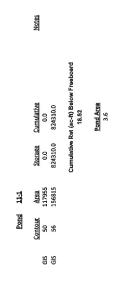
## 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	528 ft
WTOP OF SLOPE	264 ft
Area	3.20 ac

LSITE	681 ft
WSITE	365 ft
Area	5.70 ac





## I-75 Pond Siting FPID: 452074-2-32-01

			FFID	520	/4-2-32-01					
		P	ond Name:	11-2			Full	Typic	al Section Wie	dth
			Date:	2/28/	2024					
PRE-DEVELOPMENT RU			TERS							
Onsite Basin Area	27.14	ac					B	asin Lin	nits	
Pond Parcel Area	11.00	ас					1505+50	to	1545+00	
Total Area	38.14	ac								
	TION									
CURVE NUMBER CALCUA	TION:									
LAND USE	TYPE A SOI	LS	TYPE B SO	ILS	TYPE C SO	LS	TYPE D SO	1.5	CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	700.00	7.00
mpvervious	7.98	98				<u> </u>			782.02	7.98
Grass	19.16	39							747.25	19.16
Pond Site Pre Condition	11.00	39				<u> </u>			429.00	11.00
									0.00	0.00
									0.00	0.00
						<u> </u>			0.00	0.00
				<u> </u>					0.00	0.00
TOTALS	38.14		0		0		0		1958.27	38.14
TOTALS	30.14			I	5		WEIGH			51
Q = (P - 0 POST-DEVELOPMENT I	2S) <sup>2</sup> /(P + 0.8S) RUNOFF P		IETERS				Peak Volume	= A x Q		
Onsite Basin Area	27.14	ft <sup>2</sup>					B	asin Lir	nits	
Pond Parcel Area	11.00	ft <sup>2</sup>					1505+50	to	1545+00	
Total Area	38.14	ft <sup>2</sup>								
CURVE NUMBER CALCUA	TION:									
	TYPE A SO	ILS	TYPE B SO	ILS	TYPE C SO	ILS	TYPE D SO	ILS	CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		
mpervious	24.48	98							2399.38	24.48
Grass	2.66	39						<u> </u>	103.60	2.66
Pond Site (Pervious)	5.00	39		-					195.00	5.00
Pond Site (Impervious)	6.00	100		-		<u> </u>		<u> </u>	600.00	6.00
								<u> </u>	0.00	0.00
								<u> </u>	0.00	0.00
				-				_	0.00	0.00
TOTAL	20 14		0		0		0		3297.98	38.14
TOTALS	38.14		U	L	U		WEIGH	L CN		38.14
	<b>yr-240hr (P) =</b> NOAA Atlas 14 <b>ff Depth (Q) =</b>						ntial Abstraction S = (1000/0 ated Runoff Vo	on (S) = CN) - 10	1.6	ac-ft
	2S) <sup>2</sup> /(P + 0.8S)						Peak Volume	= A x Q	L.	

## Pond Name: 11-2 Date: 2/28/2024

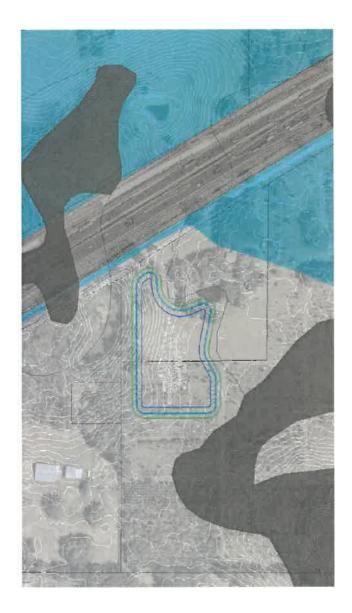
### POND SIZING ESTIMATION

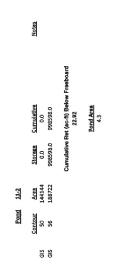
# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		27.14 ac	
Weighted C		0.88	
Total Impervious	0.95	24.48 ac	
Total Pervious	0.20	2.66 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		1.98 ac-ft J (white	hever is greater)
Required Treatment (1/2" over Area)		1.13 ac-ft 🖵 (Will	siever is greatery
		1.98 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		29.23 ac-ft	
Proposed Runoff Volume		48.17 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volum	ie	18.95 ac-ft	
Floodplain Com	pensation	0.00 ac-ft	
TOTAL	STORAGE	18.95 ac-ft	
3) Estimated Pond Configuration:			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	3.0 ft	Assumed Control	EL 53.00 ft
4) Setimated Band Dimonsions Including Freehoard			
4) Estimated Pond Dimensions Including Freeboard			

LTOP OF SLOPE	777 ft
WTOP OF SLOPE	388 ft
Area	6.93 ac

LSITE	980 ft
WSITE	514 ft
Area	11.57 ac





## I-75 Pond Siting

			FPI	D: 4520	74-2-32-01					
		P	ond Name	11-3			Full	Typica	al Section Wi	idth
			Date	: 2/28/	2024					
PRE-DEVELOPMENT RU		RAMF	TERS							
Onsite Basin Area	27.14						B	lasin Lim	its	
							1505+50	to	1545+00	
Pond Parcel Area	7.00						1000.00			
Total Area	34.14	ac								
CURVE NUMBER CALCUA	TION:									
	TYPE A SO	LS	TYPE B SC	DILS	TYPE C SO	ILS	TYPE D SO	ILS	CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		
Impvervious	7.98	98				-			782.02	7.98
Grass	19.16	39			i	-		$ \rightarrow $	747.25	19.16
Pond Site Pre Condition	7.00	39						+	273.00	7.00
									0.00	0.00
						-		++	0.00	0.00
				-					0.00	0.00
				1					0.00	0.00
TOTALS	34.14		0	1	0		0		1802.27	34.14
101710	0.111			-			WEIGH	TED CN		53
-	NOAA Atlas 14						ntial Abstracti S = (1000/ Inted Runoff Vo	CN) - 10	8.9 27.01	ac-ft
	<b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S)		IN			Latine	Peak Volume		27.01	
POST-DEVELOPMENT	RUNOFF P	ARAN	IETERS							
Onsite Basin Area	27.14	ft <sup>2</sup>					E	Basin Lim	lits	
Pond Parcel Area	7.00	ft²					1505+50	to	1545+00	
Total Area	34.14	ft²								
CURVE NUMBER CALCUA	TION:									
	TYPE A SO	ILS	TYPE B SC	DILS	TYPE C SO	ILS	TYPE D SC	DILS	CN*A	TOTAL AREA
			r							

	TYPE A SC	MLS	TYPE B SOILS		ITPE C SUILS		TIFED SOLD		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		
Impervious	24.48	98							2399.38	24.48
	2.66	39							103.60	2.66
Grass	3.00	39							117.00	3.00
Pond Site (Pervious)	4.00	100						1	400.00	4.00
Pond Site (Impervious)	4.00	100							0.00	0.00
		++					1		0.00	0.00
		+ +							0.00	0.00
		+					(		0.00	0.00
TOTALS	34.14	+ +	0		0		0		3019.98	34.14
TOTALS	24.14					1	WEIGH	TED CN		88

Potential Abstraction (S) = 1.3 S = (1000/CN) - 10

ac-ft Estimated Runoff Volume = 43.90 Peak Volume = A x Q

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 15.4 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Pond Name: 11-3 Date: 2/28/2024

## POND SIZING ESTIMATION

## 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

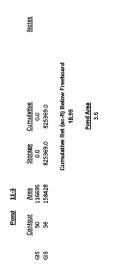
Area Inside R/W		27.14 ac	
Weighted C		0.88	
Total Impervious	0.95	24.48 ac	
Total Pervious	0.20	2.66 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		1.98 ac-ft (whichow	er is greater)
Required Treatment (1/2" over Area)		1.13 ac-ft	er is greater)
		1.98 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		27.01 ac-ft	
Proposed Runoff Volume		43.90 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volume	e	16.89 ac-ft	
Floodplain Com	pensation	0.00 ac-ft	
TOTAL	STORAGE	16.89 ac-ft	
3) Estimated Pond Configuration:			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	6.0 ft	Assumed Control EL	50.00 ft

4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	537 ft
WTOP OF SLOPE	269 ft
Area	3.31 ac

LSITE	693 ft
WSITE	370 ft
Area	5.89 ac





## I-75 Pond Siting FPID: 452074-2-32-01

		Ba	isin Name: Date:	11-4 8 2/28/			Full	Туріса	al Section Wi	dth
PRE-DEVELOPMENT RU	JNOFF PA	RAME	TERS							
Onsite Basin Area	68.94						B	asin Lim	its	
Pond Parcel Area	15.70						1505+50	to	1596+50	
							1202120	10	1330.30	
Total Area	84.64	ac								
CURVE NUMBER CALCUA										
LAND USE	TYPE A SO		TYPE B SO	-	TYPE C SO	-	TYPE D SO		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	<b>CN</b> 98	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )		1801.62	18.38
Impvervious	18.38 50.56	39		$\vdash$		-			1971.69	50.56
Grass Pond Site Pre Condition	15.70	39							612.30	15.70
ona site rie contation	10.70	35							0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	84.64		0		0		0		4385.61	84.64
ľ	NOAA Atlas 14	ŀ					S = (1000/0	CN) - 10		
Runo Q = (P - 0. POST-DEVELOPMENT F	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P	9.3 ARAM				Estima	<b>ted Runoff Vo</b> Peak Volume	iume =		ac-ft
Runo Q = (P - 0. POST-DEVELOPMENT I Onsite Basin Area	ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P 68.94	9.3 ARAM				Estima	ted Runoff Vo Peak Volume E	elume = = A x Q asin Lim	nits	ac-ft
Runo Q = (P - 0. POST-DEVELOPMENT F	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P	9.3 <b>ARAM</b> ft <sup>2</sup> ft <sup>2</sup>				Estima	<b>ted Runoff Vo</b> Peak Volume	iume = = A x Q		ac-ft
Runo Q = (P - 0. POST-DEVELOPMENT I Onsite Basin Area Pond Parcel Area Total Area	ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P 68.94 15.70 84.64	9.3 <b>ARAM</b> ft <sup>2</sup> ft <sup>2</sup>				Estima	ted Runoff Vo Peak Volume E	elume = = A x Q asin Lim	nits	ac-ft
Runo Q = (P - 0. POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA	ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P 68.94 15.70 84.64	9.3 <b>ARAM</b> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup>		ILS	TYPE C SO		ted Runoff Vo Peak Volume E	slume = = A x Q easin Lim to	nits 1596+50	
Runo Q = (P - 0. POST-DEVELOPMENT I Onsite Basin Area Pond Parcel Area Total Area	ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P 68.94 15.70 84.64	9.3 <b>ARAM</b> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup>	IETERS	ILS CN	TYPE C SO AREA (ft <sup>2</sup> )		ted Runoff Vo Peak Volume E 1505+50	slume = = A x Q easin Lim to	nits	ac-ft TOTAL AREA
Runo Q = (P - 0. POST-DEVELOPMENT I Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 68.94 15.7C 84.64 NTION: TYPE A SO	9.3 <b>ARAM</b> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup>	IETERS TYPE B SO	-		ILS	ted Runoff Vo Peak Volume E 1505+50 TYPE D SC	slume = = A x Q tasin Lim to	nits 1596+50	TOTAL AREA 56.40
Runo Q = (P - 0. POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 68.94 15.7C 84.64 NTION: TYPE A SO AREA (ft <sup>2</sup> )	9.3 <b>ARAM</b> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> CN	IETERS TYPE B SO	-		ILS	ted Runoff Vo Peak Volume E 1505+50 TYPE D SC	slume = = A x Q tasin Lim to	nits 1596+50 €N*A 5527.69 488.87	TOTAL AREA 56.40 12.54
Runo Q = (P - 0. POST-DEVELOPMENT P Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious Grass Pond Site (Pervious)	ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P 68.94 15.70 84.64 NTION: TYPE A SO AREA (ft <sup>2</sup> ) 56.40 12.54 3.00	9.3 ARAM ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> 98 39 39	IETERS TYPE B SO	-		ILS	ted Runoff Vo Peak Volume E 1505+50 TYPE D SC	slume = = A x Q tasin Lim to	nits 1596+50 CN*A 5527.69 488.87 488.87 117.00	TOTAL AREA 56.4( 12.54 3.0(
Runo Q = (P - 0. POST-DEVELOPMENT P Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious Grass Pond Site (Pervious)	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 68.94 15.7C 84.64 NTION: TYPE A SO AREA (ft <sup>2</sup> ) 56.40 12.54	9.3 ARAM ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> St 2 St 2 St 2 St 2 St 2 St 2 St 2 St 2	IETERS TYPE B SO	-		ILS	ted Runoff Vo Peak Volume E 1505+50 TYPE D SC	slume = = A x Q tasin Lim to	hits 1596+50 CN*A 5527.69 488.87 117.00 400.00	TOTAL AREA 56.40 12.54 3.00 4.00
Runo Q = (P - 0. POST-DEVELOPMENT P Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious Grass Pond Site (Pervious)	ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P 68.94 15.70 84.64 NTION: TYPE A SO AREA (ft <sup>2</sup> ) 56.40 12.54 3.00	9.3 ARAM ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> 98 39 39	IETERS TYPE B SO	-		ILS	ted Runoff Vo Peak Volume E 1505+50 TYPE D SC	slume = = A x Q tasin Lim to	nits 1596+50 CN*A 5527.69 488.87 117.00 400.00 0.00	TOTAL AREA 56.40 12.54 3.00 4.00 0.00
Runo Q = (P - 0. POST-DEVELOPMENT P Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious Grass Pond Site (Pervious)	ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P 68.94 15.70 84.64 NTION: TYPE A SO AREA (ft <sup>2</sup> ) 56.40 12.54 3.00	9.3 ARAM ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> 98 39 39	IETERS TYPE B SO	-		ILS	ted Runoff Vo Peak Volume E 1505+50 TYPE D SC	slume = = A x Q tasin Lim to	hits 1596+50 CN*A 5527.69 488.87 117.00 400.00 0.000 0.000	TOTAL AREA 56.40 12.54 3.00 4.00 0.00 0.00
Runo Q = (P - 0. POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA	ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P 68.94 15.70 84.64 NTION: TYPE A SO AREA (ft <sup>2</sup> ) 56.40 12.54 3.00	9.3 ARAM ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> 98 39 39	IETERS TYPE B SO	-		ILS	ted Runoff Vo Peak Volume E 1505+50 TYPE D SC	slume = = A x Q tasin Lim to	hits 1596+50 CN*A 5527.69 488.87 117.00 400.00 0.000 0.000 0.000 0.000	TOTAL AREA 56.40 12.54 3.00 4.00 0.00 0.00 0.00 0.00
Runo Q = (P - 0. POST-DEVELOPMENT P Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious Grass Pond Site (Pervious)	ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P 68.94 15.70 84.64 NTION: TYPE A SO AREA (ft <sup>2</sup> ) 56.40 12.54 3.00	9.3 ARAM ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> 98 39 39	IETERS TYPE B SO	-		ILS	ted Runoff Vo Peak Volume E 1505+50 TYPE D SC	slume = = A x Q tasin Lim to	hits 1596+50 CN*A 5527.69 488.87 117.00 400.00 0.000 0.000	TOTAL AREA 56.40 12.54 3.00 4.00 0.00 0.00

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 15.1 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$

Potential Abstraction (S) = S = (1000/CN) - 10

> Estimated Runoff Volume = 95.54 ac-ft Peak Volume = A x Q

1.6

## P

Onsite Basin Area	68.94 ft <sup>2</sup>
Pond Parcel Area	15.70 ft <sup>2</sup>
Total Area	84.64 ft <sup>2</sup>

### CL

## Basin Name: 11-4 &12-4 Date: 2/28/2024

## POND SIZING ESTIMATION

## 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		68.94 ac	
Weighted C		0.81	
Total Impervious	0.95	56.40 ac	
Total Pervious	0.20	12.54 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		4.67 ac-ft _ (whicheve	er is greater)
Required Treatment (1/2" over Area)		2.87 ac-ft	
		4.67 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		65.55 ac-ft	
Proposed Runoff Volume		95.54 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volume	9	29.99 ac-ft	
Floodplain Comp	ensation	0.00 ac-ft	
TOTALS	STORAGE	34.66 ac-ft	
3) Estimated Pond Configuration:			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	6.0 ft	Assumed Control EL	50.00 ft

# 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	756 ft
WTOP OF SLOPE	378 ft
Area	6.56 ac

LSITE	955 ft
WSITE	502 ft
Area	11.00 ac





	<u>Cumulative</u> 0.0	824310.0	0 2387940.0	Cumulative Ret (ac-ft) Below Freeboard	54,82	Pond Area 14.3
	Storage 0.0	824310.0	1563630.	Cumulativ		
Pond 11-4 &12-4	<u>Area</u> 117955	156815	625000			
Pond	Contour 50	56	60			
	SID	GIS	gis			

# I-75 Pond Siting

			FPIC	): 4520	74-2-32-01					
		P	ond Name: Date:	12-1 2/28/	2024		Full	Туріса	al Section Wi	dth
PRE-DEVELOPMENT RU	INOFF PAP	RAMI								
Onsite Basin Area	41.8						asin Lim	its		
Pond Parcel Area	12.99	ас					1545+00	to	1596+50	
Total Area	54.79	ас								
CURVE NUMBER CALCUA	TION:									
	TYPE A SOI	s	TYPE B SO	ILS	TYPE C SC	DILS	TYPE D SO	LS	CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CN-A	TOTAL AREA
Impvervious	10.40	98							1019.60	10.40
Grass	31.40	39							1224.44	31.40
Pond Site Pre Condition	12.99	39							506.61	12.99
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	54.79		0		0	1	0		2750.65	54.79
							WEIGH	TED CN		50
Rainfall Depth for 100y N	<b>yr-240hr (P) =</b> IOAA Atlas 14	16.9	in			Poter	ntial Abstractio S = (1000/0		9.9	
	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S)		in			Estima	t <b>ed Runoff Vo</b> Peak Volume		40.90	ac-ft
POST-DEVELOPMENT R	UNOFF P	ARAN	<b>NETERS</b>							

### POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	41.8 ft <sup>2</sup>
Pond Parcel Area	12.99 ft <sup>2</sup>
Total Area	54.79 ft <sup>2</sup>

1545+00 to 1596+50

**Basin Limits** 

### **CURVE NUMBER CALCUATION:**

LAND USE	TYPE A SC	ILS	TYPE B SOILS TYPE C SOILS		TYPE D SO	ILS	CN*A	TOTAL AREA		
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		TOTALPARE
Impopulaut	31.92	98							3128.31	31.92
Impervious	9.88	39							385.26	9.88
Grass		39							156.00	4.00
Pond Site (Pervious)	4.00								899.00	8.99
Pond Site (Impervious)	8.99	100							0.00	0.00
		++							0.00	0.00
		+							0.00	0.00
		+ +							0.00	0.00
TOTALS	54.79	+	0		0		0		4568.57	54.79
TOTALS	54.75					WEIGHTED CN				83

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

**Runoff Depth (Q) =** 14.7 in  $Q = (P - 0.2S)^2/(P + 0.8S)$ 

Potential Abstraction (S) = 2.0 S = (1000/CN) - 10

Estimated Runoff Volume = 67.22 ac-ft Peak Volume = A x Q

Pond Name: 12-1 Date: 2/28/2024

### POND SIZING ESTIMATION

## 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		41.80 ac		
Weighted C		0.77		
Total Impervious	0.95	31.92 ac		
Total Pervious	0.20	9.88 ac		
Outstanding FL Water (Y/N)[multiply x 1.5]		N		
Required Treatment (Runoff from 1" Rainfall)		_ 2.69 ac-ft	(whichovo)	r is greater)
Required Treatment (1/2" over Area)		1.74 ac-ft 了	(withchever	is greater)
		2.69 ac-ft		
2) Estimated Peak Attenuation Volume (EPAV): Existing Runoff Volume Proposed Runoff Volume		40.90 ac-ft 67.22 ac-ft		
EPAV = Proposed Runoff - Existing Runoff Volume		26.32 ac-ft		
Floodplain Comp		0.00 ac-ft		
TOTAL : 3) Estimated Pond Configuration:	STORAGE	26.32 ac-ft		
Maintenance Berm Width	20.0 ft	Freeboard		1.0 ft
L/W Ratio	2.0	Side Slope	s (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry		Dry

5.0 ft

53.00 ft

Assumed Control EL

### 4) Estimated Pond Dimensions Including Freeboard

Maximum Pond Depth Below Freeboard

LTOP OF SLOPE	719 ft
WTOP OF SLOPE	360 ft
Area	5.93 ac

LSITE	911 ft
WSITE	479 ft
Area	10.03 ac





## I-75 Pond Siting FPID: 452074-2-32-01

		- C	ond Name:		2024		Full	11010	al Section Wi	
			Date:	2/28/	2024					
PRE-DEVELOPMENT RU	INOFF PA	RAME	TERS							
Onsite Basin Area	41.8						R	asin Lin	nits	
						1	AL 1000 1000		ASSOCIATION AND AND	
Pond Parcel Area	10.00	ac					1545+00	to	1596+50	
Total Area	51.8	ac								
CURVE NUMBER CALCUA	TION:									
LAND USE	TYPE A SO	ILS	TYPE B SO	ILS	TYPE C SOI	LS	TYPE D SO	LS	CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		
mpvervious	10.40	98							1019.60	10.4
Grass	31.40	39							1224.44	31.4
Pond Site Pre Condition	10.00	39							390.00	10.0
									0.00	0.0
		$\vdash$							0.00	0.0
		$\vdash$							0.00	0.0
								——	0.00	0.0
TOTALS	51.8	$\vdash$	0	$\vdash$	0		0		2634.04	51
TUTALS	51.8		0				WEIGH	TED CN	2034.04	5
Runo	NOAA Atlas 14 <b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S)	9.1	in			Estima	S = (1000/C <b>ted Runoff Vo</b> Peak Volume	lume =	39.26	ac-ft
Runo Q = (P - 0.2 POST-DEVELOPMENT F	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S] RUNOFF P	= 9.1 ) ARAN				Estima	S = (1000/C <b>ted Runoff Vo</b> Peak Volume	:N) - 10 <b>lume =</b> = A x Q	39.26	ac-ft
Runo Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 41.8	= 9.1 ) <b>ARAN</b> 5 ft <sup>2</sup>				Estima	S = (1000/C ted Runoff Vo Peak Volume B	:N) - 10 lume = = A x Q asin Lin	39.26	ac-ft
Runo Q = (P - 0.2 POST-DEVELOPMENT F	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S] RUNOFF P	= 9.1 ) <b>ARAN</b> 5 ft <sup>2</sup>				Estima	S = (1000/C <b>ted Runoff Vo</b> Peak Volume	:N) - 10 <b>lume =</b> = A x Q	39.26	ac-ft
Runo Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 41.8	= 9.1 ) <b>ARAN</b> 3 ft <sup>2</sup> ) ft <sup>2</sup>				Estima	S = (1000/C ted Runoff Vo Peak Volume B	:N) - 10 lume = = A x Q asin Lin	39.26	ac-ft
Runo Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 41.8 10.00 51.8	= 9.1 ) <b>ARAN</b> 3 ft <sup>2</sup> ) ft <sup>2</sup>				Estima	S = (1000/C ted Runoff Vo Peak Volume B	:N) - 10 lume = = A x Q asin Lin	39.26	ac-ft
Runo Q = (P - 0.7 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 41.8 10.00 51.8	= 9.1 ) ARAN 6 ft <sup>2</sup> 9 ft <sup>2</sup> 3 ft <sup>2</sup>		ILS	TYPE C 50		S = (1000/C ted Runoff Vo Peak Volume B	EN) - 10 lume = = A x Q asin Lin to	39.26 nits 1596+50	
Runo Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 41.8 10.00 51.8	= 9.1 ) ARAN 6 ft <sup>2</sup> 9 ft <sup>2</sup> 3 ft <sup>2</sup>	1ETERS	ILS CN	TYPE C SO AREA (ft <sup>2</sup> )		S = (1000/C ted Runoff Vo Peak Volume B 1545+00	EN) - 10 lume = = A x Q asin Lin to	39.26	ac-ft TOTAL AREA
Runo Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 41.8 10.00 51.8 TION:	= 9.1 ) ARAN 3 ft <sup>2</sup> 3 ft <sup>2</sup> 3 ft <sup>2</sup>	TYPE B SO			ILS	S = (1000/C ted Runoff Vo Peak Volume B 1545+00	Image: Second state of the second state of	39.26 nits 1596+50	
Runo Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 41.8 10.00 51.8 TION: TYPE A SO AREA (ft <sup>2</sup> )	<ul> <li>9.1</li> <li>ARAN</li> <li>a ft<sup>2</sup></li> <li>b ft<sup>2</sup></li> <li>b ft<sup>2</sup></li> <li>b ft<sup>2</sup></li> <li>c N</li> </ul>	TYPE B SO			ILS	S = (1000/C ted Runoff Vo Peak Volume B 1545+00	Image: Second state of the second state of	39.26 nits 1596+50	TOTAL AREA
Runo Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious Grass	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 41.8 10.00 51.8 TION: TYPE A SO AREA (ft <sup>2</sup> ) 31.92	<ul> <li>9.1</li> <li>ARAN</li> <li>ft<sup>2</sup></li> <li>ft<sup>2</sup></li> <li>ft<sup>2</sup></li> <li>ft<sup>2</sup></li> <li>cn</li> <li>98</li> </ul>	TYPE B SO			ILS	S = (1000/C ted Runoff Vo Peak Volume B 1545+00	Image: Second state of the second state of	39.26 nits 1596+50 CN*A 3128.31	TOTAL AREA 31.9 9.8
Runo Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious Grass Pond Site (Pervious)	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 41.8 10.00 51.8 TION: TYPE ASO AREA (ft <sup>2</sup> ) 31.92 9.88	<ul> <li>9.1</li> <li>ARAN</li> <li>ft<sup>2</sup></li> <li>ft<sup>2</sup></li> <li>ft<sup>2</sup></li> <li>ft<sup>2</sup></li> <li>cn</li> <li>98</li> <li>39</li> </ul>	TYPE B SO			ILS	S = (1000/C ted Runoff Vo Peak Volume B 1545+00	Image: Second state of the second state of	39.26 nits 1596+50: CN*A 3128.31 385.26	TOTAL AREA 31.9 9.8 4.0 6.0
Runo Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious Grass Pond Site (Pervious)	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 41.8 10.00 51.8 ATION: TYPE ASO AREA (Ħ <sup>2</sup> ) 31.92 9.88 4.00	<ul> <li>9.1</li> <li>ARAN</li> <li>a ft<sup>2</sup></li> <li>b ft<sup>2</sup></li> <li>b ft<sup>2</sup></li> <li>c n</li> <li>98</li> <li>39</li> <li>39</li> </ul>	TYPE B SO			ILS	S = (1000/C ted Runoff Vo Peak Volume B 1545+00	Image: Second state of the second state of	39.26 nits 1596+50 3128.31 385.26 156.00	TOTAL AREA 31.9 9.8 4.0 6.0
Runo Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious Grass Pond Site (Pervious)	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 41.8 10.00 51.8 ATION: TYPE ASO AREA (Ħ <sup>2</sup> ) 31.92 9.88 4.00	<ul> <li>9.1</li> <li>ARAN</li> <li>a ft<sup>2</sup></li> <li>b ft<sup>2</sup></li> <li>b ft<sup>2</sup></li> <li>c n</li> <li>98</li> <li>39</li> <li>39</li> </ul>	TYPE B SO			ILS	S = (1000/C ted Runoff Vo Peak Volume B 1545+00	Image: Second state of the second state of	39.26 nits 1596+50: CN*A 3128.31 385.26 156.00 600.00 600.00 0.000 0.000	TOTAL AREA 31.9 9.8 4.0 6.0
Runor Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious Grass Pond Site (Pervious)	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 41.8 10.00 51.8 ATION: TYPE ASO AREA (Ħ <sup>2</sup> ) 31.92 9.88 4.00	<ul> <li>9.1</li> <li>ARAN</li> <li>a ft<sup>2</sup></li> <li>b ft<sup>2</sup></li> <li>b ft<sup>2</sup></li> <li>c n</li> <li>98</li> <li>39</li> <li>39</li> </ul>	TYPE B SO			ILS	S = (1000/C ted Runoff Vo Peak Volume B 1545+00	Image: Second state of the second state of	39.26 nits 1596+50 CN*A 3128.31 385.26 156.00 600.00 0.00 0.00 0.00	TOTAL AREA 31.9 9.8 4.0 6.0 0.0 0.0
Runo Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious Grass Pond Site (Pervious) Pond Site (Impervious)	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 41.8 10.00 51.8 XTION: TYPE A SO AREA (ft <sup>2</sup> ) 31.92 9.88 4.00 6.00	<ul> <li>9.1</li> <li>ARAN</li> <li>a ft<sup>2</sup></li> <li>b ft<sup>2</sup></li> <li>b ft<sup>2</sup></li> <li>c n</li> <li>98</li> <li>39</li> <li>39</li> </ul>	TYPE B SO		AREA (ft <sup>2</sup> )	ILS	S = (1000/C ted Runoff Vo Peak Volume B 1545+00 TYPE D SO AREA (ft <sup>2</sup> )	Image: Second state of the second state of	39.26 nits 1596+50 CN*A 3128.31 385.26 156.00 600.00 0.00 0.000 0.	TOTAL AREA 31.9 9.8 4.0 6.0 0.0 0.0 0.0
Runor Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious Grass Pond Site (Pervious)	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 41.8 10.00 51.8 XTION: TYPE A SO AREA (ft <sup>2</sup> ) 31.92 9.88 4.00 6.00	<ul> <li>9.1</li> <li>ARAN</li> <li>a ft<sup>2</sup></li> <li>b ft<sup>2</sup></li> <li>b ft<sup>2</sup></li> <li>c n</li> <li>98</li> <li>39</li> <li>39</li> </ul>	TYPE B SO			ILS	S = (1000/C ted Runoff Vo Peak Volume B 1545+00 TYPE D SO AREA (ft <sup>2</sup> )	Image: Second state of the second state of	39.26 nits 1596+50 CN*A 3128.31 385.26 156.00 600.00 0.00 0.00 0.00	TOTAL AREA 31.9 9.8 4.0 6.0 0.0 0.0 0.0 0.0 51
Rund Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious Grass Pond Site (Pervious) Pond Site (Impervious)	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 41.8 10.00 51.8 XTION: TYPE A SO AREA (ft <sup>2</sup> ) 31.92 9.88 4.00 6.00	<ul> <li>9.1</li> <li>ARAN</li> <li>a ft<sup>2</sup></li> <li>b ft<sup>2</sup></li> <li>b ft<sup>2</sup></li> <li>c n</li> <li>98</li> <li>39</li> <li>39</li> </ul>	TYPE B SO AREA (ft <sup>2</sup> )		AREA (ft <sup>2</sup> )	ILS	S = (1000/C ted Runoff Vo Peak Volume B 1545+00 TYPE D SO AREA (ft <sup>2</sup> )	Image: Second state of the second state of	39.26 nits 1596+50 CN*A 3128.31 385.26 156.00 600.00 0.00 0.000 0.	TOTAL AREA 31.5
Runor Q = (P - 0.7 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious Grass Pond Site (Pervious) Pond Site (Impervious) TOTALS Rainfall Depth for 100	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 41.8 10.00 51.8 TYPE A SO AREA (ft <sup>2</sup> ) 31.92 9.88 4.00 6.00 51.8	<ul> <li>9.1</li> <li>ARAN</li> <li>ft<sup>2</sup></li> <li>ft<sup>2</sup></li> <li>ft<sup>2</sup></li> <li>ft<sup>2</sup></li> <li>ft<sup>2</sup></li> <li>ft<sup>2</sup></li> <li>100</li> <li>100</li> <li>100</li> <li>100</li> <li>100</li> <li>100</li> <li>100</li> </ul>	TYPE B SO AREA (ft <sup>2</sup> )		AREA (ft <sup>2</sup> )		S = (1000/C ted Runoff Vo Peak Volume B 1545+00 TYPE D SO AREA (ft <sup>2</sup> )	ILS CN ILS CN FED CN FED CN Sn (S) =	39.26 nits 1596+50  CN*A  3128.31  385.26  156.00  600.00  0.00  0.00  0.00  0.00  0.00  2.1	TOTAL AREA 31.9 9.8 4.0 6.0 0.0 0.0 0.0 0.0 51

Runoff Depth (Q) = 14.6 in Q =  $(P - 0.2S)^2/(P + 0.8S)$ 

Peak Volume = A x Q

## Pond Name: 12-2 Date: 2/28/2024

## POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		41.80 ac 0.77	
Weighted C			
Total Impervious		31.92 ac	
Total Pervious	0.20	9.88 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		2.69 ac-ft _ (whichey	er is greater)
Required Treatment (1/2" over Area)		1.74 ac-ft	ei io 8. co. i ,
		2.69 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		39.26 ac-ft	
Proposed Runoff Volume		62.96 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volum	e	23.71 ac-ft	
Floodplain Com		0.00 ac-ft	
TOTAL	STORAGE	23.71 ac-ft	
3) Estimated Pond Configuration:			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	5.0 ft	Assumed Control EL	53.00 ft
Maximum ford beptil below recobuld			

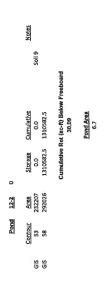
# 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	684 ft
WTOP OF SLOPE	342 ft
Area	5.37 ac

LSITE	869 ft
WSITE	458 ft
Area	9.14 ac







#### I-75 Pond Siting EDID: 452074-2-32-01

			FPIC	): 4520	74-2-32-01					
		P	ond Name: Date:	12-3 2/28/	2024		Full	Туріс	al Section Wi	dth
PRE-DEVELOPMENT	RUNOFF PA	RAME	TERS							
Onsite Basin Area	41.8	ac					B	asin Lim	nits	
Pond Parcel Area	10.00	ac					1545+00	to	1596+50	
Total Area	51.8	ac								
	JATION:	11.5	TYPE B SO	ILS	TYPE C SO	LS	TYPE D SO	ILS	CN*A	TOTAL
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		_
Impvervious	10.40	98							1019.60	
Grass	31.40	39							1224.44	
Pond Site Pre Condition	10.00	39							390.00	_
									0.00	
						_			0.00	
				1					0.00	

### **CURVE NUMB**

LAND USE	TYPE A SO	ILS	TYPE & SOILS		TYPE C SOILS		TYPE D SO	ILS	CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	di k	
Impuonious	10.40	98	*****						1019.60	10.40
Impvervious	31.40	39							1224.44	31.40
Grass									390.00	10.00
Pond Site Pre Condition	10.00	39							0.00	0.00
									0.00	0.00
		++							0.00	0.00
		++							0.00	0.00
									0.00	0.00
TOTALS	51.8		0		0		0		2634.04	51.8
TUTALS	51.0	1					WEIGH	TED CN		51

### Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

Runoff Depth (Q) = 9.1 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$ 

## **POST-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	41.8 ft <sup>2</sup>	
Pond Parcel Area	10.00 ft <sup>2</sup>	
Total Area	51.8 ft <sup>2</sup>	

#### Potential Abstraction (S) = 9.7 S = (1000/CN) - 10

Estimated Runoff Volume = 39.26 ac-ft Peak Volume = A x Q

> **Basin Limits** 1545+00 1596+50 to

## **CURVE NUMBER CALCUATION:**

	TYPE A SC	ILS	TYPE B SO	ILS	TYPE C SO	ILS	TYPE D SO	ILS	CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN		TOTALANDA						
Impoprious	31.92	98			•				3128.31	31.92
Impervious	9.88	39	_						385.26	9.88
Grass		39							156.00	4.00
Pond Site (Pervious)	4.00							+	600.00	6.00
Pond Site (Impervious)	6.00	100							0.00	0.00
		+ +							0.00	0.00
		+ +							0.00	0.00
		+ +							0.00	0.00
TOTALS	51.8		0		0		0		4269.57	51.8
TOTAD	51.0						WEIGH	TED CN		82

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 14.6 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 2.1 S = (1000/CN) - 10

Estimated Runoff Volume = 62.96 ac-ft Peak Volume = A x Q

Pond Name: 12-3 Date: 2/28/2024

## POND SIZING ESTIMATION

## 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

	Area Inside R/W		41.80 ac	
	Weighted C		0.77	
	Total Impervious	0.95	31.92 ac	
	Total Pervious	0.20	9.88 ac	
	Outstanding FL Water (Y/N)[multiply x 1.5]	1.1	N	
	Required Treatment (Runoff from 1" Rainfall)		2.69 ac-ft / (whichew	er is greater)
	Required Treatment (1/2" over Area)		1.74 ac-ft	ensgreatery
			2.69 ac-ft	
2) Estim	nated Peak Attenuation Volume (EPAV):			
	Existing Runoff Volume		39.26 ac-ft	
	Proposed Runoff Volume		62.96 ac-ft	
	EPAV = Proposed Runoff - Existing Runoff Volume	2	23.71 ac-ft	
	Floodplain Comp	ensation	0.00 ac-ft	
	TOTALS	TORAGE	23.71 ac-ft	
3) Estin	nated Pond Configuration:			
	Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
	L/W Ratio	2.0	Side Slopes (1:H)	4.0
	Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
	Maximum Pond Depth Below Freeboard	5.0 ft	Assumed Control EL	53.00 ft

### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	684 ft
WTOP OF SLOPE	342 ft
Area	5.37 ac

LSITE	869 ft
WSITE	458 ft
Area	9.14 ac





## I-75 Pond Siting FPID: 452074-2-32-01

		P	ond Name:				Full			
			Date:	2/28/	2024					
PRE-DEVELOPMENT RU	JNOFF PA	RAME	TERS							
Onsite Basin Area	37.8	ac					В	asin Lin	nits	
Pond Parcel Area	17.50	ac				1	1596+50	to	1642+50	
						- 2	50 - 12 MB			
lotal Area	55.3	ac								
CURVE NUMBER CALCUA	TION:									
	TYPE A SO	11.5	TYPE B 50	ILS	TYPE C SO	ILS	TYPE D SO	ILS	T	
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CN*A	TOTAL AREA
mpvervious	9.29	98							910.71	9.2
rass	28.51	39							1111.78	28.5
ond Site Pre Condition	17.50	39							682.50	17.5
			•						0.00	0.0
									0.00	0.0
									0.00	0.0
		I							0.00	0.0
									0.00	0.0
	55.3	1	0		0		0		2704.98	55.
TOTALS	55.5									
Rainfall Depth for 100 N Runoi	<b>yr-240hr (P) =</b> NOAA Atlas 14 ff Depth (Q) =	8.7					tial Abstraction S = (1000/Contect Runoff Vo	CN) - 10 plume =		4 ac-ft
Rainfall Depth for 100 N Runo	y <b>r-240hr (P)</b> = NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P	8.7 ARAN	in				n <b>tial Abstracti</b> S = (1000/0 I <b>ted Runoff Vo</b> Peak Volume	on (S) = CN) - 10 blume = = A x Q	40.03 a	
Rainfall Depth for 100 N Runo Q = (P - 0.:	<b>yr-240hr (P) =</b> NOAA Atlas 14 <b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S)	8.7 ARAN	in				n <b>tial Abstracti</b> S = (1000/0 I <b>ted Runoff Vo</b> Peak Volume	on (S) = CN) - 10 blume =	40.03 a	
Rainfall Depth for 100 N Runor Q = (P - 0.2 POST-DEVELOPMENT F	y <b>r-240hr (P)</b> = NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P	8.7 ARAN	in				n <b>tial Abstracti</b> S = (1000/0 I <b>ted Runoff Vo</b> Peak Volume	on (S) = CN) - 10 blume = = A x Q	40.03 a	
Rainfall Depth for 100 N Runo Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 37.8	8.7 ARAN ft <sup>2</sup> ft <sup>2</sup>	in				n <b>tial Abstracti</b> S = (1000/0 <b>ted Runoff Vo</b> Peak Volume B	on (S) = CN) - 10 blume = = A x Q Basin Lin	40.03 a	
Rainfall Depth for 100 N Runo Q = (P - 0.: POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 37.8 17.50 55.3	8.7 ARAN ft <sup>2</sup> ft <sup>2</sup>	in			Estima	ntial Abstraction S = (1000/0 ted Runoff Vo Peak Volume B 1596+50	on (S) = CN) - 10 blume = = A x Q Basin Lin to	40.03 a	
Rainfall Depth for 100 N Runor Q = (P - 0.7 POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 37.8 17.50 55.3 NTION:	8.7 <b>ARAN</b> <b>ARAN</b> <b>h</b> ft <sup>2</sup> <b>h</b> ft <sup>2</sup> <b>h</b> ft <sup>2</sup>	in IETERS TYPE B SO		TYPE C SO	Estima	tial Abstracti S = (1000/0 ted Runoff Vo Peak Volume B 1596+50	on (S) = CN) - 10 blume = = A x Q Basin Lin to	40.03 a	
Rainfall Depth for 100 N Runo Q = (P - 0.: POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 37. 8 17. 50 55.3 NTION: TYPE A SO AREA (ft <sup>2</sup> )	8.7 <b>ARAN</b> <b>f</b> t <sup>2</sup> <b>f</b> t <sup>2</sup>	in IETERS	ILS CN	TYPE C SO AREA (ft <sup>2</sup> )	Estima	ntial Abstraction S = (1000/0 ted Runoff Vo Peak Volume B 1596+50	on (S) = CN) - 10 blume = = A x Q Basin Lin to	40.03 a nits 1642+50	ac-ft TOTAL AREA
Rainfall Depth for 100 N Runo Q = (P - 0.: POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA LAND USE	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 37. 8 17. 50 55.3 NTION: TYPE A SO AREA (ft <sup>2</sup> ) 28.51	8.7 <b>ARAIV</b> <b>h</b> t <sup>2</sup> <b>h</b> t <sup>2</sup>	in IETERS TYPE B SO			Estima	tial Abstracti S = (1000/0 ted Runoff Vo Peak Volume B 1596+50	on (S) = CN) - 10 blume = = A x Q Basin Lin to	40.03 a nits 1642+50 CN*A 2794.21	ac-ft TOTAL AREA 28.5
Rainfall Depth for 100 N Runo Q = (P - 0.: POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA LAND USE mpervious Grass	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 37. 8 17. 50 55.3 NTION: TYPE A SO AREA (ft <sup>2</sup> ) 28.51 9.29	8.7 <b>ARAN</b> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> <b>CN</b> 98 39	in IETERS TYPE B SO			Estima	tial Abstracti S = (1000/0 ted Runoff Vo Peak Volume B 1596+50	on (S) = CN) - 10 blume = = A x Q Basin Lin to	40.03 nits 1642+50 CN*A 2794.21 362.22	TOTAL AREA 28.5 9.2
Rainfall Depth for 100 N Runo Q = (P - 0.: POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA LAND USE mpervious irass ond Site (Pervious)	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 37.8 17.50 55.3 NTION: TYPE A SO AREA (ft <sup>2</sup> ) 28.51 9.29 5.50	8.7 <b>ARAN</b> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> <b>CN</b> 98 39 39	in IETERS TYPE B SO			Estima	tial Abstracti S = (1000/0 ted Runoff Vo Peak Volume B 1596+50	on (S) = CN) - 10 blume = = A x Q Basin Lin to	40.03 a nits 1642+50 CN*A 2794.21 362.22 214.50	TOTAL AREA 28.5 9.2 5.5
Rainfall Depth for 100 N Runo Q = (P - 0.7 POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA LAND USE Npervious rass ond Site (Pervious)	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 37. 8 17. 50 55.3 NTION: TYPE A SO AREA (ft <sup>2</sup> ) 28.51 9.29	8.7 <b>ARAN</b> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> <b>CN</b> 98 39	in IETERS TYPE B SO			Estima	tial Abstracti S = (1000/0 ted Runoff Vo Peak Volume B 1596+50	on (S) = CN) - 10 blume = = A x Q Basin Lin to	40.03 a nits 1642+50 CN*A 2794.21 362.22 214.50 1200.00	TOTAL AREA 28.5 9.2 5.5 12.0
Rainfall Depth for 100 N Runo Q = (P - 0.: POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA LAND USE Mpervious irass ond Site (Pervious)	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 37.8 17.50 55.3 NTION: TYPE A SO AREA (ft <sup>2</sup> ) 28.51 9.29 5.50	8.7 <b>ARAN</b> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> <b>CN</b> 98 39 39	in IETERS TYPE B SO			Estima	tial Abstracti S = (1000/0 ted Runoff Vo Peak Volume B 1596+50	on (S) = CN) - 10 blume = = A x Q Basin Lin to	40.03 nits 1642+50 CN*A 2794.21 362.22 214.50 1200.00 1200.00	TOTAL AREA 28.5 9.2 5.5 12.0 0.0
Rainfall Depth for 100 N Runo Q = (P - 0.: POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA LAND USE Mpervious irass ond Site (Pervious)	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 37.8 17.50 55.3 NTION: TYPE A SO AREA (ft <sup>2</sup> ) 28.51 9.29 5.50	8.7 <b>ARAN</b> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> <b>CN</b> 98 39 39	in IETERS TYPE B SO			Estima	tial Abstracti S = (1000/0 ted Runoff Vo Peak Volume B 1596+50	on (S) = CN) - 10 blume = = A x Q Basin Lin to	40.03 nits 1642+50 CN*A 2794.21 362.22 214.50 1200.00 1200.00 0.00	TOTAL AREA 28.5 9.2 5.5 12.0 0.0
Rainfall Depth for 100 N Runo Q = (P - 0.: POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA LAND USE Mpervious irass ond Site (Pervious)	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 37.8 17.50 55.3 NTION: TYPE A SO AREA (ft <sup>2</sup> ) 28.51 9.29 5.50	8.7 <b>ARAN</b> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> <b>CN</b> 98 39 39	in IETERS TYPE B SO			Estima	tial Abstracti S = (1000/0 ted Runoff Vo Peak Volume B 1596+50	on (S) = CN) - 10 blume = = A x Q Basin Lin to	40.03 hits 1642+50 CN*A 2794.21 362.22 214.50 1200.00 1200.00 0.000 0.000	TOTAL AREA 28.5 9.2 5.5 12.0 0.0 0.0 0.0
Rainfall Depth for 100 N Runo Q = (P - 0.7 POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA LAND USE Mpervious Grass ond Site (Pervious) ond Site (Impervious)	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 37.8 17.50 55.3 NTION: TYPE A SO AREA (ft <sup>2</sup> ) 28.51 9.29 5.50 12.00	8.7 <b>ARAN</b> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> <b>CN</b> 98 39 39	in IETERS TYPE B SO AREA (ft <sup>2</sup> )		AREA (ft <sup>2</sup> )	Estima	tial Abstractic S = (1000/C ted Runoff VC Peak Volume B 1596+50 TYPE D SO AREA (ft <sup>2</sup> )	on (S) = CN) - 10 blume = = A x Q Basin Lin to	40.03 hits 1642+50 CN*A 2794.21 362.22 214.50 1200.00 1200.00 0.000 0.000	TOTAL AREA 28.5 9.2 5.5 12.0 0.0 0.0 0.0 0.0
Rainfall Depth for 100 N Runoi Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P 37.8 17.50 55.3 NTION: TYPE A SO AREA (R <sup>2</sup> ) 28.51 9.29 5.50 12.00	8.7 <b>ARAN</b> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> ft <sup>2</sup> <b>CN</b> 98 39 39	in IETERS TYPE B SO			Estima	tial Abstracti S = (1000/0 ted Runoff Vo Peak Volume B 1596+50	on (S) = CN) - 10 blume = = A x Q Basin Lin to	40.03 hits 1642+50 CN*A 2794.21 362.22 214.50 1200.00 1200.00 0.000 0.000	ac-ft TOTAL AREA

Runoff Depth (Q) = 14.6 in  $Q = (P - 0.2S)^2/(P + 0.8S)$ 

Estimated Runoff Volume = 67.37 ac-ft Peak Volume = A x Q

Pond Name: 13-1 Date: 2/28/2024

### POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W			37.80 ac	
Weighted C			0.77	
-	Total Impervious	0.95	28.51 ac	
	Total Pervious	0.20	9.29 ac	
Outstanding FL Water	· (Y/N)[multiply x 1.5]		N	
Required Treatment (	Runoff from 1" Rainfall)		2.41 ac-ft ک	(whichever is greater)
Required Treatment (	1/2" over Area)		1.58 ac-ft 🕤	(Willeliever is Breater)
			2.41 ac-ft	

# 2) Estimated Peak Attenuation Volume (EPAV):

Existing Runoff Volume	40.03 ac-ft
Proposed Runoff Volume	67.37 ac-ft
EPAV = Proposed Runoff - Existing Runoff Volume	27.34 ac-ft
Floodplain Compensation	0.00 ac-ft
TOTAL STORAGE	29.75 ac-ft

### 3) Estimated Pond Configuration:

Maintenance Berm Width 20.0 ft Freeboard	1.0 ft
L/W Ratio 2.0 Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth 1.5 ft Wet/Dry	Dry
Maximum Pond Depth Below Freeboard 2.0 ft Assumed Control EL	60.00 ft

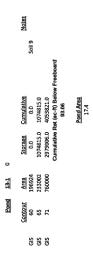
### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	1178 ft
WTOP OF SLOPE	589 ft
Area	15.92 ac

LSITE	1461 ft
WSITE	755 ft
Area	25.31 ac







#### 1-75 Pond Siting . . . . . . .

			FPID	. 4520	74-2-32-01					
		Po	nd Name:	13-2			Full	Typic	al Section Wi	dth
			Date:	2/28/	2024					
PRE-DEVELOPMENT RU	NOFF PAI	RAME	TERS							
Onsite Basin Area	37.8						В	asin Lin	nits	
Pond Parcel Area	9.50	ас					1596+50	to	1642+50	
Total Area	47.3	ас								
CURVE NUMBER CALCUAT	FION:									
	_	15	TYPE B SO	LS	TYPE C SO	ILS	TYPE D SO	LS		
LAND USE	TYPE A 501		TYPE B SO AREA (ft <sup>2</sup> )	LS CN	TYPE C SO AREA (ft <sup>2</sup> )	ILS CN	TYPE D SO AREA (ft <sup>2</sup> )	ILS CN	CN*A	TOTAL AREA
LAND USE	_		TYPE B SO AREA (ft <sup>2</sup> )						910.71	9.2
LAND USE	TYPE A 501 AREA (ft <sup>2</sup> )	CN							910.71 1111.78	9.2 28.5
LAND USE -	TYPE A 501 AREA (ft²) 9.29	<b>CN</b> 98							<u>910.71</u> 1111.78 370.50	9.2 28.5 9.5
LAND USE -	TYPE A 501 AREA (ft²) 9.29 28.51	см 98 39							910.71 1111.78 370.50 0.00	9.2 28.5 9.5 0.0
LAND USE -	TYPE A 501 AREA (ft²) 9.29 28.51	см 98 39							<u>910.71</u> 1111.78 370.50	9.2 28.5 9.5 0.0 0.0
LAND USE -	TYPE A 501 AREA (ft²) 9.29 28.51	см 98 39							910.71 1111.78 370.50 0.00	9.2 28.5 9.5 0.0 0.0 0.0
LAND USE -	TYPE A 501 AREA (ft²) 9.29 28.51	см 98 39							910.71 1111.78 370.50 0.00 0.00	9.29 28.53 9.54 0.00 0.00 0.00 0.00
LAND USE -	TYPE A 501 AREA (ft²) 9.29 28.51	см 98 39							910.71 1111.78 370.50 0.00 0.00 0.00	9.24 28.5 9.5 0.0 0.0 0.0 0.0 0.0 0.0
LAND USE	TYPE A 501 AREA (ft²) 9.29 28.51	см 98 39							910.71 1111.78 370.50 0.00 0.00 0.00 0.00	9.29 28.50 9.50 0.00 0.00 0.00

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 9.0 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

### POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	37.8	ft <sup>2</sup>
Pond Parcel Area	9.50	ft²
Total Area	47.3	ft²

Potential Abstraction (S) = S = (1000/CN) - 10

Estimated Runoff Volume = ac-ft 35.63 Peak Volume = A x Q

**Basin Limits** 1642+50 1596+50 to

### **CURVE NUMBER CALCUATION:**

	TYPE A SO	ILS	TYPE B SO	ILS	TYPE C SO	ILS	TYPE D SO	ILS	CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	UVA	TOTACASEA						
Impervious	28.51	98			******				2794.21	28.51
		39							362.22	9.29
Grass	9.29		_						156.00	4.00
Pond Site (Pervious)	4.00	39						+	550.00	5.50
Pond Site (Impervious)	5.50	100							0.00	0.00
		+						+	0.00	0.00
							_	+	0.00	0.00
		+				1-1		+	0.00	0.00
TOTALS	47.3	+-+	0		0		0		3862.43	47.3
TOTALS	47.5	1	-	1			WEIGH	TED CN		82

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 14.5 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$

Potential Abstraction (S) = 2.2 S = (1000/CN) - 10

Estimated Runoff Volume = 57.05 ac-ft Peak Volume = A x Q

Pond Name: 13-2 Date: 2/28/2024

### POND SIZING ESTIMATION

### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		37.80 ac	
Weighted C		0.77	
Total Impervious	0.95	28.51 ac	
Total Pervious		9.29 ac	
	0.20	N	
Outstanding FL Water (Y/N)[multiply x 1.5]		1012	
Required Treatment (Runoff from 1" Rainfall)		2.41 ac-ft (whicheve	r is greater)
Required Treatment (1/2" over Area)		1.58 ac-ft	in greatery
		2.41 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		35.63 ac-ft	
Proposed Runoff Volume		57.05 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volume	3	21.42 ac-ft	
Floodplain Comp	pensation	0.00 ac-ft	
TOTAL	STORAGE	21.42 ac-ft	
3) Estimated Pond Configuration:			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
		Assumed Control EL	60.00 ft
Maximum Pond Depth Below Freeboard	5.0 ft	Assumed Control EL	00.00 11

4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	651 ft
WTOP OF SLOPE	326 ft
Area	4.87 ac

LSITE	830 ft
WSITE	439 ft
Area	8.36 ac

	<u>Pond</u>	<u>13-2</u>	0			
GIS GIS	<u>Contour</u> 60 65	<u>Area</u> 203623 240835	<u>Storage</u> 0.0 1111145.0	<u>Cumulative</u> 0.0 1111145.0	Soil 9	<u>Notes</u>

# Cumulative Ret (ac-ft) Below Freeboard

25.51

Pond Area 5.5

# I-75 Pond Siting

FPID: 452074-2-32-01

		P	ond Name: Date:	13-3 2/28/	2024		Full	Туріс	al Section W	idth
PRE-DEVELOPMENT R	UNOFF PA	RAME	TERS							
Onsite Basin Area	37.8	ac					B	lasin Lin	nits	
Pond Parcel Area	9.50	ac					1596+50	to	1642+50	
Total Area	47.3	ac								
CURVE NUMBER CALCUA	ATION:									
	TYPE A SOILS		TYPE B SO	TYPE B SOILS TYPE C SOILS		ILS	TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	ur A	TOTALANDA
Impvervious	9.29	98							910.71	9.2
			3	1 1					4444 70	20 54

	AREA (ft <sup>+</sup> )		AREA (ft <sup>2</sup> )	CN	AREA (ft*)	CN	AREA (ft <sup>-</sup> )	CN		
Impvervious	9.29	98							910.71	9.29
Grass	28.51	39							1111.78	28.51
Pond Site Pre Condition	9.50	39							370.50	9.50
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	47.3		0		0		0		2392.98	47.3
							WEIGH	TED CN		51

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 9.0 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

### **POST-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	37.8 ft <sup>2</sup>
Pond Parcel Area	9.50 ft <sup>2</sup>
Total Area	47.3 ft <sup>2</sup>

Potential Abstraction (S) =	9.8
S = (1000/CN) - 10	

Estimated Runoff Volume = 35.63 ac-ft Peak Volume = A x Q

1596+50

### **CURVE NUMBER CALCUATION:**

	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UN A	TOTAL AREA
Impervious	28.51	98							2794.21	28.51
Grass	9.29	39							362.22	9.29
Pond Site (Pervious)	4.00	39							156.00	4.00
Pond Site (Impervious)	5.50	100							550.00	5.50
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	47.3		0		0		0		3862.43	47.3
						·!	WEIGH	TED CN		82

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 14.5 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$

Potential Abstraction (S) = 2.2 S = (1000/CN) - 10

Estimated Runoff Volume = 57.05 ac-ft Peak Volume = A x Q

**Basin Limits** 1642+50 to

Pond Name: 13-3 Date: 2/28/2024

# POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		37.80 ac	
Weighted C		0.77	
Total Impervious	0.95	28.51 ac	
Total Pervious	0.20	9.29 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
		2.41 ac-ft ] (whichow	ver is greater)
•		1.58 ac-ft	fer is greatery
		2.41 ac-ft	
nated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		35.63 ac-ft	
Proposed Runoff Volume		57.05 ac-ft	
	2	21.42 ac-ft	
		0.00 ac-ft	
TOTALS	STORAGE	21.42 ac-ft	
nated Pond Configuration:			
-			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
	1.5 ft	Wet/Dry	Dry
		Assumed Control EL	60.00 ft
	Weighted C Total Impervious Total Pervious Outstanding FL Water (Y/N)[multiply x 1.5] Required Treatment (Runoff from 1" Rainfall) Required Treatment (1/2" over Area) mated Peak Attenuation Volume (EPAV): Existing Runoff Volume Proposed Runoff Volume EPAV = Proposed Runoff - Existing Runoff Volume Floodplain Comp TOTAL S mated Pond Configuration: Maintenance Berm Width	Weighted C       Total Impervious       0.95         Total Pervious       0.20         Outstanding FL Water (Y/N)[multiply x 1.5]       Image: Comparison of the state of th	Weighted C       0.77         Total Impervious       0.95         Total Pervious       0.20         Outstanding FL Water (Y/N)[multiply x 1.5]       N         Required Treatment (Runoff from 1" Rainfall)       2.41 ac-ft         Required Treatment (1/2" over Area)       1.58 ac-ft         Attenuation Volume (EPAV):       2.41 ac-ft         Existing Runoff Volume       35.63 ac-ft         Proposed Runoff Volume       57.05 ac-ft         EPAV = Proposed Runoff - Existing Runoff Volume       21.42 ac-ft         Floodplain Compensation       0.00 ac-ft         TOTAL STORAGE       21.42 ac-ft         Maintenance Berm Width       2.0         L/W Ratio       2.0         Maximum Treatment Volume Depth       1.5

# 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	651 ft
WTOP OF SLOPE	326 ft
Area	4.87 ac

LSITE	830 ft
WSITE	439 ft
Area	8.36 ac

### Pond 13-3 0

	<u>Contour</u>	<u>Area</u>	<u>Storage</u>	<b>Cumulative</b>	Notes
GIS	60	198950	0.0	0.0	Soil 9
GIS	65	235744	1086735.0	1086735.0	

### Cumulative Ret (ac-ft) Below Freeboard

24.95

Pond Area 5.4

### **I-75 Pond Siting** FPID: 452074-2-32-01

		Р	ond Name: 14-1/	15-1		Full	Typic	al Section W	idth
			Date: 2/28/	2024					
PRE-DEVELOPMENT R		RAME	TERS						
Onsite Basin Area	35.15	ac				Ba	asin Lin	nits	
Pond Parcel Area	9.00	ас				1642+50	to	1684+80	
Total Area	44.15	ас							
CURVE NUMBER CALCUA	TION:								
	TYPE A SOL	LS	TYPE B SOILS	ILS TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (82)	CN	AREA (ft <sup>2</sup> ) CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	1	

	TYPE A SO	als	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		
Impvervious	8.55	98							837.45	8.55
	26.60	39							1037.58	26.60
Grass	9.00	39							351.00	9.00
Pond Site Pre Condition	3.00	33				1			0.00	0.00
	_					-			0.00	0.00
				1					0.00	0.00
				1					0.00	0.00
				-		-			0.00	0.00
TOTALS	44.15		0		0		0		2226.03	44.15
TUTALS	77,13			-			WEIGH	TED CN		50

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 9.0 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$

# POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	35.15 ft <sup>2</sup>
Pond Parcel Area	9,00 ft <sup>2</sup>
Total Area	44.15 ft <sup>2</sup>

#### Potential Abstraction (S) = 9.8 S = (1000/CN) - 10

Estimated Runoff Volume = ac-ft 33.13 Peak Volume = A x Q

> **Basin Limits** 1684+80 1642+50 to

### **CURVE NUMBER CALCUATION:**

	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	I CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CIT A	Territe .
Important	26.22	98							2569.46	26.22
Impervious		39							348.31	8.93
Grass	8.93								136.50	3.50
Pond Site (Pervious)	3.50	39						+	500.00	5.00
Pond Site (Impervious)	5.00	100						$ \rightarrow $		0.00
									0.00	
									0.00	0.00
		1-1							0.00	0.00
									0.00	0.00
TOTALS	43.65		0		0		0		3554.27	43.65
TUTALS	-5.05			hd		\$1	WEIGH	TED CN		81

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 14.4 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$

Potential Abstraction (S) = 2.3 S = (1000/CN) - 10

Estimated Runoff Volume = ac-ft 52.53 Peak Volume = A x Q

# Pond Name: 14-1/15-1 Date: 2/28/2024

### POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		35.15 ac				
Weighted C		0.76				
Total Impervious	0.95	26.22 ac				
Total Pervious	0.20	8.93 ac				
Outstanding FL Water (Y/N)[multiply x 1.5]		N				
Required Treatment (Runoff from 1" Rainfall)		2.22 ac-ft ך	which awar is graatar)			
Required Treatment (1/2" over Area)		1.46 ac-ft	- (whichever is greater)			
		2.22 ac-ft				
2) Estimated Peak Attenuation Volume (EPAV):						
Existing Runoff Volume		33.13 ac-ft				
Proposed Runoff Volume		52.53 ac-ft				
EPAV = Proposed Runoff - Existing Runoff Volum	e	19.40 ac-ft				
Floodplain Com	pensation	0.00 ac-ft				
TOTAL	STORAGE	19.40 ac-ft				
3) Estimated Pond Configuration:						
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft			
L/W Ratio	2.0	Side Slopes (	L:H) 4.0			
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry			
Maximum Pond Depth Below Freeboard	5.0 ft	Assumed Cor	trol EL ft			
4) Estimated Pond Dimensions Including Freeboard						

4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	621 ft
WTOP OF SLOPE	311 ft
Area	4.43 ac

LSITE	794 ft
WSITE	421 ft
Area	7.67 ac

# Pond 14-1/15-1

	<u>Contour</u>	Area	Storage	<u>Cumulative</u>	<u>Notes</u>
GIS	54	164786	0.0	0.0	
GIS	60	225022	1169424.0	1169424.0	

Cumulative Ret (ac-ft) Below Freeboard 26.85

> Pond Area 5.2

# I-75 Pond Siting

FPID: 452074-2-32-01

Pond Name:	14-2	Full	Typic	al Section Widt	th
Date:	2/28/2024				
<b>FRUNOFF PARAMETERS</b>					
18.8 ac		Ba	isin Lin	nits	
5.00 ac		1642+50	to	1669+80	

### **PRE-DEVELOPMENT**

Onsite Basin Area	18.8 ac
Pond Parcel Area	5.00 ac
Total Area	23.8 ac

### **CURVE NUMBER CALCUATION:**

LAND USE	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CN-A	TOTAL AREA
Impvervious	5.52	98		1 1					540.48	5.52
Grass	13.28	39							518.11	13.28
Pond Site Pre Condition	5.00	39							195.00	5.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	23.8	1	0		0		0		1253.59	23.8
				A			WEIGH	TED CN		53

#### Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

Runoff Depth (Q) = 9.5 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$ 

# **POST-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	18.8 ft <sup>2</sup>
Pond Parcel Area	5.00 ft <sup>2</sup>
Total Area	23.8 ft <sup>2</sup>

Estimated Runoff Volume =	18.78
Peak Volume = A x Q	

S = (1000/CN) - 10

Potential Abstraction (S) =

#### **Basin Limits** 1642+50 1669+80 to

9.0

ac-ft

### **CURVE NUMBER CALCUATION:**

	TYPE A SO	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		ILS	CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CN*A	IOTAL AREA
Impervious	16.92	98							1658.31	16.92
Grass	1.88	39							73.26	1.88
Pond Site (Pervious)	2.00	39							78.00	2.00
Pond Site (Impervious)	3.00	100							300.00	3.00
				1 1					0.00	0.00
					l				0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	23.8		0		0		0		2109.57	23.8
		1		645			WEIGH	TED CN		89

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 15.5 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 1.3 S = (1000/CN) - 10

Estimated Runoff Volume = 30.65 ac-ft Peak Volume = A x Q

# Pond Name: 14-2 Date: 2/28/2024

### POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W			18.80 ac	
Weighted C			0.88	
	Total Impervious	0.95	16.92 ac	
	Total Pervious	0.20	1.88 ac	
Outstanding FL Water	(Y/N)[multiply x 1.5]		N	
Required Treatment (R			1.37 ac-ft	(whichever is greater)
Required Treatment (1		0.78 ac-ft 🔎	(will chever is Breater)	
			1.37 ac-ft	

# 2) Estimated Peak Attenuation Volume (EPAV):

Existing Runoff Volume	18.78 ac-ft
Proposed Runoff Volume	30.65 ac-ft
EPAV = Proposed Runoff - Existing Runoff Volume	11.87 ac-ft
Floodplain Compensation	0.00 ac-ft
TOTAL STORAGE	11.87 ac-ft

# 3) Estimated Pond Configuration:

Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	6.0 ft	Assumed Control EL	62.00 ft

# 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	456 ft
WTOP OF SLOPE	228 ft
Area	2.38 ac

LSITE	595 ft
WSITE	321 ft
Area	4.39 ac

### <u>Pond</u> <u>14-2</u> 0

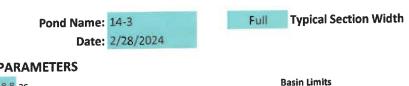
	<u>Contour</u>	<u>Area</u>	<u>Storage</u>	<b>Cumulative</b>	<u>N</u>
GIS	62	99303	0.0	0.0	
GIS	67.6	133822	652750.0	652750.0	

### Cumulative Ret (ac-ft) Below Freeboard

14.99

Pond Area 3.1

### I-75 Pond Siting FPID: 452074-2-32-01



### **PRE-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	18.8	ас
Pond Parcel Area	5.00	ac
Total Area	23.8	ас



### **CURVE NUMBER CALCUATION:**

1	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	di A	
Impvervious	5.52	98							540.48	5.52
	13.28	39							518.11	13.28
Grass	5.00	39							195.00	5.00
Pond Site Pre Condition	5.00	33				+		+	0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	23.8		0		0		0		1253.59	23.8
TOTALS	20.0			L			WEIGH	TED CN		53

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 9.5 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

# POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	18.8 ft <sup>2</sup>
Pond Parcel Area	5.00 ft <sup>2</sup>
Total Area	23.8 ft <sup>2</sup>

### Potential Abstraction (S) = 9.0 S = (1000/CN) - 10

Estimated Runoff Volume = 18.78 ac-ft Peak Volume = A x Q

> Basin Limits 1642+50 to 1669+80

# **CURVE NUMBER CALCUATION:**

	TYPE A SO	ILS	TYPE B SOILS TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA		
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		TOTALTIN
Impervious	16.92	98							1658.31	16.92
	1.88	39							73.26	1.88
Grass	2.00	39			1				78.00	2.00
Pond Site (Pervious)	3.00	100							300.00	3.00
Pond Site (Impervious)	5.00	100							0.00	0.00
		+				1-1			0.00	0.00
		+-+							0.00	0.00
		++		+-+					0.00	0.00
TOTALS	23.8	+	0		0	-	0		2109.57	23.8
TOTALS	23.0			Å			WEIGH	TED CN		89

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 15.5 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 1.3 S = (1000/CN) - 10

Estimated Runoff Volume = 30.65 ac-ft Peak Volume = A x Q

Pond Name: 14-3 Date: 2/28/2024

### POND SIZING ESTIMATION

### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		18.80 ac		
Weighted C		0.88		
Total Impervious	0.95	16.92 ac		
Total Pervious	0.20	1.88 ac		
Outstanding FL Water (Y/N)[multiply x 1.5]		N		
Required Treatment (Runoff from 1" Rainfall)		1.37 ac-ft	l	(whichever is greater)
Required Treatment (1/2" over Area)		0.78 ac-ft	Ţ	(whichever is greater)
		1.37 ac-ft		
2) Estimated Peak Attenuation Volume (EPAV):				
Existing Runoff Volume		18.78 ac-ft		
Proposed Runoff Volume		30.65 ac-ft		
EPAV = Proposed Runoff - Existing Runoff Volume		11.87 ac-ft		
Floodplain Compension	0.00 ac-ft			
TOTAL STO	RAGE	11.87 ac-ft		
3) Estimated Pond Configuration:				

Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	6.0 ft	Assumed Control EL	62.00 ft

### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	456 ft
WTOP OF SLOPE	228 ft
Area	2.38 ac

LSITE	595 ft
WSITE	321 ft
Area	4.39 ac

#### <u>14-3</u> 0 Pond <u>Notes</u> <u>Area</u> Storage Cumulative <u>Contour</u> 0.0 0.0 90258 62 GIS 592454.8 592454.8 67.6 121333 GIS

# Cumulative Ret (ac-ft) Below Freeboard

13.60

Pond Area 2.8

# I-75 Pond Siting

FPID: 452074-2-32-01



### **PRE-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	35.15 ac
Pond Parcel Area	10.23 ac
Total Area	45.38 ac

Basin Limits							
1642+50	to	1684+80					

### **CURVE NUMBER CALCUATION:**

LAND USE	TYPE A SO	TYPE A SOILS TYPE B SOILS		ILS	TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UTA	TOTALANEA
Impvervious	8.55	98							837.45	8.55
Grass	26.60	39							1037.58	26.60
Pond Site Pre Condition	10.23	39							398.97	10.23
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	45.38		0		0		0		2274.00	45.38
				-10-00-00-00-00-00-00-00-00-00-00-00-00-		· · · · ·	WEIGH	TED CN		50

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 8.9 in Q =  $(P - 0.2S)^2/(P + 0.8S)$

### POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	35.15 ft <sup>2</sup>
Pond Parcel Area	10.23 ft <sup>2</sup>
Total Area	45.38 ft <sup>2</sup>

Basin Limits	

Potential Abstraction (S) =

Estimated Runoff Volume =

S = (1000/CN) - 10

Peak Volume = A x Q

1642+50 to 1684+80

10.0

33.81

ac-ft

### **CURVE NUMBER CALCUATION:**

	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CNTA	IVIAL AREA
Impervious	26.22	98							2569.46	26.22
Grass	8.93	39							348.31	8.93
Pond Site (Pervious)	2.80	39							109.20	2.80
Pond Site (Impervious)	7.43	100							743.00	7.43
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	45.38		0		0		0		3769.97	45.38
	WEIGHTED CN					83				

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q)** = 14.7 in Q =  $(P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 2.0 S = (1000/CN) - 10

Estimated Runoff Volume = 55.51 ac-ft Peak Volume = A x Q

# Pond Name: 14-3/15-3 Date: 2/28/2024

### POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W Weighted C Total Impervious Total Pervious Outstanding FL Water (Y/N)[multiply x 1.5] Required Treatment (Runoff from 1" Rainfall) Required Treatment (1/2" over Area)		35.15 ac 0.76 26.22 ac 8.93 ac N 2.22 ac-ft 1.46 ac-ft <b>2.22 ac-ft</b>	(whichever is greater)
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume Proposed Runoff Volume EPAV = Proposed Runoff - Existing Runoff Volume	e	33.81 ac-ft 55.51 ac-ft <b>21.71 ac-ft</b>	
Floodplain Com	pensation	0.00 ac-ft	
TOTAL 3) Estimated Pond Configuration:	STORAGE	21.71 ac-ft	
Maintenance Berm Width L/W Ratio Maximum Treatment Volume Depth Maximum Pond Depth Below Freeboard	20.0 ft 2.0 1.5 ft 5.0 ft	Side Slope Wet/Dry	s (1:H) 4.0 Dry

# 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	656 ft
WTOP OF SLOPE	328 ft
Area	4.93 ac

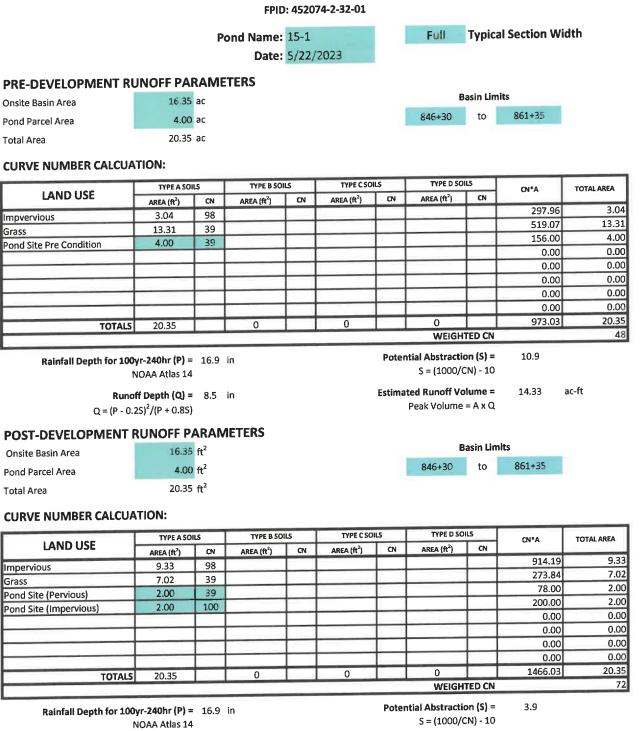
LSITE	835 ft
WSITE	441 ft
Area	8.46 ac

# Pond 14-3 & 15-3

	<u>Contour</u>	<u>Area</u>	<u>Storage</u>	Cumulative	Notes
GIS	60	90258	0.0	0.0	
GIS	65	135720	564945.0	564945.0	
GIS	68	162350	447105.0	1012050.0	
			Cumulative	Ret (ac-ft) Below	Freeboard
				23.23	

Pond Area 3.7 6

# I-75 Pond Siting



Estimated Runoff Volume = 22.04 Peak Volume = A x Q

ac-ft

Runoff Depth (Q) = 13.0 in

 $Q = (P - 0.2S)^2 / (P + 0.8S)$ 

# Pond Name: 15-1 Date: 5/22/2023

### POND SIZING ESTIMATION

### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		16.35 ac	
Weighted C		0.63	
Total Impervious	0.95	9.33 ac	
Total Pervious	0.20	7.02 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		0.86 ac-ft	(whichever is greater)
Required Treatment (1/2" over Area)		0.68 ac-ft 🕇	(winchever is Breater)
		0.86 ac-ft	

### 2) Estimated Peak Attenuation Volume (EPAV):

Existing Runoff Volume		14.33 ac-ft
Proposed Runoff Volume		22.04 ac-ft
EPAV = Proposed Runoff - Existing Runof	f Volume	7.71 ac-ft
Flood Plain Compensation		0.00 ac-ft
	TOTAL STORAGE	7.71 ac-ft
-to d Daniel Configurations		

#### 3) Estimated Pond Configuration:

Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	5.0 ft	Assumed Control EL	72.00 ft

### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	402 ft
WTOP OF SLOPE	201 ft
Area	1.85 ac

LSITE	530 ft
WSITE	289 ft
Area	3.52 ac

	Pond	<u>15-1</u>	0		
GIS GIS	<u>Contour</u> 72 77	<u>Area</u> 87734 111560	<u>Storage</u> 0.0 498235.0	<u>Cumulative</u> 0.0 498235.0	<u>Notes</u>
			Cumulative F	Ret (ac-ft) Below Fr 11.44	eeboard

Pond Area 2.6

# I-75 Pond Siting

FPID: 452074-2-32-01

Pond Name: 15-2 Full **Typical Section Width** Date: 2/28/2024

### **PRE-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	16.35	ас
Pond Parcel Area	4.00	ас
Total Area	20.35	ас

Basin Limits							
1669+80	to	1684+80					

### **CURVE NUMBER CALCUATION:**

	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	ULA	TUTAL AKEA
Impvervious	3.03	98							296.97	3.03
Grass	13.32	39						II	519.47	13.32
Pond Site Pre Condition	4.00	39							156.00	4.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	20.35		0		0		0		972.44	20.35
							WEIGH	TED CN		48

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 8.4 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$

### **POST-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	16.35 ft <sup>2</sup>	
Pond Parcel Area	4.00 ft <sup>2</sup>	
Total Area	20.35 ft <sup>2</sup>	

Pe	ak Volu	me = A	хQ	

**Basin Limits** 1669+80 1684+80 to

### **CURVE NUMBER CALCUATION:**

	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UNIA	TOTALAREA
Impervious	9.30	98			0				911.16	9.30
Grass	7.05	39							275.05	7.05
Pond Site (Pervious)	2.00	39							78.00	2.00
Pond Site (Impervious)	2.00	100			I				200.00	2.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	20.35		0		0		0		1464.20	20.35
							WEIGH	TED CN		72

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 13.0 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 3.9 S = (1000/CN) - 10

Estimated Runoff Volume = 22.01 ac-ft Peak Volume = A x Q

S = (1000/CN) - 10

Potential Abstraction (S) =

Estimated Runoff Volume = 14.32 ac-ft

# Pond Name: 15-2 Date: 2/28/2024

#### POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W			16.35 ac	
Weighted C			0.63	
-	Total Impervious	0.95	9.30 ac	
	Total Pervious	0.20	7.05 ac	
Outstanding FL Water	(Y/N)[multiply x 1.5]		N	
Required Treatment (R	unoff from 1" Rainfall)		0.85 ac-ft _	(whichever is greater)
Required Treatment (1	/2" over Area)		0.68 ac-ft 了	(whenever is Breater)
			0.85 ac-ft	

# 2) Estimated Peak Attenuation Volume (EPAV):

Existing Runoff Volume		14.32 ac-ft
Proposed Runoff Volume		22.01 ac-ft
EPAV = Proposed Runoff - Existing Runoff	f Volume	7.69 ac-ft
Flood Plain Compensation		0.00 ac-ft
	TOTAL STORAGE	7.69 ac-ft

### 3) Estimated Pond Configuration:

Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	5.0 ft	Assumed Control EL	72.00 ft

# 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	402 ft
WTOP OF SLOPE	201 ft
Area	1.85 ac

LSITE	530 ft
WSITE	289 ft
Area	3.52 ac

# <u>Pond 15-2</u> 0

	<u>Contour</u>	<u>Area</u>	<u>Storage</u>	Cumulative	
GIS	72	74073	0.0	0.0	
GIS	77	97710	429457.5	429457.5	

### Cumulative Ret (ac-ft) Below Freeboard

9.86

Pond Area 2.2

			I-	75 Pon	d Siting 74-2-32-01		,			
		P	ond Name:		/ 2 02 01		Full	Туріса	al Section Wi	dth
		•		5/22/	2023					
PRE-DEVELOPMENT RU			IEKS					asin Lim	i++	
Onsite Basin Area	16.35	ac								
Pond Parcel Area	4.00	) ac					846+30	to	861+35	
Total Area	20.35	ac ac								
CURVE NUMBER CALCUA	TION:									
	TYPE A SO	ILS	TYPE B SO	ILS	TYPE C SO	ILS	TYPE D SO	ILS	CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		
Impvervious	3.04	98							297.96	3.04
Grass	13.31	39				-		$ \rightarrow $	519.07 156.00	13.31 4.00
Pond Site Pre Condition	4.00	39		-				+	0.00	0.00
						-			0.00	0.00
						-			0.00	0.00
				+					0.00	0.00
									0.00	0.00
TOTALS	20.35		0		0	1	0		973.03	20.35
							WEIGH	TED CN		48
Rainfall Depth for 100	<b>yr-240hr (P) =</b> NOAA Atlas 14		in			Pote	ntial Abstraction S = (1000/0		10.9	
	<b>ff Depth (Q)</b> = 25) <sup>2</sup> /(P + 0.8S		in			Estima	<b>ted Runoff Vo</b> Peak Volume		14.33	ac-ft
POST-DEVELOPMENT	RUNOFF P	ARAN	IETERS							
Onsite Basin Area	16.35	5 ft <sup>2</sup>					B	asin Lim	its	
Pond Parcel Area	4.00	) ft <sup>2</sup>					846+30	to	861+35	
Total Area	20.35	5 ft <sup>2</sup>								
CURVE NUMBER CALCUA	TION:									

### POST-DE

Onsite Basin Area	16.35 ft <sup>2</sup>
Pond Parcel Area	4.00 ft <sup>2</sup>
Total Area	20.35 ft <sup>2</sup>

### **CURVE NUMBE**

	TYPE A SC	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	Cit H	
Importious	9.33	98							914.19	9.33
Impervious	7.02	39							273.84	7.02
Grass		39							78.00	2.00
Pond Site (Pervious)	2.00								200.00	2.00
Pond Site (Impervious)	2.00	100						+	0.00	0.00
								+		0.00
								$ \rightarrow $	0.00	
									0.00	0.00
									0.00	0.00
TOTALS	20.35		0		0		0		1466.03	20.35
TURES	20.33			1		Anima and	WEIGH	TED CN		72

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 13.0 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$

Potential Abstraction (S) = 3.9 S = (1000/CN) - 10

Estimated Runoff Volume = 22.04 ac-ft Peak Volume = A x Q

Pond Name: 15-3 Date: 5/22/2023

### POND SIZING ESTIMATION

### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		16.35 ac		
Weighted C		0.63		
Total Impervious	0.95	9.33 ac		
Total Pervious	0.20	7.02 ac		
Outstanding FL Water (Y/N)[multiply x 1.5]		N		
Required Treatment (Runoff from 1" Rainfall)		0.86 ac-ft	l	(whichever is greater)
Required Treatment (1/2" over Area)		0.68 ac-ft	Ţ	(whichever is greater)
		0.86 ac-ft		

# 2) Estimated Peak Attenuation Volume (EPAV):

Existing Runoff Volume		14.33 ac-ft
Proposed Runoff Volume		22.04 ac-ft
EPAV = Proposed Runoff - Existing Runoff	Volume	7.71 ac-ft
Flood Plain Compensation		0.00 ac-ft
	TOTAL STORAGE	7.71 ac-ft
ated Band Configurations		

#### 3) Estimated Pond Configuration:

Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	5.0 ft	Assumed Control EL	71.00 ft

### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	402 ft
WTOP OF SLOPE	201 ft
Area	1.85 ac

LSITE	530 ft
WSITE	289 ft
Area	3.52 ac

	Pond	<u>15-3</u>	0		
GIS GIS	<u>Contour</u> 71 76	<u>Area</u> 72027 94340	<u>Storage</u> 0.0 415917.5	<u>Cumulative</u> 0.0 415917.5	<u>Notes</u>
			Cumulative I	Ret (ac-ft) Below Freebo	bard

9.55

Pond Area 2.2

# I-75 Pond Siting

FPID: 452074-2-32-01

Pond Name:	16-1	Full	Typical Section Width
Date:	2/28/2024		

### PRE-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	31.45 ac
Pond Parcel Area	9.80 ac
Total Area	41.25 ac

Basin Limits						
1684+80	to	1722+00				

### **CURVE NUMBER CALCUATION:**

	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UN'A	TOTAL AREA
Impvervious	7.52	98							736.48	7.52
Grass	23.93	39	· · · · · · · · · · · · · · · · · · ·		()				933.46	23.93
Pond Site Pre Condition	9.80	39							382.20	9.80
									0.00	0.00
									0.00	0.00
									0.00	0.00
					(				0.00	0.00
									0.00	0.00
TOTALS	41.25		0		0		0		2052.14	41.25
							WEIGH	TED CN		50

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 8.9 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

# POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	31.45 ft <sup>2</sup>
Pond Parcel Area	9.80 ft <sup>2</sup>
Total Area	41.25 ft <sup>2</sup>

Estimated Runoff Volume =	30.47
Peak Volume = A x Q	

S = (1000/CN) - 10

Potential Abstraction (S) =

Basin Limits 1684+80 to 1722+00

10.1

ac-ft

### **CURVE NUMBER CALCUATION:**

	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UNA	TOTALAREA
Impervious	23.06	98				1			2259.67	23.06
Grass	8.39	39							327.29	8.39
Pond Site (Pervious)	5.80	39							226.20	5.80
Pond Site (Impervious)	4.00	100							400.00	4.00
									0.00	0.00
				1					0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	41.25		0		0		0		3213.16	41.25
							WEIGH	TED CN		78

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 13.9 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 2.8 S = (1000/CN) - 10

Estimated Runoff Volume = 47.83 ac-ft Peak Volume = A x Q

Pond Name: 16-1 Date: 2/28/2024

### POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		31.45 ac			
Weighted C		0.75			
Total Impervious	0.95	23.06 ac			
Total Pervious	0.20	8.39 ac			
Outstanding FL Water (Y/N)[multiply x 1.5]		N			
Required Treatment (Runoff from 1" Rainfall)		1.97 ac-ft	chever is greater)		
Required Treatment (1/2" over Area)		1.31 ac-ft 🤳 🕻 🗰			
		1.97 ac-ft			
2) Estimated Peak Attenuation Volume (EPAV):					
Existing Runoff Volume		30.47 ac-ft			
Proposed Runoff Volume		47.83 ac-ft			
EPAV = Proposed Runoff - Existing Runoff Volum	EPAV = Proposed Runoff - Existing Runoff Volume				
		_			
Floodplain Com	pensation	0.00 ac-ft			
TOTAL	STORAGE	17.36 ac-ft			
3) Estimated Pond Configuration:					
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft		
L/W Ratio	2.0	Side Slopes (1:H)	4.0		
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry		
Maximum Pond Depth Below Freeboard	5.0 ft	Assumed Contro	l EL 71.00 ft		

# 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	589 ft
WTOP OF SLOPE	295 ft
Area	3.99 ac

LSITE	755 ft
WSITE	402 ft
Area	6.96 ac

### <u>Pond</u> <u>16-1</u> 0

	<u>Contour</u>	<u>Area</u>	<u>Storage</u>	Cumulative	<u>N</u>	lotes
GIS	65	24474	0.0	0.0	Soil 15	
GIS	70	73000	243685.0	243685.0		
GIS	75	136000	522500.0	766185.0		
			Cumulative F	Ret (ac-ft) Below	w Freeboard	
17.59						
				Pond Area		

1.7

#### I-75 Pond Siting EPID- 452074-2-32-01

			FPID: 4	52074	-2-32-01					
		Ρ	ond Name: Date:				Full	Туріс	al Section Wi	dth
PRE-DEVELOPMENT RU	JNOFF PARAM	NETER	RS							
Onsite Basin Area	rea 88.39 ac							asin Lim	iits	
Pond Parcel Area	9.80	9.80 ac						to	1768+00	
Total Area	98.19	ас								
CURVE NUMBER CALCUA	TION:									
LAND USE	TYPE A SOILS		TYPE B SOIL	5	TYPE C SOI		TYPE D SO		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	1647.19	16.81
Impvervious	16.81	98							2791.69	71.58
Grass	71.58	39							382.20	9.80
Pond Site Pre Condition	9.80	39							0.00	0.00
									0.00	0.00
									0.00	0.00
		-							0.00	0.00
									0.00	0.00
TOTALS	98.19		0		0		0		4821.09	98.19
			_			_	WEIGH	TED CN		49
Rainfall Depth for	• 100yr-240hr (P) = NOAA Atlas 14		in			Poter	ntial Abstraction S = {1000/0		10.4	
	Runoff Depth (Q) = - 0.2S) <sup>2</sup> /(P + 0.8S)		in			Estima	t <b>ed Runoff Vo</b> Peak Volume		71.40	ac-ft
POST-DEVELOPMENT	RUNOFF PAR	MET	ERS							
Onsite Basin Area	88.39	ac					B	asin Lin	nits	
Pond Parcel Area	9.80	ас					1684+80	to	1768+00	
Total Area	98.19	ac								
CURVE NUMBER CALCUA	ATION:									
	TYPE A SOILS		TYPE B SOIL	s	TYPE C SOI				CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	F0F3 00	51.57
Impervious	51.57	98				-			5053.88 1435.97	36.82
Grass	36.82	39							1433.37	3.80
Pond Site (Pervious)	3.80	39							600.00	6.00
Pond Site (Impervious)	6.00	100						+		0.00

	AREA (IT )	un	ARCA (IL )	_		and the second data and th	
Impervious	51.57	98					
Grass	36.82	39					
Pond Site (Pervious)	3.80	39					
Pond Site (Impervious)	6.00	100		-			
			0		0	0	
TOTALS	98.19		0		U	WEIGHTE	D CN

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 13.3 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) =

3.6 S = (1000/CN) - 10

0.00

0.00

0.00

0.00 7238.05

ac-ft

0.00

0.00 0.00

0.00

98.19 74

Estimated Runoff Volume = 108.54 Peak Volume = A x Q

Pond Name: 16-1/17-3 Date: 5/23/2023

### POND SIZING ESTIMATION

### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		88.39 ac						
Weighted C		0.64						
Total Impervious	0.95	51.57 ac						
Total Pervious	0.20	36.82 ac						
Outstanding FL Water (Y/N)[multiply x 1.5]		N						
Required Treatment (Runoff from 1" Rainfall)		ן 4.70 ac-ft	(whichever is greater)					
Required Treatment (1/2" over Area)		3.68 ac-ft (whichever is great						
		4.70 ac-ft						
2) Estimated Peak Attenuation Volume (EPAV):								
Existing Runoff Volume		71.40 ac-ft						
Proposed Runoff Volume		108.54 ac-ft						
EPAV = Proposed Runoff - Existing Runoff Volume	5	37.14 ac-ft						
Floodplain Compensation		3.65 ac-ft						
	STORAGE	40.79 ac-ft						
3) Estimated Pond Configuration:								
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft					
L/W Ratio	2.0	Side Slopes	i (1:H) 4.0					
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry					
Maximum Pond Depth Below Freeboard	6.0 ft	Assumed C	ontrol EL 47.00 ft					

#### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	817 ft
WTOP OF SLOPE	409 ft
Area	7.67 ac

LSITE	1029 ft
WSITE	538 ft
Area	12.72 ac

# Pond 16-1/17-3 0

	<u>Contour</u>	<u>Area</u>	<b>Storage</b>	Cumulative	<u>Notes</u>		
GIS	60	196636	0.0	0.0			
GIS	65	334000	1326590.0	1326590.0			
GIS	69	425100	1518200.0	2844790.0			
Cumulative Ret (ac-ft) Below Freeboard							
65.31							
	Pond Area						

9.8

602527 13.83212

# I-75 Pond Siting

FPID: 452074-2-32-01

Pond Name: 16-2 Full **Typical Section Width** Date: 2/28/2024

# **PRE-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	31.45 ac
Pond Parcel Area	7.50 ac
Total Area	38.95 ac

Basin Limits					
1684+80	to	1722+00			

### **CURVE NUMBER CALCUATION:**

	TYPE A 50	A SOILS TYPE B SOILS		LS	TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UT A	IOTAL AREA
Impvervious	7.52	98							736.48	7.52
Grass	23.93	39							933.46	23.93
Pond Site Pre Condition	8.01	39							312.39	8.01
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	39.46		0		0		0		1982.33	39.46
				A			WEIGH	TED CN		50

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

#### Runoff Depth (Q) = 9.0 in $Q = (P - 0.2S)^2 / (P + 0.8S)$

# **POST-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	31.45 ft <sup>2</sup>
Pond Parcel Area	7.50 ft <sup>2</sup>
Total Area	38.95 ft <sup>2</sup>

Potential Abstraction (S) =	9.9
S = (1000/CN) - 10	

Estimated Runoff Volume = ac-ft 29.48 Peak Volume = A x Q

> **Basin Limits** 1684+80 1722+00 to

### **CURVE NUMBER CALCUATION:**

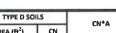
LAND USE	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CATA	TOTALAREA
Impervious	23.06	98							2259.67	23.06
Grass	8.39	39							327.29	8.39
Pond Site (Pervious)	2.50	39							97.50	2.50
Pond Site (Impervious)	5.51	100							551.00	5.51
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	39.46		0		0		0		3235.46	39.46
							WEIGH	TED CN		82

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 14.5 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$

Potential Abstraction (S) = 2.2 S = (1000/CN) - 10

Estimated Runoff Volume = 47.76 ac-ft Peak Volume = A x Q



### Pond Name: 16-2 Date: 2/28/2024

### POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		31.45 ac 0.75	
Weighted C	0.95	23.06 ac	
Total Impervious	0.95	8.39 ac	
Total Pervious	0.20	N	
Outstanding FL Water (Y/N)[multiply x 1.5]		ALM.	
Required Treatment (Runoff from 1" Rainfall)		1.97 ac-ft (whiche	ever is greater)
Required Treatment (1/2" over Area)		1.31 ac-ft	
		1.97 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		29.48 ac-ft	
Proposed Runoff Volume		47.76 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volume		18.27 ac-ft	
Floodplain Compe	ensation	0.00 ac-ft	
TOTAL S	TORAGE	18.27 ac-ft	
3) Estimated Pond Configuration:			
Maintenance Berm Width L/W Ratio	20.0 ft 2.0	Freeboard Side Slopes (1:H) Wet/Dry	1.0 ft 4.0 Dry
Maximum Treatment Volume Depth	1.5 ft	Assumed Control El	
Maximum Pond Depth Below Freeboard	6.0 ft	Assumed Control Et	

# 4) Estimated Pond Dimensions Including Freeboard

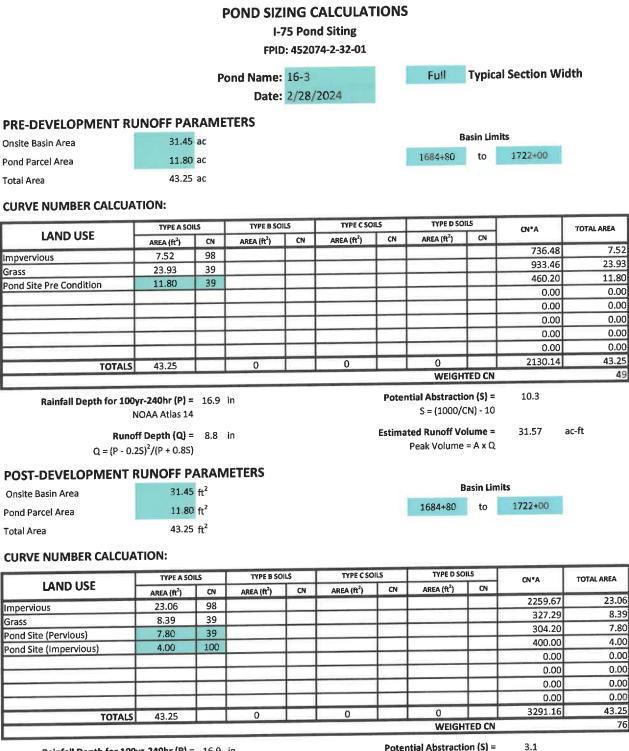
LTOP OF SLOPE	558 ft
WTOP OF SLOPE	279 ft
Area	3.57 ac

LSITE	717 ft
WSITE	383 ft
Агеа	6.30 ac

### Pond 16-2 0

	<u>Contour</u>	<u>Area</u>	<u>Storage</u>	Cumulative	<u>Notes</u>	
GIS	72	22535	0.0	0.0	Soil 15	
GIS	78	78950	304455.0	304455.0		
GIS	83	142550	553750.0	858205.0		
			Cumulative F	Ret (ac-ft) Below	Freeboard	
				19.70		

Pond Area 3.3



Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 13.6 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 3 S = (1000/CN) - 10

Estimated Runoff Volume = 49.16 ac-ft Peak Volume = A x Q

### Pond Name: 16-3 Date: 2/28/2024

### POND SIZING ESTIMATION

### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		31.45 ac	
Weighted C		0.75	
Total Impervious		23.06 ac	
Total Pervious	0.20	8.39 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		1.97 ac-ft (which	ever is greater)
Required Treatment (1/2" over Area)		1.31 ac-ft 🗍 (Willen	ever is greater)
		1.97 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		31.57 ac-ft	
Proposed Runoff Volume		49.16 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volum	e	17.59 ac-ft	
Floodplain Com	pensation	0.00 ac-ft	
TOTAL	STORAGE	17.59 ac-ft	
3) Estimated Pond Configuration:			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	5.0 ft	Assumed Control El	100 C 100 C
Maximum rond Depth Delow Heeboard	5.0 10	Assumed control E	Concerned in the

### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	593 ft
WTOP OF SLOPE	296 ft
Area	4.04 ac

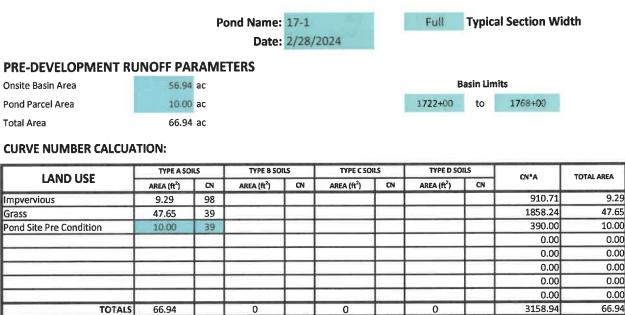
LSITE	760 ft
WSITE	404 ft
Area	7.04 ac

	Pond	<u>16-3</u>	0				
	Contour	Area	<u>Storage</u>	Cumulative		Notes	
GIS	64	21421	0.0	0.0			
GIS	68	94540	231922.0	231922.0			
GIS	73	136350	577225.0	809147.0			
			Cumulative I	Ret (ac-ft) Below	Freeboard		
				18.58			

Pond Area 3.1

# I-75 Pond Siting

FPID: 452074-2-32-01



Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 8.3 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$

# **POST-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	56.94 ac
Pond Parcel Area	10.00 ac
Total Area	66.94 ac

Potential Abstraction (S) =	11.2
S = (1000/CN) - 10	

WEIGHTED CN

Estimated Runoff Volume = 46.39 ac-ft Peak Volume = A x Q

47

**Basin Limits** 1722+00 1768+00 to

### **CURVE NUMBER CALCUATION:**

Grass

	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CNTA	TOTALAREA
Impervious	28.51	98							2794.21	28.51
Grass	28.43	39							1108.68	28.43
Pond Site (Pervious)	4.00	39							156.00	4.00
Pond Site (Impervious)	6.00	100							600.00	6.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	66.94		0		0		0		4658.89	66.94
		the second second					WEIGH	TED CN		70

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 12.6 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$

Potential Abstraction (S) = 4.4 S = (1000/CN) - 10

Estimated Runoff Volume = 70.25 ac-ft Peak Volume = A x Q

Pond Name: 17-1 Date: 2/28/2024

#### POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W			56.94 ac	
Weighted C			0.58	
-	Total Impervious	0.95	28.51 ac	
	Total Pervious	0.20	28.43 ac	
Outstanding FL Water	(Y/N)[multiply x 1.5]		N	
Required Treatment (I	Runoff from 1" Rainfall)		_ 2.73 ac-ft	(whichever is greater)
Required Treatment (3	1/2" over Area)		2.37 ac-ft 🕤	(Millenever is Breater)
			2.73 ac-ft	

### 2) Estimated Peak Attenuation Volume (EPAV):

Existing Runoff Volume		46.39 ac-ft
Proposed Runoff Volume		70.25 ac-ft
EPAV = Proposed Runoff - Existing Runoff V	/olume	23.87 ac-ft
Floodplain Compensation		3.65 ac-ft
	OTAL STORAGE	27.52 ac-ft

### 3) Estimated Pond Configuration:

Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	7.0 ft	Assumed Control EL	49.00 ft

# 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	633 ft
WTOP OF SLOPE	317 ft
Area	4.60 ac

LSITE	808 ft
WSITE	428 ft
Area	7.94 ac

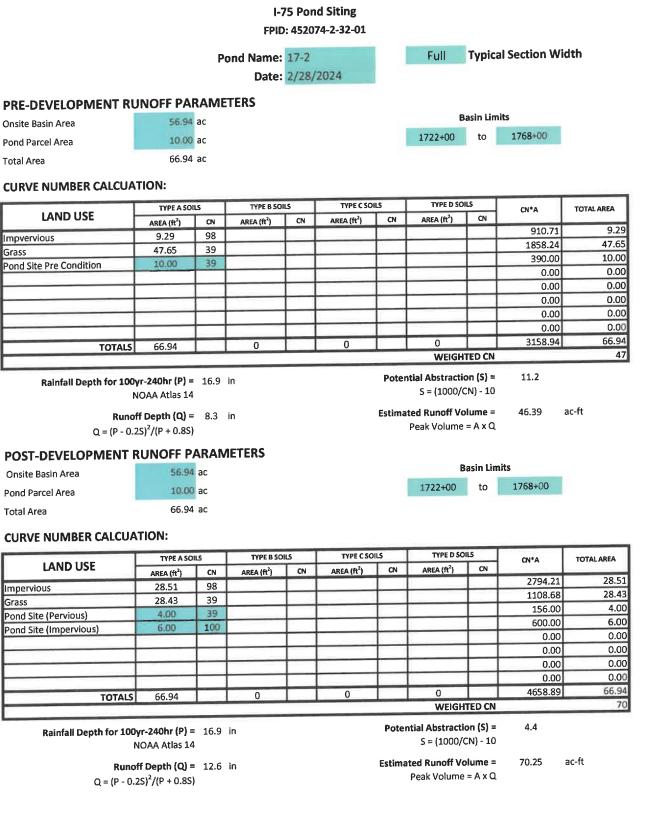
### <u>Pond 17-1</u> 0

	<u>Contour</u>	<u>Area</u>	<b>Storage</b>	Cumulative	<u>Notes</u>
GIS	49	211868	0.0	0.0	
GIS	56	266205	1673255.5	1673255.5	

### Cumulative Ret (ac-ft) Below Freeboard

38.41

Pond Area 6.1



Pond Name: 17-2 Date: 2/28/2024

### POND SIZING ESTIMATION

### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

	56.94 ac	
	0.58	
0.95	28.51 ac	
0.20	28.43 ac	
	N	
	2.73 ac-ft _	(whichever is greater)
	2.37 ac-ft 了	(willenewer is Breater)
	2.73 ac-ft	
		0.58 0.95 28.51 ac 0.20 28.43 ac N 2.73 ac-ft 2.37 ac-ft

### 2) Estimated Peak Attenuation Volume (EPAV):

Existing Runoff Volume		46.39 ac-ft
Proposed Runoff Volume		70.25 ac-ft
EPAV = Proposed Runoff - Existing Runoff	Volume	23.87 ac-ft
Floodplain Compensation		3.65 ac-ft
	TOTAL STORAGE	27.52 ac-ft
ated David Configurations		

#### 3) Estimated Pond Configuration:

Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	7.0 ft	Assumed Control EL	47.00 ft

### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	633 ft
WTOP OF SLOPE	317 ft
Area	4.60 ac

LSITE	808 ft
WSITE	428 ft
Area	7.94 ac

### <u>Pond</u> <u>17-2</u> 0

	<u>Contour</u>	Area	<u>Storage</u>	<u>Cumulative</u>	Notes
GIS	47	199247	0.0	0.0	
GIS	54	250898	1575507.5	1575507.5	

Cumulative Ret (ac-ft) Below Freeboard

36.17

Pond Area 5.8

# I-75 Pond Siting

FPID: 452074-2-32-01

Pond Name:	17-3	Full	Typical Section Width
Date:	2/28/2024		
NOFF PARAMETERS			
			and a strategy of the state of

# PRE-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	56.94 ac
Pond Parcel Area	8.50 ac
Total Area	65.44 ac

Basin Limits					
1722+00	to	1768+00			

### **CURVE NUMBER CALCUATION:**

LAND USE	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UNA	TOTALAREA
Impvervious	9.29	98							910.71	9.29
Grass	47.65	39							1858.24	47.65
Pond Site Pre Condition	8,50	39		1					331.50	8.50
									0.00	0.00
			·						0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	65.44		0		0		0		3100.44	65.44
10							WEIGH	TED CN		47

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 8.4 in Q =  $(P - 0.2S)^2/(P + 0.8S)$

#### Potential Abstraction (S) = S = (1000/CN) - 10

Estimated Runoff Volume = 45.57 ac-ft Peak Volume = A x Q

11.1

### **POST-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	56.94 ac	
Pond Parcel Area	8.50 ac	
Total Area	65.44 ac	

Basin Limits						
1722+00	to	1768+00				

### **CURVE NUMBER CALCUATION:**

	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		TOTALANLA
Impervious	28.51	98							2794.21	28.51
Grass	28.43	39							1108.68	28.43
Pond Site (Pervious)	2.50	39							97.50	2.50
Pond Site (Impervious)	6.00	100							600.00	6.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	65.44		0		0		0		4600.39	65.44
							WEIGH	TED CN		70

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 12.7 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 4.2 S = (1000/CN) - 10

Estimated Runoff Volume = 69.31 ac-ft Peak Volume = A x Q

Pond Name: 17-3 Date: 2/28/2024

### POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		56.94 ac	
Weighted C		0.58	
Total Impervious	0.95	28.51 ac	
Total Pervious		28.43 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		2.73 ac-ft ] (which a	er is greater)
Required Treatment (1/2" over Area)		2.37 ac-ft	er is greater)
Required freatment (1) 2 of a rates,		2.73 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		45.57 ac-ft	
Proposed Runoff Volume		69.31 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volume	e	23.75 ac-ft	
Floodplain Compensation		3.65 ac-ft	
TOTAL	STORAGE	27.40 ac-ft	
3) Estimated Pond Configuration:			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	6.0 ft	Assumed Control EL	47.00 ft

# 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	676 ft
WTOP OF SLOPE	338 ft
Area	5.24 ac

LSITE	859 ft
WSITE	453 ft
Area	8.94 ac

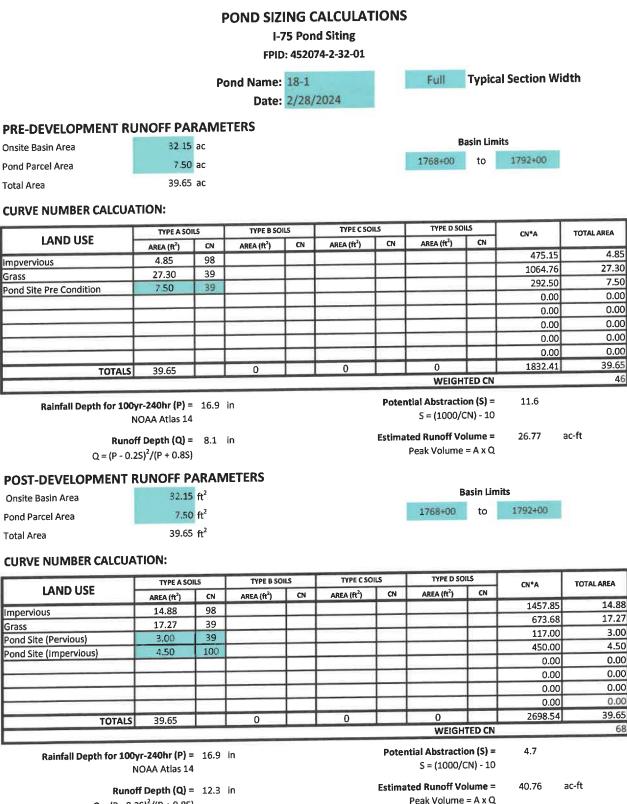
### Pond 17-3 0

	<u>Contour</u>	<u>Area</u>	<u>Storage</u>	Cumulative	Notes
GIS	47	196636	0.0	0.0	
GIS	54	248856	1559222.0	1559222.0	

### Cumulative Ret (ac-ft) Below Freeboard

35.79

Pond Area 5.7



46

68

 $Q = (P - 0.2S)^2 / (P + 0.8S)$ 

Grass

Grass

### Pond Name: 18-1 Date: 2/28/2024

### POND SIZING ESTIMATION

### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		32.15 ac	
Weighted C		0.55	
Total Impervious	0.95	14.88 ac	
Total Pervious	0.20	17.27 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		<b>1.47 ac-ft</b> _	(whichever is greater)
Required Treatment (1/2" over Area)		1.34 ac-ft 了	(whichever is greater)
		1.47 ac-ft	

#### 2) Estimated Peak Attenuation Volume (EPAV):

Existing Runoff Volume	26.77 ac-ft
Proposed Runoff Volume	40.76 ac-ft
EPAV = Proposed Runoff - Existing Runoff Volume	13.99 ac-ft
Floodplain Compensation	2.97 ac-ft
TOTAL STORAGE	18.42 ac-ft

### 3) Estimated Pond Configuration:

Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	5.0 ft	Assumed Control EL	50.00 ft

### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	606 ft
WTOP OF SLOPE	303 ft
Area	4.22 ac

LSITE	775 ft
WSITE	412 ft
Area	7.33 ac

# Pond 18-1 0

	Contour	Area	<u>Storage</u>	Cumulative	Notes
GIS	50	161710	0.0	0.0	
GIS	55	198174	899710.0	899710.0	

Cumulative Ret (ac-ft) Below Freeboard

20.65

Pond Area 4.5

# I-75 Pond Siting

FPID: 452074-2-32-01

Pond Name:	18-2	Full	Typical Section Width
Date:	2/28/2024		

### PRE-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	32.15 ac
Pond Parcel Area	7.50 ac
Total Area	39.65 ac

Basin Limits						
1768+00	to	1792+00				

### **CURVE NUMBER CALCUATION:**

LAND USE	TYPE A SO	ILS	TYPE B SOILS		TYPE B SOILS TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UN"A	IUTAL AREA
Impvervious	4.85	98							475.15	4.85
Grass	27.30	39							1064.76	27.30
Pond Site Pre Condition	7.50	39							292.50	7.50
									0.00	0.00
					[				0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	39.65		0		0		0		1832.41	39.65
							WEIGH	TED CN		46

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 8.1 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

# Potential Abstraction (\$) = 11.6 S = (1000/CN) - 10

Estimated Runoff Volume = 26.77 ac-ft Peak Volume = A x Q

### POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	32.15 ft <sup>2</sup>
Pond Parcel Area	7.50 ft <sup>2</sup>
Total Area	39.65 ft <sup>2</sup>

В	asin Lin	nits
1768+00	to	1792+00

### **CURVE NUMBER CALCUATION:**

LAND USE	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UN*A	TOTALAREA
Impervious	14.88	98							1457.85	14.88
Grass	17.27	39							673.68	17.27
Pond Site (Pervious)	3.00	39							117.00	3.00
Pond Site (Impervious)	4.50	100			i				450.00	4.50
									0.00	0.00
									0.00	0.00
									0.00	0.00
				1					0.00	0.00
TOTALS	39.65		0		0		0		2698.54	39.65
				-			WEIGH	TED CN		68

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 12.3 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 4.7 S = (1000/CN) - 10

Estimated Runoff Volume = 40.76 ac-ft Peak Volume = A x Q

### Pond Name: 18-2 Date: 2/28/2024

### POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W Weighted C Total Impervious Total Pervious Outstanding FL Water (Y/N)[multiply x 1.5]	0.95 0.20	32.15 ac 0.55 14.88 ac 17.27 ac N	
Required Treatment (Runoff from 1" Rainfall) Required Treatment (1/2" over Area)		1.47 ac-ft 1.34 ac-ft <b>1.47 ac-ft</b>	ver is greater)
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume Proposed Runoff Volume		26.77 ac-ft 40.76 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volume Floodplain Comp		13.99 ac-ft 2.97 ac-ft	
	STORAGE	18.42 ac-ft	
3) Estimated Pond Configuration:			
Maintenance Berm Width L/W Ratio Maximum Treatment Volume Depth Maximum Pond Depth Below Freeboard	20.0 ft 2.0 1.5 ft 5.0 ft	Freeboard Side Slopes (1:H) Wet/Dry Assumed Control EL	1.0 ft 4.0 Dry 49.00 ft

# 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	606 ft
WTOP OF SLOPE	303 ft
Area	4.22 ac

LSITE	775 ft
WSITE	412 ft
Area	7.33 ac

#### <u>18-2</u> 0 Pond <u>Contour</u> <u>Area</u> <u>Storage</u> Cumulative <u>Notes</u> GIS 49 170736 0.0 0.0 Soil 15 54 939280.0 GIS 204976 939280.0 Cumulative Ret (ac-ft) Below Freeboard 21.56

Pond Area 4.7

# I-75 Pond Siting

			FPID	: 45207	74-2-32-01					
		Pe	ond Name:	18-3			Full	Туріса	al Section Wi	dth
			Date:	2/28/	2024					
PRE-DEVELOPMENT RUI		RAME	TERS							
Onsite Basin Area	32.15						E	Basin Lim	its	
Pond Parcel Area	7.50	1.000					1768+00	to	1792+00	
	39.65									
Total Area	39.05	ac								
CURVE NUMBER CALCUAT	ION:									
LAND USE	TYPE A SOI	LS	TYPE B SOI		TYPE C SOIL		TYPE D SC		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft²)	CN	475.15	4.85
Impvervious	4.85	98						++	1064.76	27.30
Grass	27.30	39		$ \rightarrow $				+	292.50	7.50
Pond Site Pre Condition	7.50	39				-		+ +	0.00	0.00
									0.00	0.00
						-			0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	39.65		0		0		0		1832.41	39.65
		ARAM				Estima	ited Runoff Vo Peak Volume			ac-ft
Onsite Basin Area	32.15	1.0					-		1000	
Pond Parcel Area	7.50	ft <sup>2</sup>					1768+00	to	1792+00	
Total Area	39.65	ft <sup>2</sup>								
									(Shadhal)	
CURVE NUMBER CALCUAT							7705 0 50			
CURVE NUMBER CALCUAT	TYPE A SO	-	TYPE B SO		TYPE C SOI	-	TYPE D SC	DILS CN	CN*A	TOTAL AREA
LAND USE	TYPE A SO AREA (ft <sup>2</sup> )	CN	TYPE B SO AREA (ft <sup>2</sup> )	ILS CN	TYPE C SOI AREA (ft <sup>2</sup> )	LS CN	TYPE D SC AREA (ft²)			
LAND USE	type a so area (ft²) 14.88	CN 98				-			CN*A	14.88
LAND USE	TYPE A SO AREA (ft <sup>2</sup> ) 14.88 17.27	CN 98 39				-			cn*a 1457.85	14.88 17.27 3.00
LAND USE Impervious Grass Pond Site (Pervious)	TYPE A SO AREA (ft <sup>2</sup> ) 14.88 17.27 3.00	CN 98 39 39				-			cn*a 1457.85 673.68	14.88 17.27 3.00 4.50
LAND USE	TYPE A SO AREA (ft <sup>2</sup> ) 14.88 17.27	CN 98 39				-			CN*A 1457.85 673.68 117.00 450.00 0.00	14.88 17.2 3.00 4.50 0.00
LAND USE Impervious Grass Pond Site (Pervious)	TYPE A SO AREA (ft <sup>2</sup> ) 14.88 17.27 3.00	CN 98 39 39				-			CN*A 1457.85 673.68 117.00 450.00 0.00 0.00	14.88 17.2 3.00 4.50 0.00 0.00
LAND USE Impervious Grass Pond Site (Pervious)	TYPE A SO AREA (ft <sup>2</sup> ) 14.88 17.27 3.00	CN 98 39 39				-			CN*A 1457.85 673.68 117.00 450.00 0.00 0.00 0.00	14.88 17.27 3.00 4.50 0.00 0.00 0.00
LAND USE Impervious Grass Pond Site (Pervious)	TYPE A SO AREA (ft <sup>2</sup> ) 14.88 17.27 3.00	СN 98 39 39			AREA (ft <sup>2</sup> )	-	AREA (ft²)		CN*A 1457.85 673.68 117.00 450.00 0.00 0.00 0.00 0.00	14.88 17.27 3.00 4.50 0.00 0.00 0.00 0.00
LAND USE Impervious Grass Pond Site (Pervious)	TYPE A SO AREA (ft <sup>2</sup> ) 14.88 17.27 3.00	СN 98 39 39				-	AREA (ft²)		CN*A 1457.85 673.68 117.00 450.00 0.00 0.00 0.00	TOTAL AREA 14.88 17.27 3.00 4.50 0.00 0.00 0.00 0.00 39.65 68

Runoff Depth (Q) = 12.3 in  $Q = (P - 0.2S)^2/(P + 0.8S)$ 

40.76 ac-ft Estimated Runoff Volume = Peak Volume = A x Q

### Pond Name: 18-3 Date: 2/28/2024

#### POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		32.15 ac				
Weighted C		0.55				
Total Impervious	0.95	14.88 ac				
Total Pervious	0.20	17.27 ac				
Outstanding FL Water (Y/N)[multiply x 1.5]		N				
Required Treatment (Runoff from 1" Rainfall)		1.47 ac-ft (whichever is greater)				
Required Treatment (1/2" over Area)		1.34 ac-ft	level is greatery			
		1.47 ac-ft				
2) Estimated Peak Attenuation Volume (EPAV):						
Existing Runoff Volume		26.77 ac-ft				
Proposed Runoff Volume		40.76 ac-ft				
EPAV = Proposed Runoff - Existing Runoff Volum	e	13.99 ac-ft				
Floodplain Com	pensation	2.97 ac-ft				
TOTAL	STORAGE	18.42 ac-ft				
3) Estimated Pond Configuration:						
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft			
L/W Ratio	2.0	Side Slopes (1:H)	4.0			
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry			
Maximum Pond Depth Below Freeboard	5.0 ft	Assumed Control E	L 51.00 ft			

### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	606 ft
WTOP OF SLOPE	303 ft
Area	4.22 ac

LSITE	775 ft
WSITE	412 ft
Area	7.33 ac

	Pond	<u>18-3</u>	0		
GIS GIS	<u>Contour</u> 51 56	<u>Area</u> 158496 194083	<u>Storage</u> 0.0 881447.5	<u>Cumulative</u> 0.0 881447.5	<u>Notes</u> Soil 15

### Cumulative Ret (ac-ft) Below Freeboard

20.24

Pond Area 4.5

602527 13.83212

					d Siting 74-2-32-01					
		P	ond Name:	18-4			Half	Typica	al Section Wi	idth
			Date:	2/28/	2024					
PRE-DEVELOPMENT RU			TERS							
Onsite Basin Area	8.32		ILING				В	asin Lim	iits	
Pond Parcel Area		ас					1768+00	to	1792÷00	
Total Area	8.32									
CURVE NUMBER CALCUA	TION:									
	TYPE A SOI	LS	TYPE B SOI	LS	TYPE C SOI	LS	TYPE D SO	ILS		
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CN*A	TOTAL AREA
Impvervious	2.42	98							237.58	2.42
Grass	5.90	39							229.93	5.90
Pond Site Pre Condition	0.00	39							0.00	0.00
									0.00	0.00
				<u> </u>					0.00	0.00
				<u> </u>					0.00	0.00
									0.00	0.00
TOTALS	8.32		0		0		0		467.51	8.32
TOTALS	0.52		0		0		WEIGH	TED CN	407.51	56
Rainfall Depth for 100	<b>yr-240hr (P) =</b> NOAA Atlas 14		in			Poter	ntial Abstracti S = (1000/0		7.8	
	<b>off Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S)		in			Estima	ted Runoff Vo Peak Volume		7.05	ac-ft
POST-DEVELOPMENT	RUNOFF P	ARAN	IETERS							
Onsite Basin Area	8.32	ft²					B	lasin Lim	nits	
Pond Parcel Area	0.00	ft²					1768+00	to	1792+00	
Total Area	8.32	ft²								
CURVE NUMBER CALCUA	TION:									
	TYPE A SO	LS	TYPE B SOI	LS	TYPE C SO	LS	TYPE D SO	ILS	<b>Ch1</b> *4	-
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CN*A	TOTAL AREA
- 7.50	7.44	00		1			T	T T	700.00	7.44

	ITPE A SU		ITPE B SUILS		TTPE B SOILS TTPE C SOILS		TITE 0 SOLS		- CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CNTA	TOTAL AREA
Impervious	7.44	98							728.93	7.44
Grass	0.88	39							34.40	0.88
Pond Site (Pervious)	0.00	39							0.00	0.00
Pond Site (Impervious)	0.00	100							0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
				1	[				0.00	0.00
TOTALS	8.32		0	1	0		0		763.32	8.32
							WEIGH	TED CN		92

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 15.9 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$

Potential Abstraction (S) = 0.9 S = (1000/CN) - 10

Estimated Runoff Volume = 11.00 ac-ft Peak Volume = A x Q

# Pond Name: 18-4 Date: 2/28/2024

### POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		8.32 ac	
Weighted C		0.87	
Total Impervious	0.95	7.44 ac	
Total Pervious	0.20	0.88 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		0.60 ac-ft ] (w	vhichever is greater)
Required Treatment (1/2" over Area)		0.35 ac-ft 🥤 💔	Anenever is greatery
		0.60 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV): Existing Runoff Volume		7.05 ac-ft	
Proposed Runoff Volume		11.00 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volume		3.95 ac-ft	
Floodplain Comp		2.97 ac-ft	
TOTAL	STORAGE	6.92 ac-ft	
3) Estimated Pond Configuration:			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1	:H) 4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	5.0 ft	Assumed Con	trol EL 51.00 ft

# 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	382 ft
WTOP OF SLOPE	191 ft
Area	1.68 ac

LSITE	507 ft
WSITE	277 ft
Area	3.23 ac

### Pond 18-4 0

	<u>Contour</u>	<u>Area</u>	Storage [Variable]	<u>Cumulative</u>	<u>Notes</u>			
SIS	48	229501	0.0	0.0				
GIS	49	254584	242042.5	242042.5				
GIS	50	276591	265587.5	507630.0				
GIS	51	302455	289523.0	797153.0				
GIS	52	335655	319055.0	1116208.0				
GIS	53	365881	350768.0	1466976.0				
GIS	54	417214	391547.5	1858523.5				
GIS	55	459731	438472.5	2296996.0		56.16		
GIS	56	1208075	833903.0	3130899.0		56	71.87555	
GIS	57	2441396	1824735.5	4955634.5		57	113.7657	4
GIS	58	335655	1388525.5	6344160.0	х		78.81	
GIS	59	365881	350768.0	6694928.0				

### Cumulative Ret (ac-ft) Below Freeboard

Pond Area	
27.7	602527
56.0	13.83212

# I-75 Pond Siting

### FPID: 452074-2-32-01

			FPIL	): 4520	/4-2-32-01					
		Р	ond Name: Date:	18-4 2/28/	2024		Half	Typica	l Section Wi	idth
PRE-DEVELOPMENT RU	INOFF PA	RAME	TERS							
Onsite Basin Area	23.83	ас					E	lasin Limi	its	
Pond Parcel Area		ас					1768+00	to	1792+00	
Total Area	23.83	ас								
CURVE NUMBER CALCUA	TION:									
	TYPE A SO	ILS	TYPE B SO	DILS	TYPE C SO	ILS	TYPE D SO	ILS	CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		
Impvervious	2.42	98							237.58	2.42
Grass	21.41	39						$ \downarrow \downarrow$	834.82	21.41
Pond Site Pre Condition	0.00	39						$ \rightarrow $	0.00	0.00
						-			0.00	0.00
				-		-		+	0.00	0.00
		-				+		+	0.00	0.00
		-		+				+	0.00	0.00
	23,83	-	0		0	-	0		1072.40	
TOTALS	23.83				0			TED CN		45
Runo	<b>yr-240hr (P) =</b> IOAA Atlas 14 <b>ff Depth (Q) =</b> 25) <sup>2</sup> /(P + 0.85	7.8					ntial Abstracti S = (1000/ Ited Runoff Vo Peak Volume	CN) - 10 olume =	12.2 15.56	ac-ft
POST-DEVELOPMENT	RUNOFF P	ARAN	<b>IETERS</b>							
Onsite Basin Area	23.83	ft <sup>2</sup>					E	Basin Lim	its	
Pond Parcel Area	0.00	ft <sup>2</sup>					1768+00	to	1792+00	
Total Area	23.83	ft <sup>2</sup>								
CURVE NUMBER CALCUA	TION:									
	TYPE A SC	u s	TYPE B SC	011.5	TYPE C SC	DILS	TYPE D SC	ILS		

	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA	
LAND USE	AREA (ft <sup>2</sup> ) CN		AREA (ft <sup>2</sup> ) CN		AREA (ft <sup>2</sup> ) CN		AREA (ft <sup>2</sup> ) CN		ur A	TOTAL ANDA	
Impervious	7.44	98		1 I					728.93	7.44	
	16.39	39							639.29	16.39	
Grass		39				-			0.00	0.00	
Pond Site (Pervious)	0.00		_						0.00	0.00	
Pond Site (Impervious)	0.00	100							0.00	0.00	
	_							+	0.00	0.00	
				-							
				1					0.00		
									0.00	0.00	
TOTALS	23.83		0		0		0		1368.21	23.83	
101/12		-					WEIGH	TED CN		57	

Potential Abstraction (S) = 7.4 S = (1000/CN) - 10

Estimated Runoff Volume = 20.67 ac-ft Peak Volume = A x Q

NOAA Atlas 14

Runoff Depth (Q) = 10.4 in  $Q = (P - 0.2S)^2/(P + 0.8S)$ 

### PO

Onsite Basin Area	23.83 ft <sup>2</sup>
Pond Parcel Area	0.00 ft <sup>2</sup>
Total Area	23.83 ft <sup>2</sup>

### CU

Rainfall Depth for 100yr-240hr (P) = 16.9 in

### Pond Name: 18-4 Date: 2/28/2024

### POND SIZING ESTIMATION

### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		23.83 ac								
Weighted C		0.43								
Total Impervious	0.95	7.44 ac								
Total Pervious	0.20	16.39 ac								
Outstanding FL Water (Y/N)[multiply x 1.5]		N								
Required Treatment (Runoff from 1" Rainfall)		0.86 ac-ft								
Required Treatment (1/2" over Area)		ver is greater)								
		0.99 ac-ft								
2) Estimated Peak Attenuation Volume (EPAV):										
Existing Runoff Volume		15.56 ac-ft								
Proposed Runoff Volume		20.67 ac-ft								
EPAV = Proposed Runoff - Existing Runoff Volume	e	5.11 ac-ft								
Floodplain Com	pensation	0.00 ac-ft								
TOTAL	STORAGE	5.11 ac-ft								
3) Estimated Pond Configuration:										
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft							
L/W Ratio	2.0	Side Slopes (1:H)	4.0							
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry							
Maximum Pond Depth Below Freeboard	5.0 ft	Assumed Control EL	51.00 ft							

### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	333 ft
WTOP OF SLOPE	166 ft
Area	1.27 ac

LSITE	447 ft
WSITE	248 ft
Area	2.54 ac

	Pond	<u>18-4</u>	0					
	<u>Contour</u>	<u>Area</u>	Storage	<u>Cumulative</u>	Notes			
GIS	48	229501	0.0	0.0				
GIS	49	254584	242042.5	242042.5				
GIS	50	276591	265587.5	507630.0				
GIS	51	302455	289523.0	797153.0				
GIS	52	335655	319055.0	1116208.0				
GIS	53	365881	350768.0	1466976.0				
GIS	54	417214	391547.5	1858523.5				
GIS	55	459731	438472.5	2296996.0	5	56.16		
GIS	56	1208075	833903.0	3130899.0			71.87555	
GIS	57	2441396	1824735.5	4955634.5		57	113.7657	41.89016
GIS	58	335655	1388525.5	6344160.0	x		78.81	
GIS	59	365881	350768.0	6694928.0				

### Cumulative Ret (ac-ft) Below Freeboard

113.77

Pond Area	
27.7	602527
56.0	13.83212

### I-75 Pond Siting FPID: 452074-2-32-01

	ř.	P	ond Name:		2024		Full	Туріса	al Section Wie	ith				
			Date:	2/28/	2024									
PRE-DEVELOPMENT RU	JNOFF PA	RAME	TERS											
Onsite Basin Area	25	ас					Ba	asin Lim	lits					
Pond Parcel Area	4.50	ас					1792+00	to	1821+50					
Total Area	29.5	ас												
CURVE NUMBER CALCUA														
								TYPE D SOILS		TYPE D SOILS		TYPE D SOILS		
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CN*A	TOTAL AREA				
mpvervious	5.96	98							584.04	5.96				
Grass	19.04	39							742.58	19.04				
Pond Site Pre Condition	4.50	39							175.50	4.5				
									0.00	0.0				
									0.00	0.0				
					ī				0.00	0.0				
									0.00	0.0				
									0.00	0.0				
TOTALS	29.5		0		0		0		1502.12	29.				
				_		-	WEIGHT	FED CN		5				
Q = (P - 0.2S) <sup>2</sup> /(P + 0.8S) <b>POST-DEVELOPMENT RUNOFF PARAMETERS</b> Onsite Basin Area 25 ac Pond Parcel Area 4.50 ac Total Area 29.5 ac							Peak Volume B 1792+00	asin Lim	nits 1821+50					
CURVE NUMBER CALCUA	TION:													
LAND USE	TYPE A SO		TYPE B SO	-	TYPE C SO	-	TYPE D SO		CN*A	TOTAL AREA				
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN						
mpervious	18.29	98				-			1791.94	18.2				
Grass	6.71	39							261.88	6.7				
ond Site (Pervious)	2.30	39							89.70	2.3				
Pond Site (Impervious)	2.20	100		-		<u> </u>			220.00	2.2				
						-			0.00	0.0				
									0.00	0.0				
						-			0.00	0.0				
TOTALS	29.5		0	-	0		0		2363.52	29.				
TUTALS	29.5		0		U		WEIGH	ED CN	2303.52	- 23.				
	NOAA Atlas 14	ļ					ntial Abstractio S = (1000/C	on (S) = :N) - 10	2.5					
	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S)		in			Estima	<b>ted Runoff Vo</b> Peak Volume		35.03 a	ac-ft				

# Pond Name: 19 Date: 2/28/2024

### POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		25.00 ac					
Weighted C		0.75					
Total Impervious	0.95	18.29 ac					
Total Pervious	0.20	6.71 ac					
Outstanding FL Water (Y/N)[multiply x 1.5]		N					
Required Treatment (Runoff from 1" Rainfall)		1.56 ac-ft ] (which	ever is greater)				
Required Treatment (1/2" over Area)		1.04 ac-ft					
•		1.56 ac-ft					
2) Estimated Peak Attenuation Volume (EPAV):							
Existing Runoff Volume		22.39 ac-ft					
Proposed Runoff Volume		35.03 ac-ft					
EPAV = Proposed Runoff - Existing Runoff Volum	e	12.64 ac-ft					
TOTAL	TOTAL STORAGE						
3) Estimated Pond Configuration:							
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft				
L/W Ratio	2.0	Side Slopes (1:H)	4.0				
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry				
Maximum Pond Depth Below Freeboard	7.0 ft	Assumed Control EL	. ft				
4) Estimated Pond Dimensions Including Freeboard							

LTOP OF SLOPE	441 ft
WTOP OF SLOPE	220 ft
Area	2.23 ac

LSITE	577 ft
WSITE	312 ft
Area	4.14 ac

### I-75 Pond Siting FPID: 452074-2-32-01

		ond Name:			Full			dth		
			Date:	2/28/	2024					
RE-DEVELOPMENT RU		RAME	TERS							
nsite Basin Area	9.3	ас					В	asin Lim	its	
ond Parcel Area	2.40	ac				1	1821+50	to	1835+00	
									1000	
otal Area	11.7	ас								
URVE NUMBER CALCUA	TION:									
LAND USE	TYPE A SO		TYPE B SO		TYPE C SO		TYPE D SO		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	0.07.07	
npvervious	2.73	98							267.27	2.7
rass	6.57	39							256.34	6.5
ond Site Pre Condition	2.40	39							93.60	2.4
								$\vdash$	0.00	0.0
									0.00	0.0
									0.00	0.0
								$\vdash$	0.00	0.0
	44 7		0		0		0		617.21	11.
TOTALC			U U		U		0		017.21	11.
	NOAA Atlas 14		in				WEIGH tial Abstraction S = (1000/C ted Runoff Vo	<b>on (S) =</b> (N) - 10	9.0	5 ac-ft
Rainfall Depth for 100 N Runo Q = (P - 0.2	<b>yr-240hr (P) =</b> NOAA Atlas 14 <b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S)	9.5	in				tial Abstractio S = (1000/C	on (S) = :N) - 10 lume =		
Rainfall Depth for 100 N Runo	<b>yr-240hr (P) =</b> NOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P.	9.5	in				<b>tial Abstractic</b> S = (1000/C <b>ted Runoff Vo</b> Peak Volume	on (S) = :N) - 10 lume =	9.25 ;	
Rainfall Depth for 100 N Runo Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P. 9.3	9.5 ARAN	in				<b>tial Abstractic</b> S = (1000/C <b>ted Runoff Vo</b> Peak Volume <b>B</b>	on (S) = CN) - 10 lume = = A x Q asin Lim	9.25 a	
Rainfall Depth for 100 N Runo Q = (P - 0.2 POST-DEVELOPMENT F	<b>yr-240hr (P) =</b> NOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P.	9.5 ARAN ac ac	in				<b>tial Abstractic</b> S = (1000/C <b>ted Runoff Vo</b> Peak Volume	on (S) = :N) - 10 lume = = A x Q	9.25 ;	
Rainfall Depth for 100 N Runor Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P. 9.3 2.40 11.7	9.5 ARAN ac ac	in				<b>tial Abstractic</b> S = (1000/C <b>ted Runoff Vo</b> Peak Volume <b>B</b>	on (S) = CN) - 10 lume = = A x Q asin Lim	9.25 a	
Rainfall Depth for 100 N Runo Q = (P - 0.2 POST-DEVELOPMENT F Dnsite Basin Area Tond Parcel Area Total Area	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P. 9.3 2.40 11.7	9.5 ARAN ac ac ac	in	NLS	TYPE C SO	Estima	<b>tial Abstractic</b> S = (1000/C <b>ted Runoff Vo</b> Peak Volume <b>B</b>	on (S) = :N) - 10 lume = = A x Q asin Lin to	9.25 a	ac-ft
Rainfall Depth for 100 N Runo Q = (P - 0.2 POST-DEVELOPMENT F Dosite Basin Area ond Parcel Area otal Area	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P. 9.3 2.40 11.7	9.5 ARAN ac ac ac	in in 1ETERS	ILS CN	TYPE C SO AREA (R <sup>2</sup> )	Estima	tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 1821+50	on (S) = :N) - 10 lume = = A x Q asin Lin to	9.25 a	5. ac-ft TOTAL AREA
Rainfall Depth for 100 N Runo Q = (P - 0.2 POST-DEVELOPMENT F Dnsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P. 9.3 2.40 11.7 TION:	9.5 ARAIV ac ac ac ac	in in METERS			Estima	tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 1821+50	on (S) = :N) - 10 lume = = A x Q asin Lin to	9.25 a hits 1835+00 CN*A 820.04	ac-ft TOTAL AREA 8.3
Rainfall Depth for 100 N Runo Q = (P - 0.2 POST-DEVELOPMENT F Donsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA LAND USE Mpervious irass	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P. 9.3 2.40 11.7 TION: TYPE A SO AREA (ft <sup>2</sup> )	9.5 ARAN ac ac ac ac ac sc N 98 39	in in METERS			Estima	tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 1821+50	on (S) = :N) - 10 lume = = A x Q asin Lin to	9.25 hits 1835+00 CN*A 820.04 36.36	ac-ft Total Area 8.3 0.9
Rainfall Depth for 100 N Runor Q = (P - 0.2 POST-DEVELOPMENT F Donsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA LAND USE Mpervious irass ond Site (Pervious)	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P. 9.3 2.40 11.7 TION: TYPE ASO AREA (ft <sup>2</sup> ) 8.37 0.93 1.25	9.5 ARAN ac ac ac ac ac sc 98 39 39	in in METERS			Estima	tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 1821+50	on (S) = :N) - 10 lume = = A x Q asin Lin to	9.25 hits 1835+00 CN*A 820.04 36.36 48.75	TOTAL AREA 8.3 0.9 1.2
Rainfall Depth for 100 N Runor Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA LAND USE Mpervious irass ond Site (Pervious)	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P. 9.3 2.40 11.7 TION: TYPE A SO AREA (ft <sup>2</sup> ) 8.37 0.93	9.5 ARAN ac ac ac ac ac sc N 98 39	in in METERS			Estima	tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 1821+50	on (S) = :N) - 10 lume = = A x Q asin Lin to	9.25 bits 1835+00 CN*A 820.04 36.36 48.75 115.00	TOTAL AREA 8.3 0.9 1.2 1.1
Rainfall Depth for 100 N Runor Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA LAND USE Mpervious irass ond Site (Pervious)	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P. 9.3 2.40 11.7 TION: TYPE ASO AREA (ft <sup>2</sup> ) 8.37 0.93 1.25	9.5 ARAN ac ac ac ac ac sc 98 39 39	in in METERS			Estima	tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 1821+50	on (S) = :N) - 10 lume = = A x Q asin Lin to	9.25 bits 1835+00 CN*A 820.04 36.36 48.75 115.00 0.00	TOTAL AREA 8.3 0.9 1.2 1.1 0.0
Rainfall Depth for 100 N Runo Q = (P - 0.2 POST-DEVELOPMENT F Donsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA LAND USE	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P. 9.3 2.40 11.7 TION: TYPE ASO AREA (ft <sup>2</sup> ) 8.37 0.93 1.25	9.5 ARAN ac ac ac ac ac sc 98 39 39	in in METERS			Estima	tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 1821+50	on (S) = :N) - 10 lume = = A x Q asin Lin to	9.25 bits 1835+00 CN*A 820.04 36.36 48.75 115.00 0.00 0.00	TOTAL AREA 8.3 0.9 1.2 1.1 0.0 0.0
Rainfall Depth for 100 N Runor Q = (P - 0.2 POST-DEVELOPMENT F Donsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA LAND USE Mpervious irass ond Site (Pervious)	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P. 9.3 2.40 11.7 TION: TYPE ASO AREA (ft <sup>2</sup> ) 8.37 0.93 1.25	9.5 ARAN ac ac ac ac ac sc 98 39 39	in in METERS			Estima	tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 1821+50	on (S) = :N) - 10 lume = = A x Q asin Lin to	9.25 bits 1835+00 CN*A 820.04 36.36 48.75 115.00 0.00 0.00 0.00	TOTAL AREA 8.3 0.9 1.2 1.1 0.0 0.0 0.0
Rainfall Depth for 100 N Runor Q = (P - 0.2 POST-DEVELOPMENT F Donsite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA LAND USE Mpervious irass ond Site (Pervious)	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P. 9.3 2.40 11.7 TION: TYPE ASO AREA (ft <sup>2</sup> ) 8.37 0.93 1.25	9.5 ARAN ac ac ac ac ac sc 98 39 39	in in METERS			Estima	tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 1821+50	on (S) = :N) - 10 lume = = A x Q asin Lin to	9.25 bits 1835+00 CN*A 820.04 36.36 48.75 115.00 0.00 0.00	TOTAL AREA 8.3 0.9 1.2 1.1

ainfall Depth for 100yr-240hr (P) = 16.9 NOAA Atlas 14

,

**Runoff Depth (Q) =** 15.3 in  $Q = (P - 0.2S)^2/(P + 0.8S)$  S = (1000/CN) - 10

Estimated Runoff Volume = 14.88 ac-ft Peak Volume = A x Q

### Pond Name: 20-1 Date: 2/28/2024

### POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		9.30 ac				
Weighted C		0.87				
Total Impervious	0.95	8.37 ac				
Total Pervious	0.20	0.93 ac				
Outstanding FL Water (Y/N)[multiply x 1.5]		N				
Required Treatment (Runoff from 1" Rainfall)		0.68 ac-ft ک	(whichever	is greater)		
Required Treatment (1/2" over Area)		0.39 ac-ft 🗍	-ft (whichever is greater)			
		0.68 ac-ft				
2) Estimated Peak Attenuation Volume (EPAV):						
Existing Runoff Volume		9.25 ac-ft				
Proposed Runoff Volume		14.88 ac-ft				
EPAV = Proposed Runoff - Existing Runoff Volum	e	5.63 ac-ft				
Floodplain Com	pensation	0.00 ac-ft				
TOTAL	TOTAL STORAGE					
3) Estimated Pond Configuration:						
Maintenance Berm Width	20.0 ft	Freeboard		1.0 ft		
L/W Ratio	2.0	Side Slopes	s (1:H)	4.0		
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry		Dry		
Maximum Pond Depth Below Freeboard	7.0 ft	Assumed C	ontrol EL	79.00 ft		

# 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	306 ft
WTOP OF SLOPE	153 ft
Area	1.08 ac

LSITE	415 ft
WSITE	232 ft
Area	2.21 ac

	Pond	<u>20-1</u>	0			
GIS GIS	<u>Contour</u> 79 86	<u>Area</u> 37417 61930	<u>Storage</u> 0.0 347714.5	<u>Cumulative</u> 0.0 347714.5	Soil 15	<u>Notes</u>

Cumulative Ret (ac-ft) Below Freeboard

7.98

Pond Area 1.4

# I-75 Pond Siting

# FDID: 452074-2-32-01

			FPIC	): 4520	74-2-32-01					
		P	ond Name: Date:	2 <b>0-2</b> 2/28/	2024		Full	Typica	al Section Wi	dth
PRE-DEVELOPMENT RU	<b>INOFF PA</b>	RAME	TERS				_			
Onsite Basin Area	9.3	ac					B	asin Lim	nts	
Pond Parcel Area	2.40	ac					1821+50	to	1835+00	
Total Area	11.7	ac ac								
CURVE NUMBER CALCUA	TION:									
	TYPE A SO	ILS	TYPE B SO	ILS	TYPE C SO	ILS	TYPE D SO	ILS	CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		
Impvervious	2.73	98							267.27	2.73
Grass	6.57	39							256.34	6.57
Pond Site Pre Condition	2.40	39						$\vdash$	93.60	2.40
								$ \rightarrow $	0.00	0.00
									0.00	0.00
				-		<u> </u>			0.00	0.00
									0.00	0.00
	44.7		0		0		0		617.21	11.7
TOTALS	11.7			1			WEIGH	TED CN		53
Rainfall Depth for 100	<b>yr-240hr (P)</b> = IOAA Atlas 14		in			Poter	ntial Abstracti S = (1000/0		9.0	
	ff <b>Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S)		in			Estima	ted Runoff Vo Peak Volume		9.25	ac-ft

# POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	9.3	ас
Pond Parcel Area	2.40	ас
Total Area	11.7	ac

**Basin Limits** 1821+50 to 1835+00

### **CURVE NUMBER CALCUATION:**

	TYPE A SC	OILS TYPE B		TYPE B SOILS		TYPE C SOILS		ILS	CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		
Impervious	8.37	98				1			820.04	8.37
	0.93	39							36.36	0.93
Grass	1.25	39							48.75	1.25
Pond Site (Pervious)		100						+	115.00	1.15
Pond Site (Impervious)	1.15	100	_						0.00	0.00
		+		+ +					0.00	0.00
		++							0.00	0.00
		+							0.00	0.00
TOTALS	11.7	+-+	0		0		0		1020.15	11.7
TOTALS	11.7	-					WEIGH	TED CN		87

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 15.3 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$

Potential Abstraction (S) = 1.5 S = (1000/CN) - 10

Estimated Runoff Volume = ac-ft 14.88 Peak Volume = A x Q

### Pond Name: 20-2 Date: 2/28/2024

### POND SIZING ESTIMATION

### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		9.30 ac		
Weighted C		0.87		
Total Impervious	0.95	8.37 ac		
Total Pervious	0.20	0.93 ac		
Outstanding FL Water (Y/N)[multiply x 1.5]		N		
Required Treatment (Runoff from 1" Rainfall)		0.68 ac-ft (whicheve	er is greater)	
Required Treatment (1/2" over Area)		0.39 ac-ft	and Breatery	
	0.68 ac-ft			
2) Estimated Peak Attenuation Volume (EPAV):				
Existing Runoff Volume		9.25 ac-ft		
Proposed Runoff Volume		14.88 ac-ft		
EPAV = Proposed Runoff - Existing Runoff Volum	e	5.63 ac-ft		
Floodplain Comp	ensation	0.00 ac-ft		
TOTALS	TORAGE	6.30 ac-ft		
3) Estimated Pond Configuration:				
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft	
L/W Ratio	2.0	Side Slopes (1:H)	4.0	
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry	
Maximum Pond Depth Below Freeboard	7.0 ft	Assumed Control EL	79.00 ft	

### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	322 ft
WTOP OF SLOPE	161 ft
Area	1.19 ac

LSITE	434 ft
WSITE	241 ft
Area	2.40 ac

	Pond	<u>20-2</u>	0			
GIS GIS	<u>Contour</u> 78 85	<u>Area</u> 29937 52494	<u>Storage</u> 0.0 288508.5	<u>Cumulative</u> 0.0 288508.5	Soil 15	<u>Notes</u>

# Cumulative Ret (ac-ft) Below Freeboard

6.62

Pond Area 1.2

602527 13.83212

# I-75 Pond Siting

			FPIC	): 4520	74-2-32-01					
		P	ond Name: Date:	20-3 2/28/	2024		Full	Туріс	al Section Wi	dth
PRE-DEVELOPMENT RU	JNOFF PA	RAME	TERS							
Onsite Basin Area	9.3	ас					B	asin Lin	nits	
Pond Parcel Area	2.40	ас					1821+50	to	1835+00	
Total Area	11.7	ас								
CURVE NUMBER CALCUA	TION: TYPE A SO	ILS	TYPE B SO	ILS	TYPE C SO	ILS	TYPE D SO	ILS		
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CN*A	TOTAL AREA
Impvervious	2.73	98							267.27	2.73
Grass	6.57	39							256.34	6.57
Pond Site Pre Condition	2.40	39					1		93.60	2.40
									0.00	0.00
									0.00	0.00
							<u> </u>		0.00	0.00
									0.00	0.00
									0.00	0.0
TOTALS										
	11.7		0		0	ļ	0		617.21	11.

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 9.5 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$

#### **POST-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	9.3	ас
Pond Parcel Area	2.40	ас
Total Area	11.7	ас

Potential Abstraction (S) = 9.0 S = (1000/CN) - 10

Estimated Runoff Volume = 9.25 ac-ft Peak Volume = A x Q

2.73 6.57 2.40 0.00 0.00 0.00 0.00 0.00 11.7 53

**Basin Limits** 1821+50 1835+00 to

### **CURVE NUMBER CALCUATION:**

	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS			TOTAL MACA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft²)	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CN*A	TOTAL AREA
Impervious	8.37	98							820.04	8.37
Grass	0.93	39							36.36	0.93
Pond Site (Pervious)	1.25	39							48.75	1.25
Pond Site (Impervious)	1.15	100							115.00	1.15
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	11.7		0		0		0		1020.15	11.7
							WEIGH	TED CN		87

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 15.3 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$

S = (1000/CN) - 10

Estimated Runoff Volume = 14.88 ac-ft Peak Volume = A x Q

Potential Abstraction (S) =

## Pond Name: 20-3 Date: 2/28/2024

## POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		9.30 ac	
Weighted C		0.87	
Total Impervious	0.95	8.37 ac	
Total Pervious	0.20	0.93 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		0.68 ac-ft (whichev	er is greater)
Required Treatment (1/2" over Area)		0.39 ac-ft	
		0.68 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV): Existing Runoff Volume		9.25 ac-ft	
Proposed Runoff Volume		14.88 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volum	e	5.63 ac-ft	
Floodplain Com	pensation	0.00 ac-ft	
TOTAL	STORAGE	6.30 ac-ft	
3) Estimated Pond Configuration:			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	7.0 ft	Assumed Control EL	79.00 ft

## 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	322 ft
WTOP OF SLOPE	161 ft
Area	1.19 ac

LSITE	434 ft
WSITE	241 ft
Area	2.40 ac

	Pond	<u>20-3</u>	0						
GIS GIS	<u>Contour</u> 79 86	<u>Area</u> 32981 60609	<u>Storage</u> 0.0 327565.0	<u>Cumulative</u> 0.0 327565.0	Soil 15	<u>Notes</u>			
Cumulative Ret (ac-ft) Below Freeboard									

7.52

Pond Area 1.4

## I-75 Pond Siting

FPID: 452074-2-32-01

Pond Name:	21-1	Full	Typical Section Width
Date:	2/28/2024		

## PRE-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	23.42 ad	2
Pond Parcel Area	4.80 ad	2
Total Area	28.22 ad	c

Basin Limits
1835+00 to 1857+00

#### **CURVE NUMBER CALCUATION:**

	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN		TOTAL MILLS						
Impvervious	4.44	98							435.56	4.44
	18.98	39							740.05	18.98
Grass		39							187.20	4.80
Pond Site Pre Condition	4.80	39						+	0.00	0.00
		+							0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	28.22		0		0		0		1362.80	28.22
TOTALS	20.22	1					WEIGH	TED CN		48

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 8.6 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

## Potential Abstraction (5) = 10.7 S = (1000/CN) - 10

Estimated Runoff Volume = 20.11 ac-ft Peak Volume = A x Q

## POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	23.42	ас
Pond Parcel Area	4.80	ас
Total Area	28.22	ас

Basin Limits								
1835+00	to	1857+00						

#### **CURVE NUMBER CALCUATION:**

	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	di A	
Impaguious	13.64	98							1336.36	13.64
Impervious	9.78	39							381.56	9.78
Grass	2.60	39							101.40	2.60
Pond Site (Pervious)		other Designation of the local division in which the local division is not the local division of the local division is not the local division of the local		+ +					220.00	2.20
Pond Site (Impervious)	2.20	100		┼──┨				++	0.00	0.00
		+						+	0.00	0.00
		+ +		+ +					0.00	0.00
		+							0.00	0.00
TOTALS	28.22		0		0		0		2039.33	28.22
TOTALS	20.22	<u></u>		44		1	WEIGH	TED CN		72

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 13.0 in Q =  $(P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (\$) = 3.8 S = (1000/CN) - 10

Estimated Runoff Volume = 30.65 ac-ft Peak Volume = A x Q

Pond Name: 21-1 Date: 2/28/2024

#### POND SIZING ESTIMATION

### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W			23.42 ac	
Weighted C			0.64	
	Total Impervious	0.95	13.64 ac	
	Total Pervious	0.20	9.78 ac	
Outstanding FL Water	(Y/N)[multiply x 1.5]		N	
Required Treatment (I	Runoff from 1" Rainfall)		ן 1.24 ac-ft	(whichever is greater)
Required Treatment (	1/2" over Area)		0.98 ac-ft 🕇	(whichever is greater)
			1.24 ac-ft	

#### 2) Estimated Peak Attenuation Volume (EPAV):

Existing Runoff Volume	20.11 ac-ft
Proposed Runoff Volume	30.65 ac-ft
EPAV = Proposed Runoff - Existing Runoff Volume	10.53 ac-ft
Floodplain Compensation	1.13 ac-ft
TOTAL STORAGE	12.91 ac-ft

### 3) Estimated Pond Configuration:

Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	7.0 ft	Assumed Control EL	ft

#### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	445 ft
WTOP OF SLOPE	222 ft
Area	2.27 ac

LSITE	582 ft
WSITE	315 ft
Area	4.21 ac

### Pond 21-1 0

.

	<u>Contour</u>	<u>Area</u>	<u>Storage</u>	<u>Cumulative</u>	<u>Notes</u>
GIS	79	87757	0.0	0.0	Soil 15
GIS	86	127503	753410.0	753410.0	

Cumulative Ret (ac-ft) Below Freeboard

17.30

Pond Area 2.9

# POND SIZING CALCULATIONS I-75 Pond Siting

FPID	: 452074-2-32-01		
Pond Name:	21-2	Full	Typical Section Width
Date:	2/28/2024	-	

## PRE-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	23.42	ас
Pond Parcel Area	4.80	ас
Total Area	28.22	ac

Basin Limits 1835+00 to 1857+00

#### **CURVE NUMBER CALCUATION:**

	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		TOTALAREA
Impvervious	4.44	98							435.56	4.44
Grass	18.98	39		1 1					740.05	18.98
Pond Site Pre Condition	4.80	39							187.20	4.80
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	28.22	Î	0	1	0		0		1362.80	28.22
						19	WEIGH	TED CN		48

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

**Runoff Depth (Q) =** 8.6 in  $Q = (P - 0.2S)^2/(P + 0.8S)$ 

## S = (1000/CN) - 10 Estimated Runoff Volume =

Potential Abstraction (S) =

Peak Volume = A x Q

## **POST-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	23.42	ac
Pond Parcel Area	4.80	ac
Total Area	28.22	ас

Basin Limits
1835+00 to 1857+00

10.7

20.11

ac-ft

#### **CURVE NUMBER CALCUATION:**

LAND USE	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UNA	IVIALAREA
Impervious	13.64	98							1336.36	13.64
Grass	9.78	39							381.56	9.78
Pond Site (Pervious)	2.60	39							101.40	2.60
Pond Site (Impervious)	2.20	100							220.00	2.20
									0.00	0.00
				1 1					0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	28.22		0	Î	0		0		2039.33	28.22
							WEIGH	TED CN		72

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 13.0 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 3.8 S = (1000/CN) - 10

Estimated Runoff Volume = 30.65 ac-ft Peak Volume = A x Q

Pond Name: 21-2 Date: 2/28/2024

#### POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W			23.42 ac		
Weighted C			0.64		
Tota	al Impervious	0.95	13.64 ac		
т	otal Pervious	0.20	9.78 ac		
Outstanding FL Water (Y/N)[multipl	y x 1.5]		N		
Required Treatment (Runoff from 1	" Rainfall)		1.24 ac-ft	ſ	(whichever is greater)
Required Treatment (1/2" over Are	a)		0.98 ac-ft	ſ	(whichever is greater)
•			1.24 ac-ft		

## 2) Estimated Peak Attenuation Volume (EPAV):

Existing Runoff Volume	20.11 ac-ft
Proposed Runoff Volume	30.65 ac-ft
EPAV = Proposed Runoff - Existing Runoff Volume	10.53 ac-ft
Floodplain Compensation	1.13 ac-ft
TOTAL STORAGE	12.91 ac-ft

#### 3) Estimated Pond Configuration:

Maintenance Berm Width	20.0	ft	Freeboard	1.0 ft
L/W Ratio	2.0		Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5	ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	7.0	ft	Assumed Control EL	79.00 ft

## 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	445 ft
WTOP OF SLOPE	222 ft
Area	2.27 ac

LSITE	582 ft
WSITE	315 ft
Area	4.21 ac

#### Pond 21-2 0

	<u>Contour</u>	<u>Area</u>	<b>Storage</b>	Cumulative	Notes
GIS	79	83686	0.0	0.0	Soil 15
GIS	86	122350	721126.0	721126.0	

#### Cumulative Ret (ac-ft) Below Freeboard

16.55

Pond Area 2.8

## I-75 Pond Siting

#### FPID: 452074-2-32-01

		Pond Name:		Full	Туріс	al Section Wi	idth
		Date:	2/28/2024				
PRE-DEVELOPMENT R	JNOFF PAF	RAMETERS					
Onsite Basin Area	23.42	ас		Ba	asin Lin	nits	
Rond Parcel Area	4.80	ac		1835+00	to	1857+00	

## **CURVE NUMBER CALCUATION:**

Pond Parcel Area

Total Area

	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	al A	
mpvervious	4.44	98		1 1					435.56	4.4
Grass	18.98	39							740.05	18.9
Pond Site Pre Condition	4.80	39							187.20	4.8
Pond Site Pre Condition	4.00								0.00	0.0
	_			+ +					0.00	0.0
									0.00	0.0
									0.00	0.0
									0.00	0.0
TOTALS	28.22		0		0		0		1362.80	28.2
TURE	20122			-		A	WEIGH	TED CN		4

#### Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

Runoff Depth (Q) = 8.6 in  $Q = (P - 0.2S)^2/(P + 0.8S)$ 

4.80 ac 28.22 ac

## POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	23.42	ac
Pond Parcel Area	4.80	ас
Total Area	28.22	ас

Estimated Runoff Volume =	20.11
Peak Volume = A x Q	

S = (1000/CN) - 10

Potential Abstraction (S) =

**Basin Limits** 1835+00 1857+00 to

10.7

ac-ft

#### **CURVE NUMBER CALCUATION:**

LAND USE	TYPE A SC	DILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CH R	
Impervious	13.64	98							1336.36	13.64
Grass	9.78	39							381.56	9.78
Pond Site (Pervious)	2.60	39							101.40	2.60
Pond Site (Impervious)	2.20	100							220.00	2.20
Pond Site (Impervious)	2.20	100							0.00	0.00
		+ +							0.00	0.00
		++							0.00	0.00
		++							0.00	0.00
TOTALS	28.22	++	0		0		0		2039.33	28.22
TOTALS	20.22						WEIGH	TED CN		72

Potential Abstraction (S) = 3.8 S = (1000/CN) - 10

Estimated Runoff Volume = 30.65 ac-ft Peak Volume = A x Q

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 13.0 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$

Pond Name: 21-3 Date: 2/28/2024

#### POND SIZING ESTIMATION

#### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W			23.42 ac		
Weighted C			0.64		
	Total Impervious	0.95	13.64 ac		
	Total Pervious	0.20	9.78 ac		
Outstanding FL Water (	Y/N)[multiply x 1.5]		N		
Required Treatment (R	unoff from 1" Rainfall)		1.24 ac-ft	٦	(whichever is greater)
Required Treatment (1,	/2" over Area)		0.98 ac-ft	Ţ	(whichever is greater)
			1.24 ac-ft		

#### 2) Estimated Peak Attenuation Volume (EPAV):

Existing Runoff Volume	20.11 ac-ft
Proposed Runoff Volume	30.65 ac-ft
EPAV = Proposed Runoff - Existing Runoff Volume	10.53 ac-ft
Floodplain Compensation	1.13 ac-ft
TOTAL STORAGE	12.91 ac-ft

#### 3) Estimated Pond Configuration:

Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	7.0 ft	Assumed Control EL	79.00 ft

#### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	445 ft
WTOP OF SLOPE	222 ft
Area	2.27 ac

LSITE	582 ft
WSITE	315 ft
Area	4.21 ac

### Pond 21-3 0

	Contour	<u>Area</u>	<u>Storage</u>	<b>Cumulative</b>	<u>Notes</u>
GIS	79	104843	0.0	0.0	Soil 15
GIS	86	142894	867079.5	867079.5	

Cumulative Ret (ac-ft) Below Freeboard 19.91

> Pond Area 3.3

1110			
Pond Name:	22-1	Full	Typical Section Width
Date:	2/28/2024		

#### **PRE-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	14.14	ас
Pond Parcel Area	5.95	ас
Total Area	20.09	ac

Basin Limits 1857+00 to 1889+00

#### **CURVE NUMBER CALCUATION:**

LAND USE	TYPE A SO	ILS	TYPE B SO	ILS	TYPE C SO	ILS	TYPE D SOILS		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft²)	CN	AREA (ft <sup>2</sup> )	CN	CNA	TOTAL ANCA
Impvervious	6.46	98							633.54	6.46
Grass	7.68	39							299.34	7.68
Pond Site Pre Condition	5.95	39							232.05	5.95
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
				1-1					0.00	0.00
TOTALS	20.09		0	1	0		0		1164.92	20.09
		A		- A			WEIGH	TED CN		58

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

**Runoff Depth (Q) =** 10.5 in Q =  $(P - 0.2S)^2/(P + 0.8S)$ 

#### **POST-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	14.14 ft <sup>2</sup>
Pond Parcel Area	5.95 ft <sup>2</sup>
Total Area	20.09 ft <sup>2</sup>

Potential Abstraction (S) =	7.2
S = (1000/CN) - 10	

Estimated Runoff Volume = 17.61 ac-ft Peak Volume = A x Q

 Basin Limits

 1857+00
 to
 1889+00

#### **CURVE NUMBER CALCUATION:**

LAND USE		TYPE A SOILS TYPE B SOILS		TYPE B SOILS		TYPE C SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UNA	TOTALAREA			
Impervious	12.73	98							1247.54	12.73			
Grass	1.41	39							54.99	1.41			
Pond Site (Pervious)	2.00	39							78.00	2.00			
Pond Site (Impervious)	3.95	100							395.00	3.95			
									0.00	0.00			
									0.00	0.00			
									0.00	0.00			
									0.00	0.00			
TOTALS	20.09	† î	0		0		0		1775.53	20.09			
				14 I I I I I I I I I I I I I I I I I I I			WEIGH	TED CN		88			

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

**Runoff Depth (Q) =** 15.4 in  $Q = (P - 0.2S)^2/(P + 0.8S)$ 

Potential Abstraction (S) = 1.3 S = (1000/CN) - 10

Estimated Runoff Volume = 25.81 ac-ft Peak Volume = A x Q

Pond Name: 22-1 Date: 2/28/2024

#### POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W Weighted C		14.14 ac 0.88	
Total Impervious	0.95	12.73 ac	
Total Pervious	0.20	1.41 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		1.03 ac-ft	(whichever is greater)
Required Treatment (1/2" over Area)		0.59 ac-ft ∫	(willenever to Breater)
		1.03 ac-ft	

## 2) Estimated Peak Attenuation Volume (EPAV):

Existing Runoff Volume	17.61 ac-ft
Proposed Runoff Volume	25.81 ac-ft
EPAV = Proposed Runoff - Existing Runoff Volume	8.20 ac-ft
Floodplain Compensation	0.48 ac-ft
TOTAL STORAGE	9.71 ac-ft

#### 3) Estimated Pond Configuration:

L/W Ratio 2.0 Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth 1.5 ft Wet/Dry	Dry
Maximum Pond Depth Below Freeboard 6.0 ft Assumed Control EL	82.00 ft

#### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	415 ft
WTOP OF SLOPE	208 ft
Area	1.98 ac

LSITE	546 ft
WSITE	297 ft
Area	3.73 ac

<u>Contour</u>	<u>Area</u>	<u>Storage</u>	Cumulative	<u>Notes</u>
82	71393	0.0	0.0	Soil 15
88	99212	511815.0	511815.0	
92	110150	418724.0	930539.0	
		Cumulative I	Ret (ac-ft) Belo	w Freeboard
			21.36	
			Pond Area	
			2.5	6
	82 88	82 71393 88 99212	82         71393         0.0           88         99212         511815.0           92         110150         418724.0	82 71393 0.0 0.0 88 99212 511815.0 511815.0 92 110150 418724.0 930539.0 Cumulative Ret (ac-ft) Belo 21.36 Pond Area

602527 13.83212

## <u>Pond</u> <u>22-1</u> 0

## POND SIZING CALCULATIONS I-75 Pond Siting

# FPID: 452074-2-32-01

**Typical Section Width** Full Pond Name: 22-2 Date: 2/28/2024 **Basin Limits** 

## **PRE-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	14.14	ас
Pond Parcel Area	5.80	ас
Total Area	19.94	ac

0	45111 LIU	111.5
1857+00	to	1889+00

#### **CURVE NUMBER CALCUATION:**

LAND USE	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UT A	TOTAL ISLEN
Impvervious	6.46	98							633.54	6.46
	7.68	39							299.34	7.68
Grass	5.80	39							226.20	5.80
Pond Site Pre Condition	5.60	22							0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
		+ +							0.00	0.00
TOTALS	19.94		0		0		0		1159.07	19.94
TOTALS	10.04		· · ·				WEIGH	TED CN		58

#### Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

Runoff Depth (Q) = 10.5 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$ 

## POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	14.14 ft <sup>2</sup>
Pond Parcel Area	5.80 ft <sup>2</sup>
Total Area	19.94 ft <sup>2</sup>

Potential Abstraction (S) =	7.2
S = (1000/CN) - 10	
Tatimated Runoff Volume -	175

Estimated Runoff Volume = 17.52 ac-ft Peak Volume = A x Q

**Basin Limits** 1857+00 1889+00 to

#### **CURVE NUMBER CALCUATION:**

LAND USE	TYPE A SC	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UN A	TOTAL PLAN
Impervious	12.73	98							1247.54	12.73
	1.41	39							54.99	1.41
Grass	2.00	39							78.00	2.00
Pond Site (Pervious)									380.00	3.80
Pond Site (Impervious)	3.80	100						+	0.00	0.00
		+						+	0.00	0.00
		+							0.00	0.00
		+							0.00	0.00
TOTALS	19.94	++	0		0		0		1760.53	19.94
TOTALS	15.54						WEIGH	TED CN		88

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 15.4 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$

Potential Abstraction (S) = 1.3 S = (1000/CN) - 10

Estimated Runoff Volume = 25.60 ac-ft Peak Volume = A x Q

Pond Name: 22-2 Date: 2/28/2024

#### POND SIZING ESTIMATION

#### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W			14.14 ac		
Weighted C			0.88		
Тс	tal Impervious	0.95	12.73 ac		
	Total Pervious	0.20	1.41 ac		
Outstanding FL Water (Y/N)[multi	ply x 1.5]		N		
Required Treatment (Runoff from	1" Rainfall)		1.03 ac-ft	٦	(whichever is greater)
Required Treatment (1/2" over Ar	ea)		0.59 ac-ft	Ţ	(whichever is greater)
			1.03 ac-ft		

#### 2) Estimated Peak Attenuation Volume (EPAV):

Existing Runoff Volume	17.52 ac-ft
Proposed Runoff Volume	25.60 ac-ft
EPAV = Proposed Runoff - Existing Runoff Volume	8.08 ac-ft
Floodplain Compensation	0.48 ac-ft
TOTAL STORAGE	9.59 ac-ft

#### 3) Estimated Pond Configuration:

Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	6.0 ft	Assumed Control EL	81.00 ft

#### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	413 ft
WTOP OF SLOPE	206 ft
Area	1.96 ac

LSITE	543 ft
WSITE	296 ft
Area	3.69 ac

	Contour	Area	Storage	<u>Cumulative</u>	Notes
GIS	81	66081	0.0	0.0	Soil 15
GIS	86	92942	397557.5	397557.5	
GIS	90	110150	406184.0	803741.5	
			Cumulative I	Ret (ac-ft) Below	w Freeboard
				18.45	
				Pond Area	
				2.5	6

I-75 Pond Siting

FPID: 4	452074-	2-32-01
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Pond Name:	22-3	Full	Typical Section Width
Date:	2/28/2024		

#### PRE-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	14.14	ас
Pond Parcel Area	5.55	ac
Total Area	19.69	ас

 Basin Limits

 1857+00
 to
 1889+00

#### **CURVE NUMBER CALCUATION:**

LAND USE	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CITA	TOTALANEA
Impvervious	6.46	98							633.54	6.46
Grass	7.68	39							299.34	7.68
Pond Site Pre Condition	5.55	39							216.45	5.55
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	19.69		0		0		0		1149.32	19.69
		-					WEIGH	TED CN		58

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

**Runoff Depth (Q) =** 10.6 in  $Q = (P - 0.2S)^2/(P + 0.8S)$ 

#### POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	14.14 ft <sup>2</sup>
Pond Parcel Area	5.55 ft <sup>2</sup>
Total Area	19.69 ft <sup>2</sup>

#### Potential Abstraction (S) = 7.1 S = (1000/CN) - 10

Estimated Runoff Volume = 17.38 ac-ft Peak Volume = A x Q

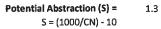
Basin Limits

#### **CURVE NUMBER CALCUATION:**

LAND USE -	TYPE A SC	ILS	TYPE B SO	TYPE B SOILS		TYPE C SOILS		ILS	CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UN'A	TOTAL AREA
Impervious	12.73	98				I			1247.54	12.73
Grass	1.41	39							54.99	1.41
Pond Site (Pervious)	2.00	39							78.00	2.00
Pond Site (Impervious)	3.55	100							355.00	3.55
					ļ				0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	19.69	Î	0		0		0		1735.53	19.69
		-					WEIGH	TED CN		88

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 15.4 in Q =  $(P - 0.2S)^2/(P + 0.8S)$



Estimated Runoff Volume = 25.25 ac-ft Peak Volume = A x Q

1857+00 to 1889+00

Pond Name: 22-3 Date: 2/28/2024

### POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W Weighted C		14.14 ac 0.88	
- Total Impervious	0.95	12.73 ac	
Total Pervious	0.20	1.41 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		_ 1.03 ac-ft	(whichever is greater)
Required Treatment (1/2" over Area)		0.59 ac-ft 🛛	(whichever is Breater)
		1.03 ac-ft	

## 2) Estimated Peak Attenuation Volume (EPAV):

Existing Runoff Volume	17.38 ac-ft
Proposed Runoff Volume	25.25 ac-ft
EPAV = Proposed Runoff - Existing Runoff Volume	7.87 ac-ft
Floodplain Compensation	0.48 ac-ft
TOTAL STORAGE	9.38 ac-ft

#### 3) Estimated Pond Configuration:

Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	6.0 ft	Assumed Control EL	80.00 ft

## 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	409 ft
WTOP OF SLOPE	204 ft
Area	1.92 ac

LSITE	538 ft
WSITE	293 ft
Area	3.62 ac

	Pond	<u>22-3</u>	0				
	Contour	Area	Storago	Cumulative		<u>Notes</u>	
	<u>Contour</u>	<u>Area</u>	<u>Storage</u>	Cumulative		NOLES	
GIS	77	61940	0.0	0.0	Soil 15		
GIS	82	88543	376207.5	376207.5			
GIS	86	113220	403526.0	779733.5			
			Cumulative I	Ret (ac-ft) Belo	w Freeboard		
				17.90			
				Pond Area			
				2.6			602527
							13.83212

I-75 Pond Siting

#### FPID: 452074-2-32-01

Pond Name:	23-1	Full	Typical Section Width
Date:	2/28/2024		

### PRE-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	13.81	ас
Pond Parcel Area	5.18	ас
Total Area	18.99	ac

**Basin Limits** 1905+00 1889+00 to

#### **CURVE NUMBER CALCUATION:**

	TYPE A SOILS		TYPE A SOILS TYPE B SOILS TYPE C SOILS		ILS	TYPE D SOILS		CN*A	TOTAL AREA	
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		
Impuopulous	3.23	98							316.77	3.23
Impvervious		39							412.53	10.58
Grass	10.58								202.02	5.18
Pond Site Pre Condition	5,18	39				+			0.00	0.00
	_								0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	18.99		0		0		0		931.32	18.99
TUTALS	10.99	1					WEIGH	TED CN		49

#### Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

Runoff Depth (Q) = 8.7 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$ 

## POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	13.81	ft <sup>2</sup>
Pond Parcel Area	5.18	ft <sup>2</sup>
Total Area	18.99	ft²

Potential Abstraction (S) =	10.4
S = (1000/CN) - 10	
	12 70

ac-ft 13.79 Estimated Runoff Volume = Peak Volume = A x Q

**Basin Limits** 1905+00 1889+00 to

#### **CURVE NUMBER CALCUATION:**

	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )		AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		
Immendance	9.92	98							971.90	9.92
Impervious		39							151.81	3.89
Grass	3.89								78.00	2.00
Pond Site (Pervious)	2.00	39							318.00	3.18
Pond Site (Impervious)	3.18	100						+		0.00
								$ \rightarrow $	0.00	
									0.00	0.00
									0.00	0.00
		+			1				0.00	0.00
TOTALS	18.99		0		0		0		1519.71	18.99
TOTALS	10.35					-	WEIGH	TED CN		80

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 14.2 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$

Potential Abstraction (S) = 2.5 S = (1000/CN) - 10

Estimated Runoff Volume = 22.53 ac-ft Peak Volume = A x Q

Pond Name: 23-1 Date: 2/28/2024

## POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		13.81 ac	
Weighted C		0.74	
Total Impervious	0.95	9.92 ac	
Total Pervious	0.20	3.89 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]	E.	N	
Required Treatment (Runoff from 1" Rainfall)		0.85 ac-ft 7	
Required Treatment (1/2" over Area)		0.58 ac-ft	r is greater)
		0.85 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		13.79 ac-ft	
Proposed Runoff Volume		22.53 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volume	È	8.74 ac-ft	
TOTAL	STORAGE	9.59 ac-ft	
3) Estimated Pond Configuration:	TORAGE	5.55 80-11	
-,			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	6.0 ft	Assumed Control EL	ft
Soil type #13 used for pond depth; refer to WSS	data		
4) Estimated Pond Dimensions Including Freeboard			
LTOP OF SLOPE	413 ft		
WTOP OF SLOPE	206 ft		
Area	1.96 ac		

LSITE	543 ft
WSITE	296 ft
Area	3.69 ac

	Pond	<u>23-1</u>				
GIS GIS GIS	<u>Contour</u> 75 80 83	<u>Area</u> 61940 88543 134520	<u>Storage</u> 0.0 376207.5 334594.5 <b>Cumulative</b>		<u>Notes</u> Soil 15 v Freeboard	
				<u>Pond Area</u> 3.1		602527

I-75 Pond Siting

## FPID: 452074-2-32-01

Pond Name:	23-2	Full	<b>Typical Section Width</b>
Date:	2/28/2024		

### PRE-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	13.81	ас
Pond Parcel Area	3.76	ас
Total Area	17.57	ас

 Basin Limits

 1889+00
 to
 1905+00

#### **CURVE NUMBER CALCUATION:**

LAND USE	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SO	LS	CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CN A	TOTAL AREA
Impvervious	3.23	98			l				316.77	3.23
Grass	10.58	39							412.53	10.5
Pond Site Pre Condition	3.76	39							146.64	3.7
									0.00	0.0
									0.00	0.0
									0.00	0.0
									0.00	0.0
									0.00	0.0
TOTALS	17.57		0		0	i Ti	0		875.94	17.5
							WEIGH	TED CN		5

#### Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

**Runoff Depth (Q) =** 8.9 in  $Q = (P - 0.2S)^2/(P + 0.8S)$ 

#### POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	13.81 ft <sup>2</sup>
Pond Parcel Area	3.76 ft <sup>2</sup>
Total Area	17.57 ft <sup>2</sup>

#### Potential Abstraction (S) = 10.1 S = (1000/CN) - 10

Estimated Runoff Volume = 13.01 ac-ft Peak Volume = A x Q

## **Basin Limits**

1889+00 to 1905+00

#### **CURVE NUMBER CALCUATION:**

	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UNIA	TOTALAKEA
Impervious	9.92	98							971.90	9.9
Grass	3.89	39							151.81	3.8
Pond Site (Pervious)	1.50	39							58.50	1.5
Pond Site (Impervious)	2.26	100							226.00	2.2
									0.00	0.0
									0.00	0.0
									0.00	0.0
									0.00	0.0
TOTALS	17.57		0		0		0		1408.21	17.5
				the second second			WEIGH	TED CN		81

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 14.3 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 2.5 S = (1000/CN) - 10

Estimated Runoff Volume = 20.87 ac-ft Peak Volume = A x Q

Pond Name: 23-2 Date: 2/28/2024

### POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W Weighted C Total Impervious Total Pervious Outstanding FL Water (Y/N)[multiply x 1.5] Required Treatment (Runoff from 1" Rainfall) Required Treatment (1/2" over Area)	0.95 0.20	13.81 ac 0.74 9.92 ac 3.89 ac N 0.85 ac-ft 0.58 ac-ft 0.85 ac-ft 0.85 ac-ft	ever is greater)
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume Proposed Runoff Volume EPAV = Proposed Runoff - Existing Runoff Volume	1	13.01 ac-ft 20.87 ac-ft <b>7.86 ac-ft</b>	
	TORAGE	8.71 ac-ft	
3) Estimated Pond Configuration:			
Maintenance Berm Width L/W Ratio Maximum Treatment Volume Depth Maximum Pond Depth Below Freeboard Soil type #13 used for pond depth; refer to WSS of 4) Estimated Pond Dimensions Including Freeboard	20.0 ft 2.0 1.5 ft 6.0 ft	Freeboard Side Slopes (1:H) Wet/Dry Assumed Control E	1.0 ft 4.0 Dry L ft
	395 ft		
LTOP OF SLOPE WTOP OF SLOPE	395 ft 197 ft		
Area	1.79 ac		
5) Minimum Site Dimensions (Considering Maintenance	Berm and 20%	6 Factor of Safety)	

LSITE	522 ft
WSITE	285 ft
Area	3.41 ac

	<u>Contour</u>	<u>Area</u>	Storage Cumulative	Notes
GIS	76	45120	0.0 0.0	Soil 15
GIS	80	71340	232920.0 232920.0	
GIS	83	116750	282135.0 515055.0	
			Cumulative Ret (ac-ft) Bel	ow Freeboard
			11.82	

Pond 23-2

Pond Area	
2.7	

I-75 Pond Siting

## FPID: 452074-2-32-01

Pond Name:	23-3	Full	Typical Section Width
Date:	2/28/2024		

## PRE-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	13.81	ac
Pond Parcel Area	4.08	ас
Total Area	17.89	ac

Basin Limits					
1889+00	to	1905+00			

#### **CURVE NUMBER CALCUATION:**

	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CIT A	10111111
Impvervious	3.23	98		1					316.77	3.23
	10.58	39							412.53	10.58
Grass		39							159.12	4.08
Pond Site Pre Condition	4.08	39							0.00	0.00
		┼──┤							0.00	0.00
									0.00	0.00
									0.00	0.00
				1-1					0.00	0.00
TOTALS	17.89		0		0		0		888.42	17.89
TOTALS	17.05					åå	WEIGH	TED CN		50

#### Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

#### Potential Abstraction (S) = 10.1 S = (1000/CN) - 10

Estimated Runoff Volume = 13.19 Peak Volume = A x Q

**Runoff Depth (Q) =** 8.8 in  $Q = (P - 0.2S)^2/(P + 0.8S)$ 

# POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	13.81 ft <sup>2</sup>
Pond Parcel Area	4.08 ft <sup>2</sup>
Total Area	17.89 ft <sup>2</sup>

<b>Basin Limits</b>					
1889+00	to	1905+0			

ac-ft

## CURVE NUMBER CALCUATION:

	TYPE A SO	ILS	TYPE B SO	ILS	TYPE C SO	ILS	TYPE D SO	ILS	CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )		AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	ULL R	
Impervious	9.92	98							971.90	9.92
	3.89	39					1		151.81	3.89
Grass		39				1-1			70.20	1.80
Pond Site (Pervious)	1.80								228.00	2.28
Pond Site (Impervious)	2.28	100							0.00	0.00
		+		<u> </u>					0.00	0.00
		+							0.00	0.00
									0.00	0.00
TOTALS	17.89		0		0		0		1421.91	17.89
TUTACI	17.05						WEIGH	TED CN		79

**Potential Abstraction (S) =** S = (1000/CN) - 10

> Estimated Runoff Volume = 21.10 ac-ft Peak Volume = A x Q

2.6

Rainfall Depth for 100yr-240hr (P) =	16.9	in
NOAA Atlas 14		

**Runoff Depth (Q) =** 14.2 in Q =  $(P - 0.2S)^2/(P + 0.8S)$ 

Pond Name: 23-3 Date: 2/28/2024

### POND SIZING ESTIMATION

### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		13.81 ac			
Weighted C		0.74			
Total Impervious	0.95	9.92 ac			
Total Pervious	0.20	3.89 ac			
Outstanding FL Water (Y/N)[multiply x 1.5]		N			
Required Treatment (Runoff from 1" Rainfall)		0.85 ac-ft ] (which	ver is greater)		
Required Treatment (1/2" over Area)		0.58 ac-ft	ver is greater)		
		0.85 ac-ft			
2) Estimated Peak Attenuation Volume (EPAV):					
Existing Runoff Volume		13.19 ac-ft			
Proposed Runoff Volume		21.10 ac-ft			
EPAV = Proposed Runoff - Existing Runoff Volum	e	7.91 ac-ft			
TOTAL 3) Estimated Pond Configuration:	STORAGE	8.76 ac-ft			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft		
L/W Ratio	2.0	Side Slopes (1:H)	4.0		
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry		
Maximum Pond Depth Below Freeboard	6.0 ft	Assumed Control EL	ft		
Soil type #13 used for pond depth; refer to WSS	data				
4) Estimated Pond Dimensions Including Freeboard					
LTOP OF SLOPE					
WTOP OF SLOPE					
Area	1.80 ac				
5) Minimum Site Dimensions (Considering Maintenance Berm and 20% Factor of Safety)					

LSITE	523 ft
WSITE	286 ft
Area	3.43 ac

	Pond	<u>23-3</u>	
CIE	<u>Contour</u> 78	<u>Area</u> 55125	Storage Cumulative Notes 0.0 0.0 Soil 15
GIS GIS	78 82	78340	266930.0 266930.0
GIS	86	111450	379580.0 646510.0
			Cumulative Ret (ac-ft) Below Freeboard
			14.84

Pond Area	
2.6	602527
	13.83212

#### I-75 Pond Siting

## FPID: 452074-2-32-01

Pond Name:	24-1	Full	Typical Section Width
Date:	2/28/2024		

## **PRE-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	14	ac
Pond Parcel Area	6.63	ас
Total Area	20.63	ас

 Basin Limits

 1905+00
 to
 1925+00

#### **CURVE NUMBER CALCUATION:**

LAND USE	TYPE A SO	ILS	TYPE B SO	TYPE B SOILS		TYPE C SOILS		ILS	CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UNA	TOTAL AREA
Impvervious	4.04	98							395.96	4.04
Grass	9.96	39							388.42	9.96
Pond Site Pre Condition	6.63	39							258.57	6.63
					·2				0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	20.63		0		0		0		1042.95	20.63
							WEIGH	TED CN		5:

#### Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

**Runoff Depth (Q) =** 9.0 in  $Q = (P - 0.2S)^2/(P + 0.8S)$ 

## POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	14	ac
Pond Parcel Area	6.63	ас
Total Area	20.63	ас

#### Potential Abstraction (S) = 9.8 S = (1000/CN) - 10

Estimated Runoff Volume = 15.53 ac-ft Peak Volume = A x Q

 Basin Limits

 1905+00
 to
 1925+00

#### **CURVE NUMBER CALCUATION:**

LAND USE -	TYPE A SO	)ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CATA	TOTAL AREA
mpervious	12.40	98							1214.88	12.40
Grass	1.60	39			()				62.53	1.60
Pond Site (Pervious)	5,13	39							200.07	5.13
Pond Site (Impervious)	1.50	100							150.00	1.50
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	20.63		0		0		0		1627.47	20.63
				·			WEIGH	TED CN		79

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 14.1 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 2.7 S = (1000/CN) - 10

Estimated Runoff Volume = 24.18 ac-ft Peak Volume = A x Q

Pond Name: 24-1 Date: 2/28/2024

## POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

A standar DAM		14.00 ac	
Area Inside R/W		0.86	
Weighted C Total Impervious	0.95	12.40 ac	
Total Pervious	0.30	1.60 ac	
	0.20	N	
Outstanding FL Water (Y/N)[multiply x 1.5]		1 01 ac ft 7	
Required Treatment (Runoff from 1" Rainfall)		0.58 ac-ft	
Required Treatment (1/2" over Area)		1.01 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		15.53 ac-ft	
Proposed Runoff Volume		24.18 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volume		8.65 ac-ft	
TOTAL ST	ORAGE	9.66 ac-ft	
3) Estimated Pond Configuration:			
	20.0 ft	Freeboard 1.0 ft	
Maintenance Berm Width	20.0 ft 2.0	Freeboard 1.0 ft Side Slopes (1:H) 4.0	
Maintenance Berm Width L/W Ratio		Treeboard	
Maintenance Berm Width L/W Ratio Maximum Treatment Volume Depth	2.0	Side Slopes (1:H) 4.0	
Maintenance Berm Width L/W Ratio	2.0 1.5 ft	Side Slopes (1:H)4.0Wet/DryDry	
Maintenance Berm Width L/W Ratio Maximum Treatment Volume Depth	2.0 1.5 ft	Side Slopes (1:H)4.0Wet/DryDry	
Maintenance Berm Width L/W Ratio Maximum Treatment Volume Depth Maximum Pond Depth Below Freeboard	2.0 1.5 ft	Side Slopes (1:H) 4.0 Wet/Dry Dry	
Maintenance Berm Width L/W Ratio Maximum Treatment Volume Depth Maximum Pond Depth Below Freeboard 4) Estimated Pond Dimensions Including Freeboard	2.0 1.5 ft 4.0 ft	Side Slopes (1:H) 4.0 Wet/Dry Dry	
Maintenance Berm Width L/W Ratio Maximum Treatment Volume Depth Maximum Pond Depth Below Freeboard 4) Estimated Pond Dimensions Including Freeboard LTOP OF SLOPE	2.0 1.5 ft 4.0 ft 492 ft	Side Slopes (1:H) 4.0 Wet/Dry Dry	
Maintenance Berm Width L/W Ratio Maximum Treatment Volume Depth Maximum Pond Depth Below Freeboard 4) Estimated Pond Dimensions Including Freeboard LTOP OF SLOPE WTOP OF SLOPE Area	2.0 1.5 ft 4.0 ft 492 ft 246 ft 2.78 ac	Side Slopes (1:H) 4.0 Wet/Dry Dry Assumed Control EL ft	
Maintenance Berm Width L/W Ratio Maximum Treatment Volume Depth Maximum Pond Depth Below Freeboard 4) Estimated Pond Dimensions Including Freeboard LTOP OF SLOPE WTOP OF SLOPE	2.0 1.5 ft 4.0 ft 492 ft 246 ft 2.78 ac	Side Slopes (1:H) 4.0 Wet/Dry Dry Assumed Control EL ft	
Maintenance Berm Width L/W Ratio Maximum Treatment Volume Depth Maximum Pond Depth Below Freeboard 4) Estimated Pond Dimensions Including Freeboard LTOP OF SLOPE WTOP OF SLOPE Area	2.0 1.5 ft 4.0 ft 492 ft 246 ft 2.78 ac	Side Slopes (1:H) 4.0 Wet/Dry Dry Assumed Control EL ft	

WSITE

Area

343 ft 5.03 ac

	<u>Contour</u>	Area	Storage Cumulative Notes
GIS	76	42250	0.0 0.0 Soil 15
GIS	81	86515	321912.5 321912.5
GIS	86	118450	512412.5 834325.0
			Cumulative Ret (ac-ft) Below Freeboard
			19.15

Pond 24-1

Pond Area	
2.7	602527

### POND SIZING CALCULATIONS I-75 Pond Siting

FPID: 452074-2-32-01

Pond Name: 24-2

**Typical Section Width** Full

Date: 2/28/2024

## PRE-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	14	ас
Pond Parcel Area	4.24	ас
Total Area	18.24	ас

**Basin Limits** 1905+00 1925+00 to

### **CURVE NUMBER CALCUATION:**

LAND USE	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		TOTAL BILLS
	4.04	98							395.96	4.04
Impvervious	9.96	39							388.42	9.96
Grass				┼──┤					165.36	4.24
Pond Site Pre Condition	4.24	39		+ +					0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	18.24		0		0		0		949.74	18.24
TUTAG	10.24	J		1 1			WEIGH	TED CN		52

#### Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

Runoff Depth (Q) = 9.3 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$ 

#### POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	14	ас
Pond Parcel Area	4.24	ас
Total Area	18.24	ас

#### S = (1000/CN) - 10 Estimated Runoff Volume = 14.21

Peak Volume = A x Q

Potential Abstraction (S) =

**Basin Limits** 1925+00 1905+00 to

9.2

ac-ft

#### **CURVE NUMBER CALCUATION:**

	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN								
Immonitorie	12.40	98		1		T			1214.88	12.40
Impervious		++							62.53	1.60
Grass	1.60	39						++	33.15	0.85
Pond Site (Pervious)	0.85	39				+		+		3.39
Pond Site (Impervious)	3.39	100							339.00	
									0.00	0.00
									0.00	0.00
		+		+ +		1 1			0.00	0.00
		+		+ +					0.00	0.00
TOTALS	18.24	+	0		0		0		1649.55	18.24
TOTAL	10121	1					WEIGH	TED CN		90

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 15.7 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$

Potential Abstraction (S) = 1.1 S = (1000/CN) - 10

Estimated Runoff Volume = 23.85 ac-ft Peak Volume = A x Q

Pond Name: 24-2 Date: 2/28/2024

#### POND SIZING ESTIMATION

## 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		14.00 ac		
Weighted C		0.86		
Total Impervious	0.95	12.40 ac		
Total Pervious	0.20	1.60 ac		
Outstanding FL Water (Y/N)[multiply x 1.5]		N		
Required Treatment (Runoff from 1" Rainfall)		1.01 ac-ft	er is greater)	
Required Treatment (1/2" over Area)		0.58 ac-ft	er is greater)	
		1.01 ac-ft		
2) Estimated Peak Attenuation Volume (EPAV):				
Existing Runoff Volume		14.21 ac-ft		
Proposed Runoff Volume		23.85 ac-ft		
EPAV = Proposed Runoff - Existing Runoff Volume		9.65 ac-ft		
TOTAL	TOTAL STORAGE			
3) Estimated Pond Configuration:				
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft	
L/W Ratio	2.0	Side Slopes (1:H)	4.0	
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry	
Maximum Pond Depth Below Freeboard	4.0 ft	Assumed Control EL	ft	
4) Estimated Pond Dimensions Including Freeboard				

LTOP OF SLOPE	516 ft
WTOP OF SLOPE	258 ft
Area	3.05 ac

LSITE	667 ft
WSITE	357 ft
Area	5.47 ac

	Pond	<u>24-2</u>				
	Contour	<u>Area</u>	<u>Storage</u>	Cumulative	Notes	
GIS	78	44125	0.0	0.0	Soil 15	
GIS	81	77515	182460.0	182460.0		
GIS	85	109105	373240.0	555700.0		
			Cumulative	Ret (ac-ft) Below	/ Freeboard	
				12.76		
				Pond Area		
				2.5	e	5025

#### I-75 Pond Siting

#### FPID: 452074-2-32-01

Pond Name: 24-3 Full **Typical Section Width** Date: 2/28/2024

#### **PRE-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	14	ас
Pond Parcel Area	4.93	ас
Total Area	18.93	ac

**Basin Limits** 1905+00 to 1925+00

#### **CURVE NUMBER CALCUATION:**

	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UT A	TOTAL AREA
Impvervious	4.04	98							395.96	4.0
Grass	9.96	39							388.42	9.9
Pond Site Pre Condition	4.93	39							192.27	4.9
									0.00	0.0
									0.00	0.0
									0.00	0.0
									0.00	0.0
									0.00	0.0
TOTALS	18.93		0		0		0		976.65	18.9
				··			WEIGH	TED CN		5

#### Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

Runoff Depth (Q) = 9.2 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$ 

#### **POST-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	14	ac
Pond Parcel Area	4.93	ас
Total Area	18.93	ас

Potential Abstraction (S) =	9.4
S = (1000/CN) - 10	

Estimated Runoff Volume = 14.59 ac-ft Peak Volume = A x Q

> **Basin Limits** 1905+00 1925+00 to

#### **CURVE NUMBER CALCUATION:**

	TYPE A SOILS TYPE		TYPE 8 SO	TYPE B SOILS TYPE C SOILS		ILS	TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UN A	TOTAL AREA
Impervious	12.40	98							1214.88	12.40
Grass	1.60	39							62.53	1.60
Pond Site (Pervious)	3.43	39							133.77	3.43
Pond Site (Impervious)	1.50	100							150.00	1.50
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	18.93		0		0	1 1	0		1561.17	18.93
		an a				A11	WEIGH	TED CN		83

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 14.6 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$

Potential Abstraction (S) = 2.1 S = (1000/CN) - 10

Estimated Runoff Volume = 23.02 ac-ft Peak Volume = A x Q

Pond Name: 24-3 Date: 2/28/2024

#### POND SIZING ESTIMATION

## 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W Weighted C Total Impervious Total Pervious Outstanding FL Water (Y/N)[multiply x 1.5] Required Treatment (Runoff from 1" Rainfall) Required Treatment (1/2" over Area)	0.95 0.20	14.00 ac 0.86 12.40 ac 1.60 ac N 1.01 ac-ft 0.58 ac-ft <b>1.01 ac-ft</b>	ater)
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume Proposed Runoff Volume EPAV = Proposed Runoff - Existing Runoff Volume	2	14.59 ac-ft 23.02 ac-ft <b>8.43 ac-ft</b>	
TOTAL : 3) Estimated Pond Configuration:	STORAGE	9.44 ac-ft	
Maintenance Berm Width L/W Ratio Maximum Treatment Volume Depth Maximum Pond Depth Below Freeboard	20.0 2.0 1.5 4.0	Side Slopes (1:H) ft Wet/Dry	1.0 ft 4.0 Dry ft
4) Estimated Pond Dimensions Including Freeboard			
LTOP OF SLOPE WTOP OF SLOPE Area 5) Minimum Site Dimensions (Considering Maintenance	243 2.72	ft ac	
S) Minimum Site Dimensions (Considering Maintenance			

WSITE

Area

340 ft 4.93 ac

	Pond	<u>24-3</u>			
	<u>Contour</u>	Area	Storage	Cumulative	Notes
GIS	79	65125	0.0	0.0	Soil 15
GIS	84	92250	393437.5	393437.5	
GIS	87	123450	323550.0	716987.5	
			Cumulative I	Ret (ac-ft) Belo	w Freeboard
				16.46	

#### Pond Area 2.8

I-75 Pond Siting

#### FPID: 452074-2-32-01



#### PRE-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	26.66	ас
Pond Parcel Area	5.74	ас
Total Area	32.4	ас

Basin Limits 1925+00 to 1963+60

#### CURVE NUMBER CALCUATION:

	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	un A	
Immunicut	7.80	98							764.20	7.80
Impvervious	18.86	39							735.62	18.86
Grass									223.86	5.74
Pond Site Pre Condition	5.74	39							0.00	0.00
						+			0.00	0.00
									0.00	0.00
		+ +							0.00	0.00
		+							0.00	0.00
TOTALS	32.4		0		0		0	Î	1723.68	32.4
TUTALS	52.7						WEIGH	TED CN		53

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

**Runoff Depth (Q) =** 9.6 in  $Q = (P - 0.2S)^2/(P + 0.8S)$ 

#### Potential Abstraction (S) = 8.8 S = (1000/CN) - 10

Estimated Runoff Volume = 25.86 Peak Volume = A x Q

ac-ft

#### POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	26.66	ас
Pond Parcel Area	5.74	ас
Total Area	32.4	ас

Basin Limits							
1925+00	to	1963+60					

#### **CURVE NUMBER CALCUATION:**

	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	ar A	TOTALTURE
Impervious	23.93	98							2344.71	23.93
	2.73	39							106.64	2.73
Grass		39							48.36	1.24
Pond Site (Pervious)	1.24	and the second days in the secon							450.00	4.50
Pond Site (Impervious)	4.50	100						++	0.00	0.00
		+						+	0.00	0.00
		+							0.00	0.00
		++							0.00	0.00
TOTALS	32.4	+-+	0		0		0		2949.71	32.4
TUIALS	52.4					-	WEIGH	TED CN		91

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 15.8 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 1.0 S = (1000/CN) - 10

Estimated Runoff Volume = 42.59 ac-ft Peak Volume = A x Q

#### Pond Name: 25-1/26-1 Date: 2/28/2024

#### POND SIZING ESTIMATION

2)

3)

#### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

	Area Inside R/W			26.66 ac		
	Weighted C			0.87		
	Total In	pervious	0.95	23.93 ac		
	Total	Pervious	0.20	2.73 ac		
	Outstanding FL Water (Y/N)[multiply x 3	1.5]		N		
	Required Treatment (Runoff from 1" Ra	infall)		ן 1.94 ac-ft		
	Required Treatment (1/2" over Area)			1.11 ac-ft	- (whichev	er is greater)
				1.94 ac-ft		
) Estir	nated Peak Attenuation Volume (EPAV):					
	Existing Runoff Volume			25.86 ac-ft		
	Proposed Runoff Volume			42.59 ac-ft		
	EPAV = Proposed Runoff - Existing Runo	off Volume		16.73 ac-ft		
	Floodp	lain Comper	nsation	1.79 ac-ft		
		TOTAL ST	ORAGE	18.52 ac-ft		
) Estir	nated Pond Configuration:					
	Maintenance Berm Width		20.0 ft	Freeboa	rd	1.0 ft
	L/W Ratio		2.0	Side Slop	oes (1:H)	4.0
	Maximum Treatment Volume Depth		1.5 ft	Wet/Dry	/	Dry
	Maximum Pond Depth Below Freeboard	d 📔	7.0 ft	Assume	d Control EL	77.00 ft

4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	526 ft
WTOP OF SLOPE	263 ft
Area	3.18 ac

LSITE	679 ft
WSITE	364 ft
Area	5.67 ac

#### Pond 25-1/26-1 0

	Contour	<u>Area</u>	<b>Storage</b>	Cumulative			<u>Notes</u>		
GIS	71	96311	0.0	0.0		Soil 15			
GIS	76	136316	581567.5	581567.5					
GIS	80	151225	575082.0	1156649.5					
Cumulative Ret (ac-ft) Below Freeboard									
				26.55					
	Pond Area								

3.5

I-75 Pond Siting

#### FPID: 452074-2-32-01

Pond Name:	25-1	Full	Typical Section Width
Date:	2/28/2024		

#### PRE-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	10.92	ac
Pond Parcel Area	3.50	ac
Total Area	14.42	ас

Basin Limits 1925+00 to 1940+00

#### **CURVE NUMBER CALCUATION:**

	TYPE A SO	ILS	TYPE B SO	LS	TYPE C SO	ILS	TYPE D SO	ILS	CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	UN A							
Impvervious	3.03	98							296.97	3.03
Grass	7.89	39							307.70	7.89
Pond Site Pre Condition	3.50	39							136.50	3.50
									0.00	0.00
									0.00	0.00
				Î 🗌					0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	14.42		0		0		0		741.17	14.42
							WEIGH	TED CN		51

#### Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

**Runoff Depth (Q) =** 9.2 in  $Q = (P - 0.2S)^2/(P + 0.8S)$ 

#### **POST-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	10.92	ac
Pond Parcel Area	3.50	ас
Total Area	14.42	ас

#### Potential Abstraction (S) = 9.5 S = (1000/CN) - 10

Estimated Runoff Volume = 11.06 ac-ft Peak Volume = A x Q

Basin Limits

1925+00 to 1940+00

#### **CURVE NUMBER CALCUATION:**

	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UT A	IOTALARIA
Impervious	9.30	98							911.16	9.30
Grass	1.62	39							63.28	1.62
Pond Site (Pervious)	1.50	39							58.50	1.50
Pond Site (Impervious)	2.00	100							200.00	2.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	14.42		0		0	ſ	0		1232.93	14.42
		at a sta					WEIGH	TED CN		86

Potential Abstraction (S) = 1.7 S = (1000/CN) - 10

Estimated Runoff Volume = 18.05 ac-ft Peak Volume = A x Q

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 15.0 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Pond Name: 25-1 Date: 2/28/2024

#### POND SIZING ESTIMATION

#### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		10.92 ac	
Weighted C		0.84	
Total Impervious	0.95	9.30 ac	
Total Pervious	0.20	1.62 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		0.76 ac-ft 0.46 ac-ft	(whichever is greater)
Required Treatment (1/2" over Area)		0.46 ac-ft 🕇	(whichever is Breater)
		0.76 ac-ft	

#### 2) Estimated Peak Attenuation Volume (EPAV):

Existing Runoff Volume	11.06 ac-ft
Proposed Runoff Volume	18.05 ac-ft
EPAV = Proposed Runoff - Existing Runoff Volume	6.99 ac-ft
Floodplain Compensation	1.79 ac-ft
TOTAL STORAGE	9.54 ac-ft

#### 3) Estimated Pond Configuration:

Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	7.0 ft	Assumed Control EL	75.00 ft

#### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	388 ft
WTOP OF SLOPE	194 ft
Area	1.72 ac

LSITE	513 ft
WSITE	281 ft
Area	3.31 ac

	Pond	<u>25-1</u>	0		
GIS GIS	<u>Contour</u> 75 82	<u>Area</u> 48851 75286	<u>Storage</u> 0.0 434479.5	<u>Cumulative</u> 0.0 434479.5	<u>Notes</u> Soil 15

Cumulative Ret (ac-ft) Below Freeboard 9.97

> Pond Area 1.7

#### I-75 Pond Siting

# FPID: 452074-2-32-01 Pond Name: 25-2 Date: 2/28/2024

Full Typical Section Width

#### PRE-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	10.92	ас
Pond Parcel Area	3.50	ас
Total Area	14.42	ас

Basin Limits 1925+00 to 1940+00

#### **CURVE NUMBER CALCUATION:**

	TYPE A SO	ILS	TYPE B SO	ILS	TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN								
Impuoprique	3.03	98				† T			296.97	3.03
Impvervious	7.89	39							307.70	7.89
Grass	3.50	39		+					136.50	3.50
Pond Site Pre Condition	5.50	23							0.00	0.00
									0.00	0.00
									0.00	0.00
		+ +			1				0.00	0.00
		+							0.00	0.00
TOTALS	14.42		0		0		0		741.17	14.42
TUTALS	14.42					de-	WEIGH	TED CN		51

#### Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

**Runoff Depth (Q) =** 9.2 in  $Q = (P - 0.2S)^2/(P + 0.8S)$ 

#### **POST-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	10.92	ac
Pond Parcel Area	3.50	ас
Total Area	14.42	ac

Estimated Runoff Volume =	11.06
Peak Volume = A x Q	

S = (1000/CN) - 10

Potential Abstraction (S) =

Peak Volume = A x Q

Basin Limits
1925+00 to 1940+00

9.5

ac-ft

#### CURVE NUMBER CALCUATION:

LAND USE	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CITA	
Impervious	9.30	98		1 I					911.16	9.30
	1.62	39							63.28	1.62
Grass	1.50	39		+1					58.50	1.50
Pond Site (Pervious)	2.00	100							200.00	2.00
Pond Site (Impervious)	2,00	100							0.00	0.00
		+							0.00	0.00
		+		+ +					0.00	0.00
		+							0.00	0.00
TOTALS	14.42	+-+	0	+ +	0		0		1232.93	14.42
TUTALS	14.42		Ŭ	<u> </u>			WEIGH	TED CN		86

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 15.0 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 1.7 S = (1000/CN) - 10

Estimated Runoff Volume = 18.05 ac-ft Peak Volume = A x Q

Pond Name: 25-2 Date: 2/28/2024

#### POND SIZING ESTIMATION

#### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		10.92 ac	
Weighted C		0.84	
Total Impervious	0.95	9.30 ac	
Total Pervious	0.20	1.62 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]	17	N	
Required Treatment (Runoff from 1" Rainfall)		0.76 ac-ft ر	(whichever is greater)
Required Treatment (1/2" over Area)		0.46 ac-ft 🕇	(whichever is greater)
		0.76 ac-ft	

#### 2) Estimated Peak Attenuation Volume (EPAV):

Existing Runoff Volume	11.06 ac-ft
Proposed Runoff Volume	18.05 ac-ft
EPAV = Proposed Runoff - Existing Runoff Volume	6.99 ac-ft
Floodplain Compensation	1.79 ac-ft
TOTAL STORAGE	9.54 ac-ft

#### 3) Estimated Pond Configuration:

Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	7.0 ft	Assumed Control EL	77.00 ft

#### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	388 ft
WTOP OF SLOPE	194 ft
Area	1.72 ac

LSITE	513 ft
WSITE	281 ft
Area	3.31 ac

## <u>Pond 25-2</u>0

	Contour	<u>Area</u>	<u>Storage</u>	<b>Cumulative</b>	Notes
GIS	77	49711	0.0	0.0	Soil 15
GIS	84	77128	443936.5	443936.5	

## Cumulative Ret (ac-ft) Below Freeboard

10.19

Pond Area 1.8

I-75 Pond Siting

#### FPID: 452074-2-32-01

Pond Name:	25-3	Full	Typical Section Width
Date:	2/28/2024		

#### **PRE-DEVELOPMENT RUNOFF PARAMETERS**

Total Area	14.42	ас
Pond Parcel Area	3.50	ac
Onsite Basin Area	10.92	ас

**Basin Limits** 1925+00 1940+00 to

#### **CURVE NUMBER CALCUATION:**

	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UNA	TOTAL ANEA
Impvervious	3.03	98							296.97	3.03
Grass	7.89	39							307.70	7.89
Pond Site Pre Condition	3.50	39							136.50	3.50
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	14.42	1	0	1	0		0	T	741.17	14.42
							WEIGH	TED CN		51

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

Runoff Depth (Q) = 9.2 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$ 

#### **POST-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	10.92	ас
Pond Parcel Area	3,50	ас
Total Area	14.42	ас

Potential Abstraction (S) =	9.5
S = (1000/CN) - 10	

Estimated Runoff Volume = 11.06 ac-ft Peak Volume = A x Q

> **Basin Limits** 1940+00 1925+00 to

#### **CURVE NUMBER CALCUATION:** TYPE B SOILS TYPE C SOILS TYPE D SOILS TYPE A SOILS LAND USE AREA (ft<sup>2</sup>) AREA (ft<sup>2</sup>) CN AREA (ft<sup>2</sup>) CN AREA (ft<sup>2</sup>) CN CN 98 9.30 Impervious 39 Grass 1.62 1.50 39 Pond Site (Pervious) Pond Site (Impervious)

1.02			1					
1.50	39						58.50	1.50
2.00	100						200.00	2.00
							0.00	0.00
							0.00	0.00
							0.00	0.00
					1 1		0.00	0.00
14.42		0		0	0	1	232.93	14.42
					WEIGH	TED CN		86
	1.50 2.00	1.50 39 2.00 100	1.50 39 2.00 100	1.50 39 2.00 100	1.50         39	1.50     39	1.50     39	1.50         39

Potential Abstraction (S) = 1.7 S = (1000/CN) - 10

Estimated Runoff Volume = 18.05 ac-ft Peak Volume = A x Q

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 15.0 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$

CN\*A

911.16

63.28

TOTAL AREA

9.30

Pond Name: 25-3 Date: 2/28/2024

#### POND SIZING ESTIMATION

#### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W Weighted C Total Impervious Total Pervious Outstanding FL Water (Y/N)[multiply x 1.5] Required Treatment (Runoff from 1" Rainfall) Required Treatment (1/2" over Area)	0.95 0.20	10.92 ac 0.84 9.30 ac 1.62 ac 0.76 ac-ft 0.46 ac-ft 0.76 ac-ft	- (whichever is greater)
2) Estimated Peak Attenuation Volume (EPAV):			

# Existing Runoff Volume11.06 ac-ftProposed Runoff Volume18.05 ac-ftEPAV = Proposed Runoff - Existing Runoff Volume6.99 ac-ftFloodplain Compensation1.79 ac-ftTOTAL STORAGE9.54 ac-ft

#### 3) Estimated Pond Configuration:

÷

Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	7.0 ft	Assumed Control EL	77.00 ft

#### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	388 ft
WTOP OF SLOPE	194 ft
Area	1.72 ac

LSITE	513 ft
WSITE	281 ft
Area	3.31 ac

	<u>Contour</u>	<u>Area</u>	<u>Storage</u>	<b>Cumulative</b>	<u>Notes</u>
GIS	75	47572	0.0	0.0	Soil 15
GIS	82	77535	437874.5	437874.5	

Pond 25-3

0

Cumulative Ret (ac-ft) Below Freeboard 10.05

Pond Area 1.8

602527 13.83212

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#### POND SIZING CALCULATIONS I-75 Pond Siting

#### FPID: 452074-2-32-01

Pond Name: 25-1/26-1	Full	Typical Section Width
Date: 5/25/2023		

#### PRE-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	26.66	ac
Pond Parcel Area	7.50	ас
Total Area	34.16	ас

**Basin Limits** 1101+00 1139+70 to

#### **CURVE NUMBER CALCUATION:**

I	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CIV A	TOTALIST
Impvervious	7.82	98							766.18	7.82
	18.84	39							734.83	18.84
Grass		39		+					292.50	7.50
Pond Site Pre Condition	7.50	39		+ +				1	0.00	0.00
		+ +						1	0.00	0.00
		+ +		++					0.00	0.00
									0.00	0.00
		+							0.00	0.00
TOTALS	34.16		0		0		0		1793.51	34.16
TOTALS	54.10						WEIGH	TED CN		53

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

#### Runoff Depth (Q) = 9.4 in $Q = (P - 0.2S)^2/(P + 0.8S)$

#### POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	26.66 ac	
Pond Parcel Area	7.50 ac	
Total Area	34.16 ac	

#### Estimated Runoff Volume = 26.86 Peak Volume = A x Q

S = (1000/CN) - 10

9.0

ac-ft

Potential Abstraction (S) =

Pond Parcel Area	7.50 ac
Total Area	34.16 ac

#### **Basin Limits** 1139+70 1101+00 to

#### **CURVE NUMBER CALCUATION:**

	TYPE A SC	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	at n	
lucing and lower	23.99	98							2350.79	23.99
Impervious	2.67	39							104.22	2.67
Grass				+ +					117.00	3.00
Pond Site (Pervious)	3.00	39						1-1-	450.00	4.50
Pond Site (Impervious)	4.50	100				$\left  \right $			0.00	0.00
									0.00	0.00
									0.00	0.00
		++							0.00	0.00
TOTALS	34.16		0		0		0		3022.01	34.16
TOTAD	54.10					1	WEIGH	TED CN		88

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 15.4 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$

Potential Abstraction (S) = 1.3 S = (1000/CN) - 10

ac-ft Estimated Runoff Volume = 43.92 Peak Volume = A x Q

#### Pond Name: 25-1/26-1 Date: 5/25/2023

#### POND SIZING ESTIMATION

#### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		26.66 ac	
Weighted C		0.87	
Total Impervious	0.95	23.99 ac	
Total Pervious	0.20	2.67 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		1.94 ac-ft	vhichever is greater)
Required Treatment (1/2" over Area)		1.11 ac-ft 🖵 💔	vilicitevel is greater)
		1.94 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		26.86 ac-ft	
Proposed Runoff Volume		43.92 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volum	e	17.07 ac-ft	
Floodplain Com	pensation	1.79 ac-ft	
TOTAL	STORAGE	18.86 ac-ft	
3) Estimated Pond Configuration:			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1	:H) 4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	7.0 ft	Assumed Cont	trol EL 77.00 ft
A) Estimated Pond Dimensions Including Freehoard			

4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	530 ft
WTOP OF SLOPE	265 ft
Area	3.23 ac

LSITE	684 ft
WSITE	366 ft
Area	5.75 ac

#### Pond 25-1/26-1 0

	Contour	<u>Area</u>	<u>Storage</u>	<b>Cumulative</b>	Notes
GIS	69	96311	0.0	0.0	Soil 15
GIS	76	136316	814194.5	814194.5	

Cumulative Ret (ac-ft) Below Freeboard 18.69

> Pond Area 3.1



#### PRE-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	15.74	ac
Pond Parcel Area	4.50	ас
Total Area	20.24	ac

Basin Limits 1940+80 to 1963+60

#### **CURVE NUMBER CALCUATION:**

LAND USE	TYPE A SO	ILS	TYPE B SO	TYPE B SOILS		TYPE C SOILS		ILS	CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CIVIA	TOTAL AREA
Impvervious	4.61	98							451.39	4.6
Grass	11.13	39							434.22	11.13
Pond Site Pre Condition	4.50	39							175.50	4.50
									0.00	0.00
			1						0.00	0.0
									0.00	0.0
									0.00	0.0
									0.00	0.0
TOTALS	20.24		0		0	Î	0		1061.12	20.24
		-		ð			WEIGH	TED CN		53

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

#### **Runoff Depth (Q) =** 9.4 in $Q = (P - 0.2S)^2/(P + 0.8S)$

#### POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	15.74	ас
Pond Parcel Area	4.50	ас
Total Area	20.24	ac

Estimated Runoff Volume =	15.89
Peak Volume = A x Q	

S = (1000/CN) - 10

Potential Abstraction (S) =

Basin Limits

9.1

ac-ft

#### **CURVE NUMBER CALCUATION:**

LAND USE	TYPE A SO	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		ILS	CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UN*A	TOTAL AREA
Impervious	14.13	98							1384.96	14.13
Grass	1.61	39							62.70	1.6:
Pond Site (Pervious)	2.00	39							78.00	2.00
Pond Site (Impervious)	2.50	100							250.00	2.50
									0.00	0.00
		$\square$							0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	20.24		0		0		0		1775.66	20.24
							WEIGH	TED CN		88

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 15.3 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 1.4 S = (1000/CN) - 10

Estimated Runoff Volume = 25.86 ac-ft Peak Volume = A x Q

Pond Name: 26-2 Date: 2/28/2024

#### POND SIZING ESTIMATION

## 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		15.74 ac		
Weighted C		0.87		
Total Impervious	0.95	14.13 ac		
Total Pervious	0.20	1.61 ac		
Outstanding FL Water (Y/N)[multiply x 1.5]		N		
Required Treatment (Runoff from 1" Rainfall)		1.15 ac-ft ጊ	(whicheve	r is greater)
Required Treatment (1/2" over Area)		0.66 ac-ft 🗍	(	
		1.15 ac-ft		
2) Estimated Peak Attenuation Volume (EPAV):				
Existing Runoff Volume		15.89 ac-ft		
Proposed Runoff Volume		25.86 ac-ft		
EPAV = Proposed Runoff - Existing Runoff Volume	e	9.97 ac-ft		
Floodplain Comp	pensation	0.00 ac-ft		
	STORAGE	9.97 ac-ft		
3) Estimated Pond Configuration:				
	20.0 ft	Freeboar	d	1.0 ft
Maintenance Berm Width	20.0 1	Side Slop		4.0
L/W Ratio	2.0 1.5 ft	Wet/Dry	C3 (1117)	Dry
Maximum Treatment Volume Depth			Control EL	79.00 ft
Maximum Pond Depth Below Freeboard	5.0 ft	Assumed	CONTIOLER	100010

#### 4) Estimated Pond Dimensions Including Freeboard

Maximum Pond Depth Below Freeboard

LTOP OF SLOPE	453 ft
WTOP OF SLOPE	227 ft
Area	2.36 ac

## 5) Minimum Site Dimensions (Considering Maintenance Berm and 20% Factor of Safety)

LSITE	592 ft
WSITE	320 ft
Area	4.35 ac

	Pond	<u>26-2</u>	0		
GIS GIS	<u>Contour</u> 69 76	<u>Area</u> 96311 136316	<u>Storage</u> 0.0 814194.5	<u>Cumulative</u> 0.0 814194.5	<u>Notes</u> Soil 15

Cumulative Ret (ac-ft) Below Freeboard

18.69

Pond Area 3.1

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#### I-75 Pond Siting

#### FPID: 452074-2-32-01

Pond Name:	26-3	Full	Typical Section Width
Date:	2/28/2024		

#### PRE-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	15.74	ac
Pond Parcel Area	4.50	ас
Total Area	20.24	ас

Basin Limits 1940+80 to 1963+60

#### CURVE NUMBER CALCUATION:

LAND USE	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		TOTALITE
Immunique	4.61	98		1 1					451.39	4.61
Impvervious	11.13	39							434.22	11.13
Grass		39							175.50	4.50
Pond Site Pre Condition	4.50	39						++	0.00	0.00
		+ +							0.00	0.00
		+ +							0.00	0.00
		+ +		++					0.00	0.00
		++							0.00	0.00
TOTALS	20.24	+	0		0		0	1 1	1061.12	20.24
TOTALS	20.24						WEIGH	TED CN		52

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

#### **Runoff Depth (Q) =** 9.4 in $Q = (P - 0.2S)^2/(P + 0.8S)$

#### POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	15.74	ас
Pond Parcel Area	4.50	ас
Total Area	20.24	ас

#### Estimated Runoff Volume = 15.89 Peak Volume = A x Q

S = (1000/CN) - 10

Potential Abstraction (S) =

Basin Limits

to 1963+60

9.1

ac-ft

#### **CURVE NUMBER CALCUATION:**

	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )		AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		
magnious	14.13	98						T	1384.96	14.13
mpervious	1.61	39							62.70	1.61
Grass									78.00	2.00
Pond Site (Pervious)	2.00	39		+					250.00	2.50
Pond Site (Impervious)	2.50	100				$ \rightarrow $		++	0.00	0.00
						$\left  \right $			0.00	0.00
		++							0.00	0.00
		+							0.00	0.00
TOTALS	20,24		0		0		0		1775.66	20.24
TOTALS	2012 1		and the second second	A		<u>*</u> *	WEIGH	TED CN		88

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q)** = 15.3 in Q =  $(P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 1.4 S = (1000/CN) - 10

Estimated Runoff Volume = 25.86 ac-ft

Peak Volume = A x Q

Pond Name: 26-3 Date: 2/28/2024

#### POND SIZING ESTIMATION

#### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

	Area Inside R/W			15.74 ac		
	Weighted C			0.87		
		Total Impervious	0.95	14.13 ac		
		<b>Total Pervious</b>	0.20	1.61 ac		
	Outstanding FL Water (Y/N)[m	ultiply x 1.5]		N		
	Required Treatment (Runoff fr	rom 1" Rainfall)		ן 1.15 ac-ft	• (whichever is gr	astar)
	Required Treatment (1/2" ove	r Area)		0.66 ac-ft 亅	- (whichever is gr	eater
				1.15 ac-ft		
2) Esti	mated Peak Attenuation Volum	e (EPAV):				
	Existing Runoff Volume			15.89 ac-ft		
	Proposed Runoff Volume			25.86 ac-ft		
	EPAV = Proposed Runoff - Exis	ting Runoff Volume		9.97 ac-ft		
		Floodplain Compe	nsation	0.00 ac-ft		
		TOTAL ST	ORAGE	9.97 ac-ft		
3) Esti	mated Pond Configuration:					
	Maintenance Berm Width		20.0 ft	Freeboar	rd 🛛	1.0 ft
	L/W Ratio		2.0	Side Slop	bes (1:H)	4.0
	Maximum Treatment Volume	Depth	1.5 ft	Wet/Dry		Dry
	Maximum Pond Depth Below	Freeboard	5.0 ft	Assumed	d Control EL	79.00 ft

4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	453 ft
WTOP OF SLOPE	227 ft
Area	2.36 ac

LSITE	592 ft
WSITE	320 ft
Area	4.35 ac

GIS GIS	<u>Contour</u> 69 76	<u>Area</u> 96311 136316	<u>Storage</u> 0.0 814194.5	<u>Cumulative</u> 0.0 814194.5	<u>Notes</u> Soil 15
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Pond 26-3

0

Cumulative Ret (ac-ft) Below Freeboard 18.69

> Pond Area 3.1

#### POND SIZING CALCULATIONS I-75 Pond Siting

FPID: 452074-2-32-01 Pond Name: 27-1 Full **Typical Section Width** Date: 2/28/2024

#### PRE-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	13,88	ac
Pond Parcel Area	8.21	ас
Total Area	22.09	ac

**Basin Limits** 1993+00 1963+60 to

#### **CURVE NUMBER CALCUATION:**

LAND USE	TYPE A SO	ILS	TYPE & SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CN A	TOTAL AREA
Impvervious	5.94	98							582.06	5.9
Grass	7.94	39	1				1		309.68	7.9
Pond Site Pre Condition	8.21	39							320.19	8.2
									0.00	0.0
			1						0.00	0.0
		1							0.00	0.0
									0.00	0.0
			1						0.00	0.0
TOTALS	22.09	Î	0	1 1	0		0		1211.93	22.0
				3			WEIGH	TED CN		5.

#### Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

Runoff Depth (Q) = 9.9 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$ 

#### **POST-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	13.88 ac	
Pond Parcel Area	8.21 ac	
Total Area	22.09 ac	

Basin Limits	

to

1963+60

Potential Abstraction (S) =

#### **CURVE NUMBER CALCUATION:**

	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	ULA I	TOTALARDA
Impervious	12.55	98							1229.90	12.5
Grass	1.33	39							51.87	1.3
Pond Site (Pervious)	4.21	39							164.19	4.2
Pond Site (Impervious)	4.00	100							400.00	4.00
									0.00	0.0
									0.00	0.0
									0.00	0.0
									0.00	0.0
TOTALS	22.09		0		0		0		1845.96	22.0
							WEIGH	TED CN		84

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 14.7 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$

Potential Abstraction (S) = 2.0 S = (1000/CN) - 10

Estimated Runoff Volume = 27.15 ac-ft Peak Volume = A x Q

S = (1000/CN) - 10 Estimated Runoff Volume =

Peak Volume = A x Q

8.2

18.24

1993+00

ac-ft

Pond Name: 27-1 Date: 2/28/2024

#### POND SIZING ESTIMATION

## 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W Weighted C		13.88 ac 0.88		
Total Impervious	0.95	12.55 ac		
Total Pervious	0.20	1.33 ac		
Outstanding FL Water (Y/N)[multiply x 1.5]		N		
Required Treatment (Runoff from 1" Rainfall)		1.02 ac-ft	(whichever	is greater)
Required Treatment (1/2" over Area)		0.58 ac-ft	(	
		1.02 ac-ft		
2) Estimated Peak Attenuation Volume (EPAV):				
Existing Runoff Volume		18.24 ac-ft		
Proposed Runoff Volume		27.15 ac-ft		
EPAV = Proposed Runoff - Existing Runoff Volum	e	8.91 ac-ft		
Floodplain Com	pensation	1.71 ac-ft		
	STORAGE	10.62 ac-ft		
3) Estimated Pond Configuration:				
Maintenance Berm Width	20.0 ft	Freeboard		1.0 ft
L/W Ratio	2.0	Side Slopes	; (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry		Dry
Maximum Pond Depth Below Freeboard	4.0 ft	Assumed C	ontrol EL	66.00 ft

#### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	515 ft
WTOP OF SLOPE	257 ft
Area	3.04 ac

LSITE	666 ft
WSITE	357 ft
Area	5.45 ac

	<u>Contour</u>	<u>Area</u>	<u>Storage</u>	<u>Cumulative</u>	Notes
GIS	70	42150	0.0	0.0	Soil 15
GIS	75	87650	324500.0	324500.0	
GIS	78	132450	330150.0	654650.0	
			Cumulative I	Ret (ac-ft) Below	Freeboard
				15.03	

Pond 27-1

#### Pond Area 3.0

#### I-75 Pond Siting

#### FPID: 452074-2-32-01

Pond Name:	27-2	Full	Typical Section Width
Date:	2/28/2024		

#### PRE-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	13.88	ас
Pond Parcel Area	10.62	ac
Total Area	24.5	ас

 Basin Limits

 1963+60
 to
 1993+00

#### **CURVE NUMBER CALCUATION:**

	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CIT A	
	5.94	98							582.06	5.94
Impvervious		39							309.68	7.94
Grass	7.94								414.18	10.62
Pond Site Pre Condition	10.62	39						+ +	0.00	0.00
		$\left  \right $						++	0.00	0.00
									0.00	0.00
				+					0.00	0.00
									0.00	0.00
TOTALS	24.5		0		0		0	1 1	1305.92	24.5
TOTALS	24.5						WEIGH	TED CN		53

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

#### **Runoff Depth (Q) =** 9.6 in Q = $(P - 0.2S)^2/(P + 0.8S)$

## POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	13.88 ac
Pond Parcel Area	10.62 ac
Total Area	24.5 ac

Estimated Runoff Volume =	19.59
Peak Volume = A x Q	

S = (1000/CN) - 10

8.8

ac-ft

Potential Abstraction (S) =

Basin Limits 1963+60 to 1993+00

#### **CURVE NUMBER CALCUATION:**

	TYPE A SC	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CN'A	TOTALTAL
Impervious	12.55	98							1229.90	12.55
	1.33	39							51.87	1.33
Grass	6.62	39							258.18	6.62
Pond Site (Pervious)									400.00	4.00
Pond Site (Impervious)	4.00	100	_			+			0.00	0.00
		++							0.00	0.00
		++							0.00	0.00
		+-+							0.00	0.00
TOTALS	24.5	+	0		0		0		1939.95	24.5
TOTALS	2113						WEIGH	TED CN		79

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 14.1 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 2.6 S = (1000/CN) - 10

Estimated Runoff Volume = 28.81 ac-ft Peak Volume = A x Q

Pond Name: 27-2 Date: 2/28/2024

#### POND SIZING ESTIMATION

#### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		13.88 ac 0.88	
Weighted C	0.05		
Total Impervious	0.95	12.55 ac	
Total Pervious	0.20	1.33 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		1.02 ac-ft _	(whichever is greater)
Required Treatment (1/2" over Area)		0.58 ac-ft 」	(
		1.02 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		19.59 ac-ft	
Proposed Runoff Volume		28.81 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volume	2	9.21 ac-ft	
Floodplain Comp	ensation	1.71 ac-ft	
TOTALS	TORAGE	10.92 ac-ft	
3) Estimated Pond Configuration:			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slope	s (1:H) 4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	4.0 ft	Assumed	Control EL 66.00 ft

4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	522 ft
WTOP OF SLOPE	261 ft
Area	3.12 ac

LSITE	674 ft
WSITE	361 ft
Area	5.59 ac

GIS GIS GIS	<u>Contour</u> 73 78 81	<u>Area</u> 64520 93250 151230	Storage         Cumulative         Notes           0.0         0.0         Soil 15           394425.0         394425.0           366720.0         761145.0           Cumulative Ret (ac-ft) Below Freeboard
			Cumulative Ret (ac-ft) Below Freeboard
			17.47

Pond

<u>27-2</u>

# Pond Area 3.5 60 12.0 12.0

#### I-75 Pond Siting

#### FPID: 452074-2-32-01

	Po	ond Name:	27-3			Full	Typic	al Section Wi	idth
		Date:	2/28/	2024					
NOFF PAI	RAME	TERS							
13.88	ас					В	asin Lin	nits	
8.46	ас					1963+60	to	1993+00	
22.34	ас								
HON:									
TYPE A SOI		TYPE B SO		TYPE C SO		TYPE D SO	_	CN*A	TOTAL AREA
AREA (ft <sup>2</sup> )	CN	TYPE B SO AREA (ft <sup>2</sup> )	CN	TYPE C SO AREA (ft <sup>2</sup> )	ILS CN	TYPE D SO AREA (ft <sup>2</sup> )	LS CN		
AREA (ft²) 5.94	см 98						_	582.06	5.9
AREA (ft²) 5.94 7.94	CN 98 39						_	582.06 309.68	5.9 7.9
AREA (ft²) 5.94	см 98						_	582.06	5.9 7.9 8.4
AREA (ft²) 5.94 7.94	CN 98 39						_	582.06 309.68 329.94	5.9 7.9 8.4 0.0
AREA (ft²) 5.94 7.94	CN 98 39						_	582.06 309.68 329.94 0.00	5.9 7.9 8.4 0.0 0.0
AREA (ft²) 5.94 7.94	CN 98 39						_	582.06 309.68 329.94 0.00 0.00	5.9 7.9 8.4 0.0 0.0 0.0
AREA (ft²) 5.94 7.94	CN 98 39						_	582.06 309.68 329.94 0.00 0.00 0.00	TOTAL AREA 5.9 7.9 8.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0
	13.88 8.46	NOFF PARAME 13.88 ac 8.46 ac 22.34 ac	Date: NOFF PARAMETERS 13.88 ac 8.46 ac 22.34 ac	NOFF PARAMETERS 13.88 ac 8.46 ac 22.34 ac	Date: 2/28/2024 NOFF PARAMETERS 13.88 ac 8.46 ac 22.34 ac	Date: 2/28/2024 NOFF PARAMETERS 13.88 ac 8.46 ac 22.34 ac	Date: 2/28/2024 NOFF PARAMETERS 13:88 ac B 8.46 ac 1963+60 22:34 ac	Date:         2/28/2024           NOFF PARAMETERS         Basin Lin           13.88 ac         Basin Lin           8.46 ac         1963+60         to           22.34 ac         1963+60         to	Date:         2/28/2024           NOFF PARAMETERS         Basin Limits           13:88 ac         Basin Limits           8.46 ac         1963+60 to 1993+00           22.34 ac         1963+60 to 1993+00

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

#### **Runoff Depth (Q) =** 9.9 in Q = $(P - 0.2S)^2/(P + 0.8S)$

#### **POST-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	13.88	ас
Pond Parcel Area	8.46	ас
Total Area	22.34	ас

## Potential Abstraction (S) = 8.3 S = (1000/CN) - 10

Estimated Runoff Volume = 18.38 ac-ft Peak Volume = A x Q

Ba	Basin Limits						
1963+60	to	1993+00					

#### CURVE NUMBER CALCUATION:

	TYPE A SC	ILS	TYPE B SOI	LS	TYPE C SO	ILS	TYPE D SO	ILS	CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		TOTALAREA
Impervious	12.55	98							1229.90	12.55
Grass	1.33	39							51.87	1.33
Pond Site (Pervious)	4.46	39							173.94	4.46
Pond Site (Impervious)	4.00	100					1		400.00	4.00
			i l						0.00	0.00
									0.00	0.00
			i – 1						0.00	0.00
									0.00	0.00
TOTALS	22.34		0		0	Î I	0		1855.71	22.34
							WEIGH	TED CN		83

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 14.7 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 2.0 S = (1000/CN) - 10

Estimated Runoff Volume = 27.33 ac-ft Peak Volume = A x Q

Pond Name: 27-3 Date: 2/28/2024

#### POND SIZING ESTIMATION

#### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		13.88 ac	
Weighted C		0.88	
Total Impervious	0.95	12.55 ac	
Total Pervious	0.20	1.33 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		1.02 ac-ft ] (wh	ichever is greater)
Required Treatment (1/2" over Area)		0.58 ac-ft	10112107 10 0,
		1.02 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		18.38 ac-ft	
Proposed Runoff Volume		27.33 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volume	9	8.94 ac-ft	
Floodplain Comp	pensation	1.71 ac-ft	
TOTAL	STORAGE	10.65 ac-ft	
3) Estimated Pond Configuration:			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H	) 4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	4.0 ft	Assumed Contro	ol EL 67.00 ft

#### 4) Estimated Pond Dimensions Including Freeboard

Maximum Pond Depth Below Freeboard

LTOP OF SLOPE	516 ft
WTOP OF SLOPE	258 ft
Area	3.05 ac

# 5) Minimum Site Dimensions (Considering Maintenance Berm and 20% Factor of Safety)

LSITE	667 ft
WSITE	357 ft
Area	5.47 ac

	<u>Contour</u>	Area	Storage Cumulative Notes	
GIS	66	44350	0.0 0.0 Soil 15	
GIS	70	91245	271190.0 271190.0	
GIS	72	116650	207895.0 479085.0	
			Cumulative Ret (ac-ft) Below Freeboard	
			11.00	

<u>Pond</u> 27-3

Pond Area	
2.7	602527
	13.83212

#### I-75 Pond Siting

#### FPID: 452074-2-32-01

Pond Name:	28-1	Full	Typical Section Width
Date:	2/28/2024		

#### PRE-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	16.08	ас
Pond Parcel Area	10.63	ас
Total Area	26.71	ас

**Basin Limits** 1993+00 2016+20 to

#### **CURVE NUMBER CALCUATION:**

	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		TOTALPHILDT
Impvervious	4.69	98							459.31	4.69
	11.39	39							444.33	11.39
Grass	10.63	39							414.57	10.63
Pond Site Pre Condition	10.05	32							0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	26.71	+ +	0		0		0		1318.22	26.71
TUTALS	20.71		, , , , , , , , , , , , , , , , , , ,				WEIGH	TED CN		49

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 8.8 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$

#### POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	16.08 ft <sup>2</sup>
Pond Parcel Area	10.63 ft <sup>2</sup>
Total Area	26.71 ft <sup>2</sup>

#### Estimated Runoff Volume = 19.54 Peak Volume = A x Q

S = (1000/CN) - 10

10.3

ac-ft

Potential Abstraction (S) =

**Basin Limits** 2016+20 1993+00 to

#### **CURVE NUMBER CALCUATION:**

LAND USE	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	R	
Impervious	14.38	98							1409.26	14.38
	1.70	39							66.29	1.70
Grass		_						1	141.57	3.63
Pond Site (Pervious)	3.63	39							700.00	7.00
Pond Site (Impervious)	7.00	100				+				0.00
									0.00	
									0.00	0.00
									0.00	0.00
		+ +					[]		0.00	0.00
TOTALS	26.71		0		0		0		2317.12	26.71
IUIAD	20.74					÷	WEIGH	TED CN		87

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 15.2 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 1.5 S = (1000/CN) - 10

ac-ft Estimated Runoff Volume = 33.82 Peak Volume = A x Q

Pond Name: 28-1 Date: 2/28/2024

#### POND SIZING ESTIMATION

#### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W			16.08 ac	
Weighted C			0.87	
	<b>Total Impervious</b>	0.95	14.38 ac	
	Total Pervious	0.20	1.70 ac	
Outstanding FL Water (Y/N)[mi	ultiply x 1.5]		N	
Required Treatment (Runoff fro	om 1" Rainfall)		_ 1.17 ac-ft	(whichever is greater)
Required Treatment (1/2" over	Area)		0.67 ac-ft 了	(whichever is greater)
			1.17 ac-ft	
2) Estimated Peak Attenuation Volume	e (EPAV):			
Existing Runoff Volume			19.54 ac-ft	
Proposed Runoff Volume			33.82 ac-ft	
EPAV = Proposed Runoff - Exist	EPAV = Proposed Runoff - Existing Runoff Volume		14.28 ac-ft	
	Floodplain Comp	ensation	2.23 ac-ft	
	TOTAL	STORAGE	16.51 ac-ft	
3) Estimated Pond Configuration:	TOTAL	STORAGE	10.31 dC-1	
Maintenance Berm Width		20.0 ft	Freeboard	1.0 ft
L/W Ratio		2.0	Side Slope	s (1:H) 4.0
Maximum Treatment Volume I	Depth	1.5 ft	t Wet/Dry	Dry
Maximum Pond Depth Below F	reeboard	4.0 ft	Assumed (	Control EL 70.00 ft

#### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	636 ft
WTOP OF SLOPE	318 ft
Area	4.64 ac

LSITE	811 ft
WSITE	430 ft
Area	8.00 ac

	Contour	<u>Area</u>	Storage Cumulative Notes	
GIS	75	42350	0.0 0.0 Soil 15	
GIS	79	86750	258200.0 258200.0	
GIS	83	118750	411000.0 669200.0	
			Cumulative Ret (ac-ft) Below Freeboard	
			15.36	

Pond 28-1

Pond Area	
2.7	602527
	40.00040

# I-75 Pond Siting

### FPID: 452074-2-32-01

	P	ond Name: 28-2 Date: 2/28/	2024	Full	Туріс	al Section W	/idth
PRE-DEVELOPMENT R	UNOFF PARAME	TERS					
Onsite Basin Area	16.08 ac			В	lasin Lim	nits	_
Pond Parcel Area	9.91 ac			1993+00	to	2016+20	
Total Area	25.99 ac						
CURVE NUMBER CALCU	ATION:						
LAND USE	TYPE A SOILS	TYPE B SOILS	TYPE C SOILS	TYPE D SO	ns	CN*A	TOTA
		2					1

									CN*A I	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN		TOTALANLA						
Impvervious	4.69	98							459.31	4.69
Grass	11.39	39							444.33	11.39
Pond Site Pre Condition	9.91	39							386.49	9.91
									0.00	0.00
									0.00	0.00
									0.00	0.00
							[		0.00	0.00
									0.00	0.00
TOTALS	25.99		0		0		0		1290.14	25.99
		ð					WEIGH	TED CN		50

#### Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

#### Runoff Depth (Q) = 8.8 in $Q = (P - 0.2S)^2 / (P + 0.8S)$

## **POST-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	16.08 ft <sup>2</sup>
Pond Parcel Area	9.91 ft <sup>2</sup>
Total Area	25.99 ft <sup>2</sup>

S = (1000/CN) - 10	
Estimated Runoff Volume =	19.15

10.1

ac-ft

Peak Volume = A x Q

Potential Abstraction (S) =

Basin Limits						
1993+00	to	2016+20				

### **CURVE NUMBER CALCUATION:**

	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	GLA	TOTAL AREA
Impervious	14.38	98							1409.26	14.38
Grass	1.70	39							66.29	1.70
Pond Site (Pervious)	3.01	39					[]		117.39	3.01
Pond Site (Impervious)	6.90	100							690.00	6.90
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	25.99		0		0	İ	0		2282.94	25.99
							WEIGH	TED CN		88

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 15.3 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$

Potential Abstraction (S) = 1.4 S = (1000/CN) - 10

Estimated Runoff Volume = 33.23 ac-ft Peak Volume = A x Q

Pond Name: 28-2 Date: 2/28/2024

### POND SIZING ESTIMATION

٢

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

		16.08 ac	
Area Inside R/W			
Weighted C		0.87	
Total Impervious	0.95	14.38 ac	
Total Pervious	0.20	1.70 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		1.17 ac-ft ] (utished	in the superstant
Required Treatment (1/2" over Area)		0.67 ac-ft	er is greater)
Required Treatment (1/2 - over Area)		1.17 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		19.15 ac-ft	
Proposed Runoff Volume		33.23 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volume	e	14.09 ac-ft	
Floodplain Comp	pensation	2.23 ac-ft	
TOTAL	STORAGE	16.32 ac-ft	
3) Estimated Pond Configuration:			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
-	1.5 ft	Wet/Dry	Dry
Maximum Treatment Volume Depth	2.00		70.00

4) Estimated Pond Dimensions Including Freeboard

Maximum Pond Depth Below Freeboard

LTOP OF SLOPE	632 ft
WTOP OF SLOPE	316 ft
Area	4.59 ac

# 5) Minimum Site Dimensions (Considering Maintenance Berm and 20% Factor of Safety)

LSITE	807 ft
WSITE	427 ft
Area	7.92 ac

4.0 ft

70.00 ft

Assumed Control EL

	<u>Contour</u>	<u>Area</u>	Storage Cumulative Notes	
GIS	68	73340	0.0 0.0 Soil 15	
GIS	72	107650	361980.0 361980.0	
GIS	75	126640	351435.0 713415.0	
			Cumulative Ret (ac-ft) Below Freeboard	
			16.38	

Pond

<u>28-2</u>

Pond Area	
2.9	602527
	40.00040

# I-75 Pond Siting

### FPID: 452074-2-32-01

Pond Name:	28-3	Full	<b>Typical Section Width</b>
Date:	2/28/2024		

### PRE-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	15.08	ас
Pond Parcel Area	9.35	ac
Total Area	25.43	ac

**Basin Limits** 1993+00 2016+20 to

# CURVE NUMBER CALCUATION:

	TYPE A SO	ILS	TYPE & SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CIT A	
Lasan ya mila ya	4.69	98							459.31	4.69
Impvervious	11.39	39		1					444.33	11.39
Grass									364.65	9.35
Pond Site Pre Condition	9.35	39		+ +		$\left  \right $		1-1	0.00	0.00
								1	0.00	0.00
									0.00	0.00
								1 1	0.00	0.00
				1-1					0.00	0.00
TOTALS	25.43		0		0		0		1268.30	25.43
TOTALS	23.45	1					WEIGH	TED CN		50

#### Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

#### Runoff Depth (Q) = 8.9 in $Q = (P - 0.2S)^2/(P + 0.8S)$

### POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	16.08 ft <sup>2</sup>
Pond Parcel Area	9.35 ft <sup>2</sup>
Total Area	25.43 ft <sup>2</sup>

#### S = (1000/CN) - 10Estimated Runoff Volume = 18.84

Peak Volume = A x Q

Potential Abstraction (S) =

**Basin Limits** 1993+00

2016+20 to

10.1

ac-ft

### **CURVE NUMBER CALCUATION:**

	TYPE A SC	TYPE A SOILS TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA	
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		
	14.38	98							1409.26	14.38
Impervious									66.29	1.70
Grass	1.70	39					_	++	97.50	2.50
Pond Site (Pervious)	2.50	39								6.85
Pond Site (Impervious)	6.85	100							685.00	
									0.00	0.00
									0.00	0.00
		+							0.00	0.00
									0.00	0.00
TOTALS	25.43	+	0		0		0		2258.05	25.43
TOTALS	20.40			1	WEIGHTED CN				89	

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 15.5 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 1.3 S = (1000/CN) - 10

Estimated Runoff Volume = 32.79 ac-ft Peak Volume = A x Q

Pond Name: 28-3 Date: 2/28/2024

### POND SIZING ESTIMATION

### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		16.08 ac	
Weighted C		0.87	
Total Impe		14.38 ac	
Total Pe	rvious 0.20	1.70 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfa	all)	1.17 ac-ft _	(whichever is greater)
Required Treatment (1/2" over Area)		0.67 ac-ft 了	(minenever is greater)
		1.17 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		18.84 ac-ft	
Proposed Runoff Volume		32.79 ac-ft	
EPAV = Proposed Runoff - Existing Runoff \	/olume	13.95 ac-ft	
Floodplain	Compensation	2.23 ac-ft	
т	OTAL STORAGE	16.18 ac-ft	
3) Estimated Pond Configuration:			
Maintenance Berm Width	20.0 f	t Freeboard	1.0 ft
L/W Ratio	2.0	Side Slope	s (1:H) 4.0
Maximum Treatment Volume Depth	1.5 f	t Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	4.0 f	t Assumed (	Control EL 70.00 ft

4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	630 ft
WTOP OF SLOPE	315 ft
Area	4.55 ac

LSITE	804 ft
WSITE	426 ft
Area	7.86 ac

	<u>Contour</u>	<u>Area</u>	Storage Cumulative Notes	
GIS	68	66550	0.0 0.0 Soil 15	
GIS	72	98760	330620.0 330620.0	
GIS	76	115660	428840.0 759460.0	
•			Cumulative Ret (ac-ft) Below Freeboard	
			17.43	

Pond 28-3

Pond Area	
2.7	602527
	13.83212

# POND SIZING CALCULATIONS I-75 Pond Siting

# FPID: 452074-2-32-01

Pond Name:	29-1	Full	Typical Section Width
Date:	2/28/2024		

## PRE-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	18.36	ас
Pond Parcel Area	6.13	ас
Total Area	24.49	ас

 Basin Limits

 2016+20
 to
 2043+00

### **CURVE NUMBER CALCUATION:**

	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UNA	IOTAL AREA
Impvervious	5.41	98				1			530.59	5.41
Grass	12.95	39		1					504.89	12.95
Pond Site Pre Condition	6.13	39				1			239.07	6.13
						1			0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
						i —			0.00	0.00
TOTALS	24.49	İ	0		0		0		1274.54	24.49
							WEIGH	TED CN		52

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

**Runoff Depth (Q) =** 9.3 in  $Q = (P - 0.2S)^2/(P + 0.8S)$ 

# **POST-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	18.36	ас
Pond Parcel Area	6.13	ас
Total Area	24.49	ac

Potential Abstraction (S) = 9.2 S = (1000/CN) - 10

Estimated Runoff Volume = 19.06 ac-ft Peak Volume = A x Q

Basin Limits
2016+20 to 2043+00

#### **CURVE NUMBER CALCUATION:**

LAND USE	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UN-A	TOTALAREA
Impervious	16.61	98							1627.93	16.63
Grass	1.75	39							68.19	1.75
Pond Site (Pervious)	1.88	39							73.32	1.88
Pond Site (Impervious)	4.25	100							425.00	4.25
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	24.49	1	0		0		0		2194.44	24.49
							WEIGH	TED CN		90

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 15.6 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 1.2 S = (1000/CN) - 10

Estimated Runoff Volume = 31.80 ac-ft Peak Volume = A x Q

Pond Name: 29-1 Date: 2/28/2024

### POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

	Area Inside R/W Weighted C Total Impervious Total Pervious	0.95 0.20	18.36 ac 0.88 16.61 ac 1.75 ac	
	Outstanding FL Water (Y/N)[multiply x 1.5] Required Treatment (Runoff from 1" Rainfall)		N 1.34 ac-ft	
	Required Treatment (1/2" over Area)		0.77 ac-ft	(whichever is greater)
2) Estir	nated Peak Attenuation Volume (EPAV):			
	Existing Runoff Volume		19.06 ac-ft	
	Proposed Runoff Volume		31.80 ac-ft	
	EPAV = Proposed Runoff - Existing Runoff Volume	e	12.74 ac-ft	
	Floodplain Comp	pensation	2.15 ac-ft	
	TOTAL	STORAGE	14.89 ac-ft	
3) Estir	nated Pond Configuration:			
	Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
	L/W Ratio	2.0	Side Slopes	(1:H) 4.0
	Maximum Treatment Volume Depth	1.5 ft	: Wet/Dry	Dry
	Maximum Pond Depth Below Freeboard	6.0 ft	: Assumed C	ontrol EL 80.00 ft

# 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	506 ft
WTOP OF SLOPE	253 ft
Area	2.94 ac

LSITE	656 ft
WSITE	352 ft
Area	5.30 ac

	<u>Contour</u>	<u>Area</u>	Storage Cumulative Notes
GIS	73	55650	0.0 0.0 Soil 15
GIS	76	92350	222000.0 222000.0
GIS	80	124340	433380.0 655380.0
			Cumulative Ret (ac-ft) Below Freeboard
			15.05

Pond Area	
2.9	602527
	10.00010

13.83212

# Pond 29-1

# I-75 Pond Siting

## FPID: 452074-2-32-01

Pond Name:	29-2	Full	Typical Section Width
Date:	2/28/2024		

# PRE-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	18.36	ас
Pond Parcel Area	6.74	ac
Total Area	25.1	ас

 Basin Limits

 2016+20
 to
 2043+00

### CURVE NUMBER CALCUATION:

	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )		AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	di A	
terminut	5.41	98		t t					530.59	5.41
Impvervious	12.95	39		1-1					504.89	12.95
Grass		39							262.86	6.74
Pond Site Pre Condition	6.74	39							0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	25.1	-+	0		0		0	1 1	1298.33	25.1
TOTALS	23.1		0				WEIGH	TED CN		52

#### Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

**Runoff Depth (Q) =** 9.3 in  $Q = (P - 0.2S)^2/(P + 0.8S)$ 

# POST-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	18.36	ас	
Pond Parcel Area	6.74	ас	
Total Area	25.1	ас	

# S = (1000/CN) - 10 Estimated Runoff Volume = 19.40

Potential Abstraction (S) =

Peak Volume = A x Q

9.3

ac-ft

Basin Limits						
2016+20	to	2043+00				

### **CURVE NUMBER CALCUATION:**

	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	UT A	TOTAL
Impervious	16.61	98				T I			1627.93	16.61
	1.75	39							68.19	1.75
Grass	2.24	39							87.36	2.24
Pond Site (Pervious)	And the Real Property lies of the Property lies of								450.00	4.50
Pond Site (Impervious)	4.50	100				+			0.00	0.00
		+		++					0.00	0.00
		+							0.00	0.00
									0.00	0.00
TOTALS	25.1		0		0		0		2233.48	25.1
101765	2.5.2						WEIGH	TED CN		89

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 15.5 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (\$) = 1.2 S = (1000/CN) - 10

Estimated Runoff Volume = 32.42 ac-ft Peak Volume = A x Q

Pond Name: 29-2 Date: 2/28/2024

### POND SIZING ESTIMATION

### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		18.36 ac	
Weighted C		0.88	
Total Impervious	0.95	16.61 ac	
Total Pervious	0.20	1.75 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		ן 1.34 ac-ft	(whichever is greater)
Required Treatment (1/2" over Area)		0.77 ac-ft 了	(whichever is greater)
		1.34 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		19.40 ac-ft	
Proposed Runoff Volume		32.42 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volum	e	13.02 ac-ft	
Floodplain Com	pensation	2.15 ac-ft	
TOTAL	STORAGE	15.17 ac-ft	
3) Estimated Pond Configuration:			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slope	es (1:H) 4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	6.0 ft	Assumed	Control EL 80.00 ft
Almost in the state of the trade the first second			

4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	511 ft
WTOP OF SLOPE	255 ft
Area	3.00 ac

LSITE	661 ft
WSITE	355 ft
Area	5.38 ac

	<u>Contour</u>	<u>Area</u>	<u>Storage</u>	<u>Cumulative</u>	<u>Notes</u>				
GIS	85	62450	0.0	0.0	Soil 15				
GIS	90	104450	417250.0	417250.0					
GIS	93	118980	335145.0	752395.0					
		Cumulative Ret (ac-ft) Below Freeboard							
				17.27					

<u>29-2</u>

Pond

Pond Area	
2.7	

# I-75 Pond Siting

### FPID: 452074-2-32-01

		_						<b>.</b>		t.a.l.
		P	ond Name:				Full	I ypica	al Section W	lath
			Date:	2/28/	2024					
PRE-DEVELOPMENT RU	JNOFF PA	RAMI	ETERS							
Onsite Basin Area	18.36	ас					В	asin Lim	its	
Pond Parcel Area	6.65	ас					2016+20	to	2043+00	
Total Area	25.01	ас								
CURVE NUMBER CALCUA	TION:									
	TYPE A SO	ILS	TYPE B 50	ILS	TYPE C SOI	LS	TYPE D SO	ILS		
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CN*A	TOTAL AREA
Impvervious	5.41	98							530.59	5.4
Grass	12.95	39							504.89	12.9
Pond Site Pre Condition	6.65	39							259.35	6.6
									0.00	0.0
						-			0.00	0.0
									0.00	0.0
								$ \rightarrow $	0.00	0.0
TOTALS	25.01		0		0		0		1294.82	25.0
TOTALS	25.01				0		WEIGH	TED CN	1254.02	5
Rainfall Depth for 100	<b>yr-240hr (P) =</b> NOAA Atlas 14		in			Pote	n <b>tial Abstracti</b> S = (1000/0		9.3	
	<b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S)		in			Estima	a <b>ted Runoff Vo</b> Peak Volume		19.35	ac-ft
POST-DEVELOPMENT	RUNOFF P	ARAN	<b>IETERS</b>							
Onsite Basin Area	18.36	ас					6	asin Lim	nits	
Pond Parcel Area	6.65	ас					2016+20	to	2043+00	
Total Area	25.01	ас								
CURVE NUMBER CALCUA	ATION:									
LAND USE	TYPE A SO	ILS	TYPE B SO	ILS	TYPE C SO	-	TYPE D SO		CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		
mnervious	16.61	98						I 1	1627.93	16.

	TYPE A SOILS TYPE B SOILS		TYPECSOILS		ITPE D SUILS		CN*A	TOTAL AREA		
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CIT A	TOTALANEA
Impervious	16.61	98							1627.93	16.61
Grass	1.75	39							68.19	1.75
Pond Site (Pervious)	1.75	39							68.25	1.75
Pond Site (Impervious)	4.90	100							490.00	4.90
									0.00	0.00
		Î Î							0.00	0.00
									0.00	0.00
				1 1					0.00	0.00
TOTALS	25.01		0	1	0		0		2254.37	25.01
							WEIGH	TED CN		90

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 15.7 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 1.1 S = (1000/CN) - 10

Estimated Runoff Volume = 32.63 ac-ft Peak Volume = A x Q

Pond Name: 29-3 Date: 2/28/2024

### POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W Weighted C Total Impervious Outstanding FL Water (Y/N)[multiply x 1.5] Required Treatment (Runoff from 1" Rainfall) Required Treatment (1/2" over Area)	0.95 0.20	18.36 ac 0.88 16.61 ac 1.75 ac N 1.34 ac-ft 0.77 ac-ft <b>1.34 ac-ft</b> (whiche	ver is greater)
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume Proposed Runoff Volume EPAV = Proposed Runoff - Existing Runoff Volume		19.35 ac-ft 32.63 ac-ft <b>13.28 ac-ft</b>	
Floodplain Compe	nsation	2.15 ac-ft	
TOTAL ST 3) Estimated Pond Configuration:	ORAGE	15.43 ac-ft	
Maintenance Berm Width L/W Ratio Maximum Treatment Volume Depth Maximum Pond Depth Below Freeboard	20.0 ft 2.0 1.5 ft 6.0 ft	Freeboard Side Slopes (1:H) Wet/Dry Assumed Control EL	1.0 ft 4.0 Dry 80.00 ft

# 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	515 ft
WTOP OF SLOPE	257 ft
Area	3.04 ac

LSITE	666 ft
WSITE	357 ft
Area	5.46 ac

	<u>Contour</u>	<u>Area</u>	Storage Cumulative Notes
GIS	68	42250	0.0 0.0 Soil 15
GIS	73	85670	319800.0 319800.0
GIS	77	113200	397740.0 717540.0
			Cumulative Ret (ac-ft) Below Freeboard
			16.47

Pond

<u>29-3</u>

Pond Area	
2.6	602527
	13.83212

# I-75 Pond Siting

#### FPID: 452074-2-32-01

Basin Name:	Basin 30-1A	Half	<b>Typical Section Width</b>
Date:	2/28/2024		

### PRE-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	20.55 ac
Pond Parcel Area	6.77 ac
Total Area	27.32 ac

 Basin Limits

 2043+00
 to
 2091+00

### **CURVE NUMBER CALCUATION:**

	TYPE A SO	ILS	TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	M. A	TOTALTURA
Immunique	4.85	98							475.15	4.85
Impvervious	15.70	39	_						612.36	15.70
Grass		39							264.03	6.77
Pond Site Pre Condition	6.77	- 59							0.00	0.00
		$ \rightarrow $							0.00	0.00
									0.00	0.00
									0.00	0.00
		+							0.00	0.00
TOTALS	27.32	++	0		0		0		1351.54	27.32
TOTALS	27.52			L			WEIGH	TED CN		49

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

#### **Runoff Depth (Q) =** 8.8 in $Q = (P - 0.2S)^2/(P + 0.8S)$

### **POST-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	20.55 ac
Pond Parcel Area	6.77 ac
Total Area	27.32 ac

Peak Volume = A x Q	

Potential Abstraction (S) =

Estimated Runoff Volume =

S = (1000/CN) - 10

#### **CURVE NUMBER CALCUATION:**

	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	di A	
Impervious	14.88	98							1457.85	14.88
	5.67	39							221.28	5.67
Grass	2.27	39							88.53	2.27
Pond Site (Pervious)		and the second division of the second divisio							450.00	4.50
Pond Site (Impervious)	4.50	100						++	0.00	0.00
		+				+			0.00	0.00
		+							0.00	0.00
		+							0.00	0.00
TOTALS	27.32		0		0		0		2217.67	27.32
TOTAL3	21.32			4			WEIGH	TED CN		81

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q)** = 14.4 in Q =  $(P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 2.3 S = (1000/CN) - 10

Estimated Runoff Volume = 32.79 ac-ft Peak Volume = A x Q

 Basin Limits

 2043+00
 to
 2091+00

10.2

20.04

ac-ft

Basin Name: Basin 30-1A Date: 2/28/2024

### POND SIZING ESTIMATION

### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		20.55 ac				
Weighted C		0.74				
Total Impervious	0.95	14.88 ac				
Total Pervious		5.67 ac				
Outstanding FL Water (Y/N)[multiply x 1.5]		N				
Required Treatment (Runoff from 1" Rainfall)		1.27 ac-ft	or is greater)			
Required Treatment (1/2" over Area)		0.86 ac-ft	er is greater)			
		1.27 ac-ft				
2) Estimated Peak Attenuation Volume (EPAV):						
Existing Runoff Volume		20.04 ac-ft				
Proposed Runoff Volume	-					
EPAV = Proposed Runoff - Existing Runoff Volum						
TOTAL	STORAGE	14.02 ac-ft				
3) Estimated Pond Configuration:						
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft			
L/W Ratio	2.0	Side Slopes (1:H)	4.0			
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry			
Maximum Pond Depth Below Freeboard	7.0 ft	Assumed Control EL	ft			
4) Estimated Pond Dimensions Including Freeboard						
	462 ft					

LTOP OF SLOPE	462 ft
WTOP OF SLOPE	231 ft
Area	2.45 ac

LSITE	603 ft
WSITE	325 ft
Area	4.50 ac

Pond 30-1B

	Contour	<u>Area</u>	Storage Cumulative	<u>Notes</u>							
GIS	71	46230	0.0 0.0	Soil 15							
GIS	76	86440	331675.0 331675.0								
GIS	79	104760	286800.0 618475.0								
			Cumulative Ret (ac-ft) Below	Cumulative Ret (ac-ft) Below Freeboard							
			14.20								

Pond Area 2.4

# I-75 Pond Siting

## FPID: 452074-2-32-01



## PRE-DEVELOPMENT RUNOFF PARAMETERS

Onsite Basin Area	12.51	ас
Pond Parcel Area	4.87	ac
Total Area	17.38	ас

**Basin Limits** 2043+00 2091+00 to

#### **CURVE NUMBER CALCUATION:**

	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CN-A	TOTAL AREA
Impvervious	4.85	98							475.15	4.8
Grass	7.66	39	1						298.80	7.60
Pond Site Pre Condition	4.87	39							189.93	4.8
			1						0.00	0.00
			· · · · · · · · · · · · · · · · · · ·						0.00	0.00
									0.00	0.00
									0.00	0.00
							0		0.00	0.00
TOTALS	17.38		0		0		0		963.88	17.38
							WEIGH	TED CN		55

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

#### Runoff Depth (Q) = 10.0 in $Q = (P - 0.2S)^2 / (P + 0.8S)$

# **POST-DEVELOPMENT RUNOFF PARAMETERS**

Onsite Basin Area	12.51 ac	
Pond Parcel Area	4.87 ac	
Total Area	17.38 ac	

Estimated Runoff Volume =	14.52
Peak Volume = A x Q	

S = (1000/CN) - 10

Potential Abstraction (S) =

#### 2091+00 2043+00 to

8.0

ac-ft

### **CURVE NUMBER CALCUATION:**

	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CITA	TUTALAREA
Impervious	11.25	98	i						1102.50	11.25
Grass	1.26	39							49.14	1.26
Pond Site (Pervious)	1.42	39					1		55.38	1.42
Pond Site (Impervious)	3.45	100	(						345.00	3.45
									0.00	0.00
				1 1					0.00	0.00
									0.00	0.00
									0.00	0.00
TOTALS	17.38	1 1	0	1 1	0		0		1552.02	17.38
							WEIGH	TED CN		89

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 15.5 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 1.2 S = (1000/CN) - 10

Estimated Runoff Volume = 22.51 ac-ft Peak Volume = A x Q

**Basin Limits** 

# Basin Name: Basin 30-1B Date: 2/28/2024

### POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

		10 51	
Area Inside R/W		12.51 ac	
Weighted C		0.87	
Total Impervious	0.95	11.25 ac	
Total Pervious	0.20	1.26 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		0.91 ac-ft (whiche	ver is greater)
Required Treatment (1/2" over Area)		0.52 ac-ft	er is greatery
		0.91 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		14.52 ac-ft	
Proposed Runoff Volume		22.51 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volum	e	7.99 ac-ft	
EFAV - Hoposed Humon - Existing Rate of Film			
TOTAL	STORAGE	8.90 ac-ft	
3) Estimated Pond Configuration:			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
	2.0	Side Slopes (1:H)	4.0
L/W Ratio	1.5 ft	Wet/Dry	Dry
Maximum Treatment Volume Depth	7.0 ft	Assumed Control EL	ft
Maximum Pond Depth Below Freeboard	2.00	Assumed control ee	
4) Estimated Pond Dimensions Including Freeboard			
LTOP OF SLOPE	376 ft		

# 5) Minimum Site Dimensions (Considering Maintenance Berm and 20% Factor of Safety)

LSITE	499 ft
WSITE	273 ft
Area	3.13 ac

Area 1.62 ac

WTOP OF SLOPE 188 ft

	Pond	<u>30-1B</u>						
	Contour	Area	Storage Cumulative Notes					
GIS	68	31200	0.0 0.0 Soil 15					
GIS	73	52330	208825.0 208825.0					
GIS	76	71990	186480.0 395305.0					
	Cumulative Ret (ac-ft) Below Freeboard							
			9.07					

Pond Area 1.7

## I-75 Pond Siting

			FPI	): <b>4520</b>	74-2-32-01					
		P	ond Name Date	30-2 2/28/	/2024		Full	Туріса	al Section Wi	dth
PRE-DEVELOPMENT R	JNOFF PAI	RAME	ETERS							
Onsite Basin Area	33.06	ас					E	Basin Lim	its	
Pond Parcel Area	5.00	ac					2043+00	to	2091+00	
Total Area	38.06	ac								
CURVE NUMBER CALCUA	TION:									
	TYPE A SOI	LS	TYPE B SO	ILS	TYPE C SC	DILS	TYPE D SC	ILS	CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		
Impvervious	9.70	98							950.30	9.70
Grass	23.36	39						_ ∤	911.16	23.36
Pond Site Pre Condition	5.00	39							195.00	5.00
						-		++	0.00	0.00
				-					0.00	0.00
		<u> </u>				+			0.00	0.00
						+			0.00	0.00
TOTALS	38.06		0	-	0	1	0		2056.46	38.06
TOTAL	50.00						WEIGH	TED CN		54
Rainfall Depth for 100	<b>iyr-240hr (P) =</b> NOAA Atlas 14	16.9	in			Poter	ntial Abstracti S = (1000/0	• •	8.5	
	<b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S)	9.7	in			Estima	t <b>ed Runoff Vo</b> Peak Volume		30.91 a	ac-ft
POST-DEVELOPMENT	RUNOFF P	ARAN	<b>1ETERS</b>							
Onsite Basin Area	33.06	ac					B	lasin Lim	its	
Pond Parcel Area	5.00	ас					2043+00	to	2091+00	
Total Area	38.06	ас								

### **CURVE NUMBER CALCUATION:**

	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		TOTALAREA
Impervious	29.75	98		İ					2915.70	29.75
Grass	3.31	39							129.01	3.31
Pond Site (Pervious)	1.30	39							50.70	1.30
Pond Site (Impervious)	3.70	100							370.00	3.70
rond site (impervices)									0.00	0.00
									0.00	0.00
		++							0.00	0.00
		+ +							0.00	0.00
TOTALS	38.06	+	0		0		0		3465.41	38.06
101/100	00.00	1		· · · · ·		de anti-	WEIGH	TED CN		91

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 15.8 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 1.0 S = (1000/CN) - 10

Estimated Runoff Volume = 50.03 ac-ft Peak Volume = A x Q

### Pond Name: 30-2 Date: 2/28/2024

# POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		33.06 ac	
Weighted C		0.87	
Total Impervious	0.95	29.75 ac	
Total Pervious	0.20	3.31 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		2.41 ac-ft (which	ever is greater)
Required Treatment (1/2" over Area)		1.38 ac-ft	ver is greatery
		2.41 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		30.91 ac-ft	
Proposed Runoff Volume		50.03 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volum	e	19.13 ac-ft	
Floodplain Com	pensation	5.19 ac-ft	
TOTAL	STORAGE	21.54 ac-ft	
3) Estimated Pond Configuration:			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	4.0 ft	Assumed Control EL	ft

### 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	723 ft
WTOP OF SLOPE	361 ft
Area	6.00 ac

LSITE	916 ft
WSITE	482 ft
Area	10.13 ac

	Pond	<u> 30-2</u>			
	<u>Contour</u>	<u>Area</u>	<u>Storage</u>	Cumulative	<u>Notes</u>
GIS	69	56230	0.0	0.0	Soil 15
GIS	74	111890	420300.0	420300.0	
GIS	78	149340	522460.0	942760.0	
			Cumulative I	Ret (ac-ft) Below	w Freeboard
				21.64	
				Pond Area	

3.4

					d Siting 74-2-32-01					
		Pc	ond Name:	30-3			Full	Туріс	al Section Wi	idth
			Date:	2/28/	2024					
PRE-DEVELOPMENT RU	INOFF PAF	AME	TERS							
Onsite Basin Area	33.06	ас					Ba	asin Lim	nits	
Pond Parcel Area	10.34	ас					2043+00	to	2091+00	
Total Area	43.4									
CURVE NUMBER CALCUA	TION:									
	TYPE A SOIL	s	TYPE B SOIL	s	TYPE C SOIL	LS	TYPE D SOU	us	CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		
mpvervious	9.70	98							950.30	9.70
Grass	23.36	39							911.16 403.26	23.36 10.34
Pond Site Pre Condition	10,34	39		-					403.26	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
									0.00	0.00
				T -			A		2264.72	43.4
TOTALS	43.4		0		0		0		2204.72	the second second second second second second second second second second second second second second second se
TOTALS	43.4		0		0		0 WEIGHT	TED CN	2204.72	43.4
Rainfall Depth for 100		16.9			0	Poter		on (S) =	9.2	the second second second second second second second second second second second second second second second se
Rainfall Depth for 100 N Runot	yr-240hr (P) =		in		0		WEIGHT	on (S) = :N) - 10 lume =	9.2	the second second second second second second second second second second second second second second second se
Rainfall Depth for 100 N Runot	<b>yr-240hr (P) =</b> IOAA Atlas 14 <b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S)	9.4	in		0		WEIGHT ntial Abstractio S = (1000/C nted Runoff Vo	on (S) = :N) - 10 lume =	9.2	52
Rainfall Depth for 100 N Runo Q = (P - 0.2	<b>yr-240hr (P) =</b> IOAA Atlas 14 <b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S)	9.4 <b>\RAM</b>	in		0		WEIGHT ntial Abstractio S = (1000/C nted Runoff Vo Peak Volume =	on (S) = :N) - 10 lume =	9.2 33.89	52
Rainfall Depth for 100 N Runod Q = (P - 0.2 POST-DEVELOPMENT F	<b>yr-240hr (P) =</b> IOAA Atlas 14 <b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF PA</b>	9.4 ARAM ac	in		0		WEIGHT ntial Abstractio S = (1000/C nted Runoff Vo Peak Volume =	on (S) = :N) - 10 lume = = A x Q	9.2 33.89	52
Rainfall Depth for 100 N Runod Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area	yr-240hr (P) = IOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF PA 33.06	9.4 ARAM ac ac	in		0		WEIGHT ntial Abstractio S = (1000/C nted Runoff Vol Peak Volume = Ba	on (S) = :N) - 10 lume = = A x Q asin Lin	9.2 33.89 nits	52
Rainfall Depth for 100 N Runoi Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area	yr-240hr (P) = IOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF PA 33.06 10.34 43.4	9.4 ARAM ac ac	in		0		WEIGHT ntial Abstractio S = (1000/C nted Runoff Vol Peak Volume = Ba	on (S) = :N) - 10 lume = = A x Q asin Lin	9.2 33.89 nits	52
Rainfall Depth for 100 N Runoi Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA	yr-240hr (P) = IOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF PA 33.06 10.34 43.4	9.4 ARAM ac ac ac	in	5	0 TYPE C SOII	Estima	WEIGHT ntial Abstractio S = (1000/C nted Runoff Vol Peak Volume = Ba	on (S) = :N) - 10 lume = = A x Q asin Lin to	9.2 33.89 nits 2091+00	52 ac-ft
Rainfall Depth for 100 N Runoi Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area	yr-240hr (P) = IOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF PA 33.06 10.34 43.4	9.4 ARAM ac ac ac ac	in IETERS	LS CN		Estima	WEIGHT ntial Abstractio S = (1000/C nted Runoff Vol Peak Volume = Ba 2043+00	on (S) = :N) - 10 lume = = A x Q asin Lin to	9.2 33.89 nits 2091+00.	52 ac-ft TOTAL AREA
Rainfall Depth for 100 N Runoi Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA	yr-240hr (P) = IOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF PA 33.06 10.34 43.4 43.4 TION: TYPE A SOII AREA (ft <sup>2</sup> ) 29.75	9.4 ARAM ac ac ac ac cv 98	in IETERS		TYPE C SOIL	Estima	WEIGHT ntial Abstractio S = (1000/C nted Runoff Vol Peak Volume = Ba 2043+00	on (S) = N) - 10 lume = = A x Q asin Lin to	9.2 33.89 nits 2091+00.	52 ac-ft TOTAL AREA 29.75
Rainfall Depth for 100 N Runo Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE	yr-240hr (P) = IOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF PA 33.06 10.34 43.4 43.4 TION: TYPE A SOII AREA (ft <sup>2</sup> ) 29.75 3.31	9.4 <b>ARAM</b> ac ac ac ac cn 98 39	in IETERS		TYPE C SOIL	Estima	WEIGHT ntial Abstractio S = (1000/C nted Runoff Vol Peak Volume = Ba 2043+00	on (S) = N) - 10 lume = = A x Q asin Lin to	9.2 33.89 nits 2091+00. CN*A 2915.70 129.01	52 ac-ft TOTAL AREA 29.75 3.31
Rainfall Depth for 100 N Runo Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious Grass Pond Site (Pervious)	yr-240hr (P) = IOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF PA 33.06 10.34 43.4 43.4 TION: TYPE A SOII AREA (ft <sup>2</sup> ) 29.75 3.31 3.84	9.4 ARAM ac ac ac ac cN 98 39 39	in IETERS		TYPE C SOIL	Estima	WEIGHT ntial Abstractio S = (1000/C nted Runoff Vol Peak Volume = Ba 2043+00	on (S) = N) - 10 lume = = A x Q asin Lin to	9.2 33.89 nits 2091+00. 2915.70 129.01 149.76	52 ac-ft TOTAL AREA 29.75 3.31 3.84
Rainfall Depth for 100 N Runo Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE	yr-240hr (P) = IOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF PA 33.06 10.34 43.4 43.4 TION: TYPE A SOII AREA (ft <sup>2</sup> ) 29.75 3.31	9.4 <b>ARAM</b> ac ac ac ac cn 98 39	in IETERS		TYPE C SOIL	Estima	WEIGHT ntial Abstractio S = (1000/C nted Runoff Vol Peak Volume = Ba 2043+00	on (S) = N) - 10 lume = = A x Q asin Lin to	9.2 33.89 nits 2091+00. 2915.70 129.01 149.76 650.00	52 ac-ft 29.75 3.31 3.84 6.50
Rainfall Depth for 100 N Runo Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious Grass Pond Site (Pervious)	yr-240hr (P) = IOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF PA 33.06 10.34 43.4 43.4 TION: TYPE A SOII AREA (ft <sup>2</sup> ) 29.75 3.31 3.84	9.4 ARAM ac ac ac ac cN 98 39 39	in IETERS		TYPE C SOIL	Estima	WEIGHT ntial Abstractio S = (1000/C nted Runoff Vol Peak Volume = Ba 2043+00	on (S) = N) - 10 lume = = A x Q asin Lin to	9.2 33.89 nits 2091+00. 2915.70 129.01 149.76 650.00 0.00	52 ac-ft 29.75 3.31 3.84 6.50 0.00
Rainfall Depth for 100 N Runo Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious Grass Pond Site (Pervious)	yr-240hr (P) = IOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF PA 33.06 10.34 43.4 43.4 TION: TYPE A SOII AREA (ft <sup>2</sup> ) 29.75 3.31 3.84	9.4 ARAM ac ac ac ac cN 98 39 39	in IETERS		TYPE C SOIL	Estima	WEIGHT ntial Abstractio S = (1000/C nted Runoff Vol Peak Volume = Ba 2043+00	on (S) = N) - 10 lume = = A x Q asin Lin to	9.2 33.89 nits 2091+00. 2915.70 129.01 149.76 650.00 0.00 0.000	52 ac-ft 29.75 3.31 3.84 6.50 0.00 0.00
Rainfall Depth for 100 N Runo Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious Grass Pond Site (Pervious)	yr-240hr (P) = IOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF PA 33.06 10.34 43.4 43.4 TION: TYPE A SOII AREA (ft <sup>2</sup> ) 29.75 3.31 3.84	9.4 ARAM ac ac ac ac cN 98 39 39	in IETERS		TYPE C SOIL	Estima	WEIGHT ntial Abstractio S = (1000/C nted Runoff Vol Peak Volume = Ba 2043+00	on (S) = N) - 10 lume = = A x Q asin Lin to	9.2 33.89 nits 2091+00. 2915.70 129.01 149.76 650.00 0.00	52 ac-ft 29.75 3.31 3.84 6.50 0.00

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

Runoff Depth (Q) = 15.4 in  $Q = (P - 0.2S)^2/(P + 0.8S)$ 

Potential Abstraction (S) = 1.3 S = (1000/CN) - 10

WEIGHTED CN

ac-ft Estimated Runoff Volume = 55.86 Peak Volume = A x Q

89

Pond Name: 30-3 Date: 2/28/2024

### POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		33.06 ac	
Weighted C		0.87	
Total Impervious	0.95	29.75 ac	
Total Pervious		3.31 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		2.41 ac-ft ] (which a	lanta araatari
Required Treatment (1/2" over Area)		1.38 ac-ft	ver is greater)
		2.41 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		33.89 ac-ft	
Proposed Runoff Volume		55.86 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volum	e	21.98 ac-ft	
Floodplain Com	pensation	5.19 ac-ft	
TOTAL	STORAGE	24.39 ac-ft	
3) Estimated Pond Configuration:			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Aaximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	4.0 ft	Assumed Control EL	ft
4) Estimated Pond Dimensions Including Freeboard			

LTOP OF SLOPE	768 ft
WTOP OF SLOPE	384 ft
Area	6.77 ac

# 5) Minimum Site Dimensions (Considering Maintenance Berm and 20% Factor of Safety)

LSITE	969 ft
WSITE	509 ft
Area	11.32 ac

	Pond	<u>30-3</u>			
	<u>Contour</u>	Area	<u>Storage</u>	Cumulative	<u>Notes</u>
GIS	71	73320	0.0	0.0	Soil 15
GIS	75	138750	424140.0	424140.0	
GIS	79	184230	645960.0	1070100.0	
			Cumulative	Ret (ac-ft) Below	Freeboard
				24.57	

Pond Area	
4.2	

# I-75 Pond Siting

			FPIC	): 4520	74-2-32-01					
		P	ond Name: Date:	31-1 2/28/	2024		Full	Туріса	al Section Wi	dth
PRE-DEVELOPMENT RU	JNOFF PA	RAME	TERS							
Onsite Basin Area	24.69	ас					E	lasin Lim	its	
Pond Parcel Area	10.65	ас					2091+00	to	2126+80	
Total Area	35.34	ас								
CURVE NUMBER CALCUA	TION:									
	TYPE A SO	LS	TYPE B SO	ILS	TYPE C SO	ILS	TYPE D SC	ILS	CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		
Impvervious	7.23	98							708.77	7.23
Grass	17.46	39						+	680.85	17.46
Pond Site Pre Condition	10.65	39						+	415.35 0.00	10.65 0.00
	_								0.00	0.00
		-				+ +		+	0.00	0.00
						+ +	_	+	0.00	0.00
									0.00	0.00
TOTALS	35.34	-	0		0		0		1804.97	35.34
101/10	00.01						WEIGH	TED CN		51
Rainfall Depth for 100	<b>yr-240hr (P) =</b> NOAA Atlas 14		in			Poten	tial Abstracti S = (1000/		9.6	
	<b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S)		in				<b>ted Runoff V</b> Peak Volume		26.92	əc-ft
POST-DEVELOPMENT	RUNOFF P	ARAN	IETERS							
Onsite Basin Area	24.69	ac					E	Basin Lim	nits	
Pond Parcel Area	10.65	ac					2091+00	to	2126+80	
Total Area	35.34	ac								
CURVE NUMBER CALCUA	TION:									

	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		TOTAL PAREN
Impervious	22.19	98							2174.63	22.19
And a state of the	2.50	39			1				97.50	2.50
Grass	2.85	39							111.15	2.85
Pond Site (Pervious)	7.80	100							780.00	7.80
Pond Site (Impervious)	7.00	- ANNO							0.00	0.00
									0.00	0.00
	_	+							0.00	0.00
		+							0.00	0.00
TOTALS	35.34	++	0		0		0		3163.27	35.34
TUTALS	55.54	<u> </u>					WEIGH	TED CN		90

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> Runoff Depth (Q) = 15.6 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$

Potential Abstraction (S) = 1.2 S = (1000/CN) - 10

Estimated Runoff Volume = 45.86 ac-ft Peak Volume = A x Q

Pond Name: 31-1 Date: 2/28/2024

### POND SIZING ESTIMATION

### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		24.69 ac	
Weighted C		0.87	
Total Impervious	0.95	22.19 ac	
Total Pervious	0.20	2.50 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		1.80 ac-ft	er is greater)
Required Treatment (1/2" over Area)		1.03 ac-ft	er is greater)
		1.80 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		26.92 ac-ft	
Proposed Runoff Volume		45.86 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volum	e	18.94 ac-ft	
TOTAL	STORAGE	20.73 ac-ft	
3) Estimated Pond Configuration:			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	7.0 ft	Assumed Control EL	ft
4) Estimated Pond Dimensions Including Freeboard			
.,			

LTOP OF SLOPE	554 ft
WTOP OF SLOPE	277 ft
Area	3.53 ac

LSITE	713 ft
WSITE	381 ft
Area	6.23 ac

	<u>Contour</u>	Area	<u>Storage</u>	Cumulative	<u>Notes</u>
GIS	67	48650	0.0	0.0	Soil 15
GIS	70	135640	276435.0	276435.0	
GIS	74	184230	639740.0	916175.0	
			Cumulative	Ret (ac-ft) Belo	w Freeboard
				21.03	
				Pond Area	
,				4.2	602527
					13.83212

Pond <u>31-1</u>

a.

# I-75 Pond Siting

### FPID: 452074-2-32-01

			Date:	2/28/	2024					
PRE-DEVELOPMENT RU	JNOFF PA	RAME	TERS							
Onsite Basin Area	24.69	ac					В	asin Lim	nits	
Pond Parcel Area	11.92	ac				1	2091+00	to	2126+80	
Fotal Area	36.61						AND COMPANY	01. <sup>(1</sup> )	- managements	
CURVE NUMBER CALCUA	TION:									
	TYPE A SO	LS	TYPE B SO	ILS	TYPE C SO	ILS	TYPE D SOI	LS		
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CN*A	TOTAL AREA
Impvervious	7.23	98							708.77	7.23
Grass	17.46	39							680.85	17.4
Pond Site Pre Condition	11.92	39							464.88	11.9
									0.00	0.0
									0.00	0.00
									0.00	0.00
									0.00	0.0
									0.00	0.0
TOTALS	36.61		0		0		0		1854.50	36.6
Runo	NOAA Atlas 14 off Depth (Q) =	9.1					WEIGH tial Abstraction S = (1000/C ted Runoff Vo	on (S) = CN) - 10	9.7 27.62 a	5: ac-ft
Runo Q = (P - 0.2	NOAA Atlas 14 <b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S)	9.1	in	×			tial Abstractio S = (1000/C	on (S) = CN) - 10 Iume =		
Runo Q = (P - 0.2	NOAA Atlas 14 <b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF P</b>	9.1 ARAN	in	ø			<b>tial Abstractio</b> S = (1000/C <b>ted Runoff Vo</b> Peak Volume	on (S) = CN) - 10 Iume =	27.62 a	
Runo Q = (P - 0.7 POST-DEVELOPMENT I Onsite Basin Area	NOAA Atlas 14 <b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S)	9.1 ARAN ac	in	×			<b>tial Abstractio</b> S = (1000/C <b>ted Runoff Vo</b> Peak Volume	on (S) = CN) - 10 Iume = = A x Q	27.62 a	
Runo Q = (P - 0. POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area	NOAA Atlas 14 <b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF P</b> 24.69	9.1 ARAN ac ac	in	8			tial Abstraction S = (1000/C ted Runoff Vo Peak Volume B	on (S) = CN) - 10 Iume = = A x Q asin Lin	27.62 a	
Runo Q = (P - 0.1 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area	NOAA Atlas 14 <b>ff Depth (Q)</b> = 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF P</b> 24.69 11.92 36.61	9.1 ARAN ac ac	in	×			tial Abstraction S = (1000/C ted Runoff Vo Peak Volume B	on (S) = CN) - 10 Iume = = A x Q asin Lin	27.62 a	
Runo Q = (P - 0. POST-DEVELOPMENT I Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA	NOAA Atlas 14 <b>ff Depth (Q)</b> = 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF P</b> 24.69 11.92 36.61	9.1 ARAN ac ac ac	in		TYPE C SO	Estima	tial Abstraction S = (1000/C ted Runoff Vo Peak Volume B	on (S) = CN) - 10 Jume = = A x Q asin Lin to	27.62 a nits 2126+80	ac-ft
Runo Q = (P - 0.1 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area	NOAA Atlas 14 <b>ff Depth (Q)</b> = 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF P</b> 24.69 11.92 36.61 <b>ATION:</b> <b>TYPE A SO</b>	9.1 ARAN ac ac ac	in IETERS	ILS CN		Estima	tial Abstraction S = (1000/C ted Runoff Vo Peak Volume B 2091+00	on (S) = CN) - 10 Jume = = A x Q asin Lin to	27.62 a	
Runo Q = (P - 0.1 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE	NOAA Atlas 14 <b>ff Depth (Q)</b> = 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF P</b> 24.69 11.92 36.61 <b>ATION:</b> <b>TYPE A SO</b> <b>AREA (ft<sup>2</sup>)</b>	9.1 ARAN ac ac ac ac	in <b>1ETERS</b>		TYPE C SO AREA (ft²)	Estima	tial Abstraction S = (1000/C ted Runoff Vo Peak Volume B 2091+00	on (S) = CN) - 10 Jume = = A x Q asin Lin to	27.62 a nits 2126+80	ac-ft Total Area
Runo Q = (P - 0.7 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious	NOAA Atlas 14 <b>ff Depth (Q)</b> = 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF P</b> 24.69 11.92 36.61 <b>ATION:</b> <b>TYPE A SO</b>	9.1 ARAN ac ac ac	in IETERS			Estima	tial Abstraction S = (1000/C ted Runoff Vo Peak Volume B 2091+00	on (S) = CN) - 10 Jume = = A x Q asin Lin to	27.62 a nits 2126+80	DC-ft TOTAL AREA 22.1
Runo Q = (P - 0.: POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious Grass	NOAA Atlas 14 <b>ff Depth (Q)</b> = 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF P</b> 24.69 11.92 36.61 <b>ATION:</b> <b>TYPE A SO</b> <b>AREA (ft<sup>2</sup>)</b> 22.19	9.1 ARAN ac ac ac ac cN 98	in IETERS			Estima	tial Abstraction S = (1000/C ted Runoff Vo Peak Volume B 2091+00	on (S) = CN) - 10 Jume = = A x Q asin Lin to	27.62 a nits 2126+80 CN*A 2174.63	ac-ft
Runo Q = (P - 0.: POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious Grass Pond Site (Pervious)	NOAA Atlas 14 <b>ff Depth (Q)</b> = 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF P</b> 24.69 11.92 36.61 <b>ATION:</b> <b>TYPE A SO</b> <b>AREA (ft<sup>2</sup>)</b> 22.19 2.50	9.1 ARAN ac ac ac ac cn 98 39	in IETERS			Estima	tial Abstraction S = (1000/C ted Runoff Vo Peak Volume B 2091+00	on (S) = CN) - 10 Jume = = A x Q asin Lin to	27.62 a nits 2126+80 CN*A 2174.63 97.50	TOTAL AREA 22.1 2.5
Runo Q = (P - 0.: POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious Grass	NOAA Atlas 14 <b>ff Depth (Q)</b> = 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF P</b> 24.69 11.92 36.61 <b>ATION:</b> <b>TYPE A SO</b> <b>AREA (ft<sup>2</sup>)</b> 22.19 2.50 <b>2.85</b>	9.1 ARAN ac ac ac ac ILS CN 98 39 39	in IETERS			Estima	tial Abstraction S = (1000/C ted Runoff Vo Peak Volume B 2091+00	on (S) = CN) - 10 Jume = = A x Q asin Lin to	27.62 a hits 2126+80 CN*A 2174.63 97.50 111.15	TOTAL AREA 22.1 2.5 2.8
Runo Q = (P - 0.: POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious Grass Pond Site (Pervious)	NOAA Atlas 14 <b>ff Depth (Q)</b> = 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF P</b> 24.69 11.92 36.61 <b>ATION:</b> <b>TYPE A SO</b> <b>AREA (ft<sup>2</sup>)</b> 22.19 2.50 <b>2.85</b>	9.1 ARAN ac ac ac ac ILS CN 98 39 39	in IETERS			Estima	tial Abstraction S = (1000/C ted Runoff Vo Peak Volume B 2091+00	on (S) = CN) - 10 Jume = = A x Q asin Lin to	27.62 a nits 2126+80 CN*A 2174.63 97.50 111.15 907.00	TOTAL AREA 22.1 2.5 2.8 9.0 0.0
Runo Q = (P - 0.: POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious Grass Pond Site (Pervious)	NOAA Atlas 14 <b>ff Depth (Q)</b> = 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF P</b> 24.69 11.92 36.61 <b>ATION:</b> <b>TYPE A SO</b> <b>AREA (ft<sup>2</sup>)</b> 22.19 2.50 <b>2.85</b>	9.1 ARAN ac ac ac ac ILS CN 98 39 39	in IETERS			Estima	tial Abstraction S = (1000/C ted Runoff Vo Peak Volume B 2091+00	on (S) = CN) - 10 Jume = = A x Q asin Lin to	27.62 a hits 2126+80 2174.63 97.50 111.15 907.00 0.00	TOTAL AREA 22.1 2.5 2.8 9.0 0.0 0.0
Runo Q = (P - 0.: POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious Grass Pond Site (Pervious)	NOAA Atlas 14 <b>ff Depth (Q)</b> = 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF P</b> 24.69 11.92 36.61 <b>ATION:</b> <b>TYPE A SO</b> <b>AREA (ft<sup>2</sup>)</b> 22.19 2.50 <b>2.85</b>	9.1 ARAN ac ac ac ac ILS CN 98 39 39	in IETERS			Estima	tial Abstraction S = (1000/C ted Runoff Vo Peak Volume B 2091+00	on (S) = CN) - 10 Jume = = A x Q asin Lin to	27.62 a hits 2126+80 2174.63 97.50 1111.5 907.00 0.000	TOTAL AREA 22.1 2.5 2.8 9.0
Runo Q = (P - 0.: POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Impervious Grass Pond Site (Pervious)	NOAA Atlas 14 <b>ff Depth (Q)</b> = 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF P</b> 24.69 11.92 36.61 <b>XTION:</b> <b>TYPE A 50</b> <b>AREA (ft<sup>2</sup>)</b> 22.19 2.50 <b>2.85</b> 9.07	9.1 ARAN ac ac ac ac ILS CN 98 39 39	in IETERS			Estima	tial Abstraction S = (1000/C ted Runoff Vo Peak Volume B 2091+00	on (S) = CN) - 10 Jume = = A x Q asin Lin to	27.62 a hits 2126+80 2174.63 97.50 1111.5 907.00 0.00 0.00	TOTAL AREA 22.1 2.5 2.8 9.0 0.0 0.0 0.0 0.0

Runoff Depth (Q) = 15.6 in  $Q = (P - 0.2S)^2 / (P + 0.8S)$ 

Estimated Runoff Volume = 47.65 ac-ft Peak Volume = A x Q

# Pond Name: 31-2 Date: 2/28/2024

# POND SIZING ESTIMATION

2)

3)

4)

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

	Area Inside R/W			24.69 ac					
	Weighted C			0.87					
	Total Impe	ervious	0.95	22.19 ac					
	Total Pe	ervious	0.20	2.50 ac					
	Outstanding FL Water (Y/N)[multiply x 1.5	]		N					
	Required Treatment (Runoff from 1" Rainf			1.80 ac-ft	(which eve	r is greater)			
	Required Treatment (1/2" over Area)			1.03 ac-ft ∫	1.03 ac-ft (whichever is greater)				
				1.80 ac-ft					
) Estir	nated Peak Attenuation Volume (EPAV):								
	Existing Runoff Volume			27.62 ac-ft					
	Proposed Runoff Volume			47.65 ac-ft					
	EPAV = Proposed Runoff - Existing Runoff	Volume		20.03 ac-ft					
	1	TOTAL ST	ORAGE	21.83 ac-ft					
) Estir	nated Pond Configuration:								
	Maintenance Berm Width		20.0 ft	Freeboard	ı I	1.0 ft			
	L/W Ratio		2.0	Side Slope	es (1:H)	4.0			
	Maximum Treatment Volume Depth		1.5 ft	Wet/Dry		Dry			
	Maximum Pond Depth Below Freeboard	1	7.0 ft	Assumed	Control EL	ft			
) Estir	nated Pond Dimensions Including Freeboar	rd							

LTOP OF SLOPE	568	ft
WTOP OF SLOPE	284	ft
Area	3.70	ac

LSITE	729 ft
WSITE	389 ft
Area	6.51 ac

	Pond	<u>31-2</u>	•					
	<u>Contour</u>	Area	Storage Cumulative Notes					
GIS	68	66230	0.0 0.0 Soil 15					
GIS	73	134230	501150.0 501150.0					
GIS	77	175420	619300.0 1120450.0					
	Cumulative Ret (ac-ft) Below Freeboard							
			25.72					

Pond Area 4.0

# I-75 Pond Siting

					74-2-32-01					
		P	ond Name Date	31-3 2/28/	2024		Full	Typica	al Section Wi	dth
PRE-DEVELOPMENT RU	JNOFF PA	RAME	TERS							
Onsite Basin Area	24.69	ac I					B	asin Lim	its	
Pond Parcel Area	10.39	ac ac					2091+00	to	2126+80	
Total Area	35.08	вас								
CURVE NUMBER CALCUA	TION:									
	TYPE A SO	ILS	TYPE B SC	DILS .	TYPE C SO	LS	TYPE D SO	ILS	CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN		
Impvervious	7.23	98							708.77	7.23
Grass	17.46	39			-	-		$ \rightarrow $	680.85	17.46
Pond Site Pre Condition	10.39	39							405.21	0.00
								$\left  \right $	0.00	0.00
									0.00	0.00
									0.00	0.00
				+		-			0.00	0.00
TOTALS	35.08	-	0	+	0		0		1794.83	35.08
101/10							WEIGH	TED CN		51
Runo	<b>yr-240hr (P)</b> = NOAA Atlas 14 <b>ff Depth (Q)</b> = 2S) <sup>2</sup> /(P + 0.8S	1 = 9.2					ntial Abstraction S = (1000/0 Inted Runoff Vo Peak Volume	CN) - 10	9.5 26.78	ac-ft
POST-DEVELOPMENT	RUNOFF P	ARAN	IETERS				R	asin Lim	iits	
Onsite Basin Area	24.65							f 11	2126+80	
Pond Parcel Area	10.3	ac					2091+00	to	2120+00	
Total Area	35.08	8 ac								

### **CURVE NUMBER CALCUATION:**

	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS		CN*A	TOTAL AREA
LAND USE	DUSE AREA (ft <sup>2</sup> ) CN AREA (ft <sup>2</sup> ) CN AREA (ft <sup>2</sup> ) CN		CN	AREA (ft <sup>2</sup> ) CN		di A	TOTAL ALLA			
Impervious	22.19	98							2174.63	22.19
	2.50	39							97.50	2.50
Grass	2.85	39							111.15	2.85
Pond Site (Pervious)		Comparison of the							754.00	7.54
Pond Site (Impervious)	7.54	100						++	0.00	0.00
		++							0.00	0.00
		+ +							0.00	0.00
		+							0.00	0.00
TOTALS	35.08	+	0		0		0	1 1	3137.27	35.08
TOTALS	55.00			L		december of	WEIGH	TED CN		89

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 15.6 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (\$) = 1.2 S = (1000/CN) - 10

Estimated Runoff Volume = 45.49 ac-ft Peak Volume = A x Q

Pond Name: 31-3 Date: 2/28/2024

### POND SIZING ESTIMATION

### 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W			24.69 ac				
Weighted C			0.87				
-	Total Impervious	0.95	22.19 ac				
	Total Pervious	0.20	2.50 ac				
Outstanding FL Water (	Y/N}[multiply x 1.5]		N				
Required Treatment (R	unoff from 1" Rainfall)		1.80 ac-ft [ (whichou	ver is greater)			
Required Treatment (1,	/2" over Area)	1.03 ac-ft	er is greater)				
			1.80 ac-ft				
2) Estimated Peak Attenuation	Volume (EPAV):						
Existing Runoff Volume			26.78 ac-ft				
Proposed Runoff Volun	ne		45.49 ac-ft				
EPAV = Proposed Runo	ff - Existing Runoff Volume		18.71 ac-ft				
	TOTAL S	TORAGE	20.51 ac-ft				
B) Estimated Pond Configuration	n:						
Maintenance Berm Wid	ith	20.0 ft	Freeboard	1.0 ft			
Maintenance berni wit		1000		4.0			
L/W Ratio		2.0	Side Slopes (1:H)	4.0			
	olume Depth	2.0 1.5 ft	Side Slopes (1:H) Wet/Dry	Dry			

4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	552 ft
WTOP OF SLOPE	276 ft
Area	3.49 ac

LSITE	710 ft
WSITE	379 ft
Area	6.18 ac

	Pond	<u>31-3</u>		
GIS GIS GIS	<u>Contour</u> 77 82 86	<u>Area</u> 54320 118760 171230	Storage         Cumulative         Notes           0.0         0.0         Soil 15           432700.0         432700.0         579980.0           579980.0         1012680.0         Cumulative Ret (ac-ft) Below Freeboard           23.25         23.25	
			Pond Area	

3.9

602527 13.83212

7

# POND SIZING CALCULATIONS

# I-75 Pond Siting

# FPID: 452074-2-32-01

		P	ond Name:	32-1			Full	Typica	al Section Wi	dth
			Date:	2/28/3	2024					
PRE-DEVELOPMENT RU	JNOFF PA	RAME	TERS							
Insite Basin Area	31.28						В	asin Lim	its	
ond Parcel Area	6.62					1	2126+80	to	2159+00	
						4	6.160.100			
otal Area	37.9	ас								
URVE NUMBER CALCUA	TION:									
	TYPE A SO	ILS	TYPE B SO	LS	TYPE C SOI	LS	TYPE D SO	ILS	CN*A	TOTAL AREA
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CN A	TOTALANEA
mpvervious	6.51	98							637.49	6.5
irass	24.77	39							966.22	24.7
ond Site Pre Condition	6.62	39		$ \downarrow \downarrow$				$\vdash$	258.18	6.6
				+ +				$\vdash$	0.00	0.0
				$\vdash$				$\vdash$	0.00	0.0
									0.00	0.0
									0.00	0.0
TOTALS	37.9		0		0		0		1861.90	37.
							WEIGH	TED CN		4
	NOAA Atlas 14						tial Abstractio S = (1000/0	on (S) = CN) - 10	10.4	
Runo Q = (P - 0.2	NOAA Atlas 14 <b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S)	8.7	in			Estima	tial Abstraction	on (S) = CN) - 10 Hume =		- əc-ft
Runo	NOAA Atlas 14 <b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S)	8.7 ARAN	in			Estima	<b>tial Abstractio</b> S = (1000/0 <b>ted Runoff Vo</b> Peak Volume	on (S) = CN) - 10 Hume =	27.58	
۲ Runo Q = (P - 0.: POST-DEVELOPMENT F Onsite Basin Area	NOAA Atlas 14 <b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF P</b> ,	8.7 ARAN	in			Estima	<b>tial Abstractio</b> S = (1000/0 <b>ted Runoff Vo</b> Peak Volume	on (S) = CN) - 10 elume = = A x Q	27.58	
Runo Q = (P - 0.: POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area	NOAA Atlas 14 <b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF P</b> . 31.28 6.52	8.7 ARAN ac ac	in			Estima	tial Abstractic S = (1000/0 ted Runoff Vo Peak Volume B	on (S) = CN) - 10 Hume = = A x Q Hasin Lim	27.58	
Runo Q = (P - 0.1 POST-DEVELOPMENT F Donsite Basin Area Pond Parcel Area Total Area	NOAA Atlas 14 <b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.85) <b>RUNOFF P</b> 31.28 6.62 37.9	8.7 ARAN ac ac	in			Estima	tial Abstractic S = (1000/0 ted Runoff Vo Peak Volume B	on (S) = CN) - 10 Hume = = A x Q Hasin Lim	27.58	
Runo Q = (P - 0.1 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area	NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.85) RUNOFF P. 31.28 6.62 37.9 ATION:	ac ac ac	in 1ETERS	115 1	TYDE C CAI	Estima	tial Abstraction S = (1000/0 ted Runoff Vo Peak Volume B 2126+80	on (S) = CN) - 10 Hume = = A x Q Hasin Lim to	27.58	
Runo Q = (P - 0.1 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area	NOAA Atlas 14 <b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF P</b> 31.28 6.62 37.9 <b>XTION:</b> <b>TYPE A SO</b>	8.7 ARAN ac ac ac	in IETERS	r +	TYPE C SO	Estima	tial Abstracti S = (1000/0 ted Runoff Vo Peak Volume B 2126+80 TYPE D SO	on (S) = CN) - 10 Hume = = A x Q Hasin Lim to	27.58	
Runo Q = (P - 0. POST-DEVELOPMENT F Onsite Basin Area Pond Parcei Area Total Area CURVE NUMBER CALCUA	NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P, 31.28 6.62 37.9 XTION: TYPE A SO AREA (ft <sup>2</sup> )	ac ac ac	in 1ETERS	LS CN	TYPE C SO AREA (ft²)	Estima	tial Abstraction S = (1000/0 ted Runoff Vo Peak Volume B 2126+80	on (S) = CN) - 10 Hume = = A x Q Hasin Lim to	27.58 its 2159+00	ac-ft
Runo Q = (P - 0.7 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE	NOAA Atlas 14 <b>ff Depth (Q) =</b> 2S) <sup>2</sup> /(P + 0.8S) <b>RUNOFF P</b> 31.28 6.62 37.9 <b>XTION:</b> <b>TYPE A SO</b>	8.7 ARAN ac ac ac ac	in IETERS	r +		Estima	tial Abstracti S = (1000/0 ted Runoff Vo Peak Volume B 2126+80 TYPE D SO	on (S) = CN) - 10 Hume = = A x Q Hasin Lim to	27.58 iits 2159+00	ac-ft Total Area
Runo Q = (P - 0.: POST-DEVELOPMENT F Onsite Basin Area Pond Parcei Area Potal Area CURVE NUMBER CALCUA LAND USE Manuel Ma	NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P, 31.28 6.62 37.9 XTION: TYPE A SO AREA (ft <sup>2</sup> ) 19.96	8.7 ARAN ac ac ac ac ac c N 98	in IETERS	r +		Estima	tial Abstracti S = (1000/0 ted Runoff Vo Peak Volume B 2126+80 TYPE D SO	on (S) = CN) - 10 Hume = = A x Q Hasin Lim to	27.58 its 2159+00 CN*A 1955.95	TOTAL AREA 19.9 11.3
Runo Q = (P - 0.7 POST-DEVELOPMENT F Onsite Basin Area Pond Parcei Area Potal Area CURVE NUMBER CALCUA LAND USE Manuel Manuel CURVE NUMBER CALCUA LAND USE	NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P, 31.28 6.62 37.9 XTION: TYPE A SO AREA (ft <sup>2</sup> ) 19.96 11.32	8.7 ARAN ac ac ac ac ac cn 98 39	in IETERS	r +		Estima	tial Abstracti S = (1000/0 ted Runoff Vo Peak Volume B 2126+80 TYPE D SO	on (S) = CN) - 10 Hume = = A x Q Hasin Lim to	27.58 its 2159+00 CN*A 1955.95 441.53 102.18 400.00	TOTAL AREA 19.9 11.3 2.6 4.0
Runo Q = (P - 0.7 POST-DEVELOPMENT F Onsite Basin Area Pond Parcei Area Potal Area CURVE NUMBER CALCUA LAND USE Manuel Manuel CURVE NUMBER CALCUA LAND USE	NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P. 31.28 6.62 37.9 XTION: TYPE ASO AREA (ft <sup>2</sup> ) 19.96 11.32 2.62	8.7 ARAN ac ac ac ac ac	in IETERS	r +		Estima	tial Abstracti S = (1000/0 ted Runoff Vo Peak Volume B 2126+80 TYPE D SO	on (S) = CN) - 10 Hume = = A x Q Hasin Lim to	27.58 its 2159+00 CN*A 1955.95 441.53 102.18 400.00 400.00	TOTAL AREA 19.9 11.3 2.6 4.0 0.0
Runo Q = (P - 0.: POST-DEVELOPMENT F Onsite Basin Area Pond Parcei Area Total Area CURVE NUMBER CALCUA LAND USE Manager Content LAND USE	NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P. 31.28 6.62 37.9 XTION: TYPE ASO AREA (ft <sup>2</sup> ) 19.96 11.32 2.62	8.7 ARAN ac ac ac ac ac	in IETERS	r +		Estima	tial Abstracti S = (1000/0 ted Runoff Vo Peak Volume B 2126+80 TYPE D SO	on (S) = CN) - 10 Hume = = A x Q Hasin Lim to	27.58 its 2159+00 CN*A 1955.95 441.53 102.18 400.00 400.00 0.000	TOTAL AREA 19.9 11.3 2.6 4.0 0.0 0.0
Runo Q = (P - 0. POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA	NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P. 31.28 6.62 37.9 XTION: TYPE ASO AREA (ft <sup>2</sup> ) 19.96 11.32 2.62	8.7 ARAN ac ac ac ac ac	in IETERS	r +		Estima	tial Abstracti S = (1000/0 ted Runoff Vo Peak Volume B 2126+80 TYPE D SO	on (S) = CN) - 10 Hume = = A x Q Hasin Lim to	27.58 its 2159+00 CN*A 1955.95 441.53 102.18 400.00 400.00 0.000 0.000	TOTAL AREA 19.9 11.3 2.6 4.0 0.0 0.0 0.0
Runo Q = (P - 0.7 POST-DEVELOPMENT F Onsite Basin Area Pond Parcel Area Total Area CURVE NUMBER CALCUA LAND USE Margervious Frass Pond Site (Pervious) Pond Site (Impervious)	NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.85) RUNOFF P. 31.28 6.62 37.9 ATION: TYPE A SO AREA (ft <sup>2</sup> ) 19.96 11.32 2.62 4.00	8.7 ARAN ac ac ac ac ac	IETERS	r +	AREA (ft²)	Estima	tial Abstraction S = (1000/0 Peak Volume B 2126+80 TYPE D SO AREA (ft <sup>2</sup> )	on (S) = CN) - 10 Hume = = A x Q Hasin Lim to	27.58 its 2159+00 CN*A 1955.95 441.53 102.18 400.00 0.000 0.000 0.000 0.000	TOTAL AREA 19.9 11.3 2.6 4.0 0.0 0.0 0.0 0.0 0.0
Runo Q = (P - 0.7 POST-DEVELOPMENT F Disite Basin Area ond Parcel Area otal Area CURVE NUMBER CALCUA LAND USE Mervious irass ond Site (Pervious)	NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P. 31.28 6.62 37.9 XTION: TYPE ASO AREA (ft <sup>2</sup> ) 19.96 11.32 2.62	8.7 ARAN ac ac ac ac ac	in IETERS	r +		Estima	tial Abstracti S = (1000/0 ted Runoff Vo Peak Volume B 2126+80 TYPE D SO	en (S) = CN) - 10 Formation of the second	27.58 its 2159+00 CN*A 1955.95 441.53 102.18 400.00 400.00 0.000 0.000	TOTAL AREA 19.5 11.3 2.6 4.0 0.0 0.0

NOAA Atlas 14

Runoff Depth (Q) = 13.7 in  $Q = (P - 0.2S)^2/(P + 0.8S)$ 

43.28 ac-ft

Peak Volume = A x Q

Estimated Runoff Volume =

# POND SIZING CALCULATIONS I-75 Pond Siting FPID: 452074-2-32-01

Pond Name: 32-1 Date: 2/28/2024

# POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		31.28 ac	
Weighted C		0.68	
Total Impervious	0.95	19.96 ac	
Total Pervious	0.20	11.32 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		1.77 ac-ft _ (whicheve	er is greater)
Required Treatment (1/2" over Area)		1.30 ac-ft	er 10 Broater)
		1.77 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		27.58 ac-ft	
Proposed Runoff Volume		43.28 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volume	e	15.70 ac-ft	
2			
Floodplain Comp	ensation	9.24 ac-ft	
TOTAL S	TORAGE	24.94 ac-ft	
3) Estimated Pond Configuration:			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slopes (1:H)	4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	7.0 ft	Assumed Control EL	60.00 ft
4) Estimated Bond Dimensions Including Freeboard			

# 4) Estimated Pond Dimensions Including Freeboard

LTOP OF SLOPE	605 ft
WTOP OF SLOPE	302 ft
Area	4.19 ac

# 5) Minimum Site Dimensions (Considering Maintenance Berm and 20% Factor of Safety)

LSITE	773 ft
WSITE	411 ft
Area	7.29 ac

Pond 32-1

	<u>Contour</u>	Area	<u>Storage</u>	<u>Cumulative</u>	Notes
GIS	67	68340	0.0	0.0	Soil 15
GIS	72	123890	480575.0	480575.0	
GIS	76	179230	606240.0	1086815.0	
			Cumulative R	et (ac-ft) Belov	w Freeboard
				24.95	

Pond Area 4.1

602527 13.83212

# POND SIZING CALCULATIONS

## I-75 Pond Siting

# FPID: 452074-2-32-01

		P	ond Name: Date:	32-2 2/28/3	2024		Full	Туріса	I Section Wie	ath
RE-DEVELOPMENT RU		RAME	TERS							
nsite Basin Area	31.28						Ba	asin Lim	its	
							2126+80	to	2159+00	
ond Parcel Area	5.00						6.4.6.0			
otal Area	36.28	ас								
URVE NUMBER CALCUA					TYPE C SO		TYPE D SOI	IS T		
LAND USE	TYPE A SO		TYPE B SOI			CN	AREA (ft <sup>2</sup> )	CN	CN*A	TOTAL AREA
	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )		AREA (IL)		637.49	6.5
npvervious	6.51	98							966.22	24.7
rass	24.77	39	-	$\vdash$					195.00	5.0
ond Site Pre Condition	5.00	39		$\vdash$					0.00	0.0
		+-+							0.00	0.0
									0.00	0.0
		$\vdash$							0.00	0.0
									0.00	0.0
							0		1798.72	36.2
	NOAA Atlas 14				0		WEIGH tial Abstractic S = (1000/C	on (S) = N) - 10	10.2	5
Rainfall Depth for 100 N Runo Q = (P - 0.2 POST-DEVELOPMENT F	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P	8.8 ARAN	in				WEIGH tial Abstraction S = (1000/C ted Runoff Vo Peak Volume	on (S) = N) - 10 lume =	10.2 26.69	
Rainfall Depth for 100 N Runo Q = (P - 0.2 O <b>OST-DEVELOPMENT F</b> Onsite Basin Area	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P 31.28	8.8 ARAN	in				WEIGH tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B	on (S) = :N) - 10 lume = = A x Q asin Lim	10.2 26.69 a	5
Rainfall Depth for 100 N Runo Q = (P - 0.: POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P 31.28 5.00 36.28	8.8 ARAN ac ac	in				WEIGH tial Abstraction S = (1000/C ted Runoff Vo Peak Volume	on (S) = N) - 10 Iume = = A x Q	10.2 26.69	5
Rainfall Depth for 100 N Runo Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P 31.28 5.00 36.28	ac ac ac ac	in in 1ETERS			Estima	WEIGH tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 2126+80	on (S) = :N) - 10 lume = = A x Q asin Lim to	10.2 26.69 a	5
Rainfall Depth for 100 Runo Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area Otal Area	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P 31.28 5.00 36.28 NTION:	ARAN ac ac ac ac ac	in IETERS		TYPE CSO	Estima	WEIGH tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 2126+80	on (S) = N) - 10 lume = = A x Q asin Lim to	10.2 26.69 a	5
Rainfall Depth for 100 N Runo Q = (P - 0.: OST-DEVELOPMENT F Insite Basin Area Ind Parcel Area Ind Parcel Area	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P 31.28 5.00 36.28 5.00 36.28 TION: TYPE A SO AREA (ft <sup>2</sup> )	8.8 <b>ARAN</b> ac ac ac ac ac ac ac c	in in 1ETERS	LS CN		Estima	WEIGH tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 2126+80	on (S) = :N) - 10 lume = = A x Q asin Lim to	10.2 26.69 its 2159+00	ac-ft TOTAL AREA
Rainfall Depth for 100 Runo Q = (P - 0.: OST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area URVE NUMBER CALCUA LAND USE npervious	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P. 31.28 5.00 36.28 TION: TYPE A SO AREA (ft <sup>2</sup> ) 19.96	8.8 ARAN ac ac ac ac ac	in IETERS		TYPE CSO	Estima	WEIGH tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 2126+80	on (S) = N) - 10 lume = = A x Q asin Lim to	10.2 26.69 iits 2159+00 CN*A 1955.95	ac-ft TOTAL AREA 19.9
Rainfall Depth for 100 Runo Q = (P - 0.: OST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area URVE NUMBER CALCUA LAND USE npervious rass	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P 31.28 5.00 36.28 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 5.00 5.00 5.00 5.00 5.00 5.00 5.0	8.8 ARAN ac ac ac ac ac ac S ac S S S S S S S S	in IETERS		TYPE CSO	Estima	WEIGH tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 2126+80	on (S) = N) - 10 lume = = A x Q asin Lim to	10.2 26.69 its 2159+00 CN*A 1955.95 441.53	ac-ft TOTAL AREA
Rainfall Depth for 100 Runo Q = (P - 0.: OST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area URVE NUMBER CALCUA LAND USE npervious rass ond Site (Pervious)	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P. 31.28 5.00 36.28 TION: TYPE A SO AREA (ft <sup>2</sup> ) 19.96 11.32 1.50	8.8 ARAN ac ac ac ac ac s ac S S S S S S S S S S S S S S S S S S	in IETERS		TYPE CSO	Estima	WEIGH tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 2126+80	on (S) = N) - 10 lume = = A x Q asin Lim to	10.2 26.69 iits 2159+00 CN*A 1955.95	5 ac-ft TOTAL AREA 19.5 11.3
Rainfall Depth for 100 Runo Q = (P - 0.: OST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area URVE NUMBER CALCUA LAND USE mpervious rass ond Site (Pervious)	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P 31.28 5.00 36.28 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 37 5.00 5.00 5.00 5.00 5.00 5.00 5.00 5.0	8.8 ARAN ac ac ac ac ac ac S ac S S S S S S S S	in IETERS		TYPE CSO	Estima	WEIGH tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 2126+80	on (S) = N) - 10 lume = = A x Q asin Lim to	10.2 26.69 its 2159+00 0N*A 1955.95 441.53 58.50	5 ac-ft 19.5 11.3 1.5 3.5
Rainfall Depth for 100 Runo Q = (P - 0.2 POST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area Otal Area	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P. 31.28 5.00 36.28 TION: TYPE A SO AREA (ft <sup>2</sup> ) 19.96 11.32 1.50	8.8 ARAN ac ac ac ac ac s ac S S S S S S S S S S S S S S S S S S	in IETERS		TYPE CSO	Estima	WEIGH tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 2126+80	on (S) = N) - 10 lume = = A x Q asin Lim to	10.2 26.69 its 2159+00 0N*A 1955.95 441.53 58.50 350.00	5 ac-ft TOTAL AREA 19.5 11.3 1.5
Rainfall Depth for 100 Runo Q = (P - 0.: OST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area URVE NUMBER CALCUA LAND USE npervious rass ond Site (Pervious)	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P. 31.28 5.00 36.28 TION: TYPE A SO AREA (ft <sup>2</sup> ) 19.96 11.32 1.50	8.8 ARAN ac ac ac ac ac s ac S S S S S S S S S S S S S S S S S S	in IETERS		TYPE CSO	Estima	WEIGH tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 2126+80	on (S) = N) - 10 lume = = A x Q asin Lim to	10.2 26.69 its 2159+00 2159+00 0.00 350.00 0.00	5 ac-ft 19.5 11.3 1.5 3.5 0.0
Rainfall Depth for 100 Runo Q = (P - 0.: OST-DEVELOPMENT F Onsite Basin Area ond Parcel Area otal Area URVE NUMBER CALCUA LAND USE npervious rass ond Site (Pervious)	yr-240hr (P) = NOAA Atlas 14 ff Depth (Q) = 25) <sup>2</sup> /(P + 0.85) RUNOFF P. 31.28 5.00 36.28 TION: TYPE A SO AREA (ft <sup>2</sup> ) 19.96 11.32 1.50	8.8 ARAN ac ac ac ac ac s ac S S S S S S S S S S S S S S S S S S	in IETERS		TYPE CSO	Estima	WEIGH tial Abstractic S = (1000/C ted Runoff Vo Peak Volume B 2126+80	on (S) = N) - 10 lume = = A x Q asin Lim to	10.2 26.69 its 2159+00 CN*A 1955.95 441.53 58.50 350.00 0.00 0.00	5 ac-ft 19.5 11.3 1.5 3.5 0.0 0.0

Rainfall Depth for 100yr-240hr (P) = 16.9 in NOAA Atlas 14

> **Runoff Depth (Q) =** 13.8 in  $Q = (P - 0.2S)^2/(P + 0.8S)$

Potential Abstraction (S) = 2.9 S = (1000/CN) - 10

Estimated Runoff Volume = 41.81 ac-ft Peak Volume = A x Q

# POND SIZING CALCULATIONS I-75 Pond Siting FPID: 452074-2-32-01

# Pond Name: 32-2 Date: 2/28/2024

#### POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		31.28 ac	
Weighted C		0.68	
Total Impervio	us 0.95	19.96 ac	
Total Pervio	us 0.20	11.32 ac	
Outstanding FL Water (Y/N)[multiply x 1.5]		N	
Required Treatment (Runoff from 1" Rainfall)		ן 1.77 ac-ft	(whichever is greater)
Required Treatment (1/2" over Area)		1.30 ac-ft 了	(whichever is greater)
		1.77 ac-ft	
2) Estimated Peak Attenuation Volume (EPAV):			
Existing Runoff Volume		26.69 ac-ft	
Proposed Runoff Volume		41.81 ac-ft	
EPAV = Proposed Runoff - Existing Runoff Volu	me	15.13 ac-ft	
Floodplain Co	mpensation	9.24 ac-ft	
τοτ	AL STORAGE	24.37 ac-ft	
3) Estimated Pond Configuration:			
Maintenance Berm Width	20.0 ft	Freeboard	1.0 ft
L/W Ratio	2.0	Side Slope	s (1:H) 4.0
Maximum Treatment Volume Depth	1.5 ft	Wet/Dry	Dry
Maximum Pond Depth Below Freeboard	5.0 ft	Assumed	Control EL 63.00 ft
4) Estimated Pond Dimensions Including Freeboard			

LTOP OF SLOPE	693 ft
WTOP OF SLOPE	346 ft
Area	5.51 ac

# 5) Minimum Site Dimensions (Considering Maintenance Berm and 20% Factor of Safety)

LSITE	879 ft
WSITE	464 ft
Area	9.36 ac

	Pond	<u>32-2</u>	
	<u>Contour</u>	<u>Area</u>	Storage Cumulative Notes
GIS	73	56750	0.0 0.0
GIS	79	113450	510600.0 510600.0
GIS	83	166345	559590.0 1070190.0
			Cumulative Ret (ac-ft) Below Freeboard
			24.57

Pond	Area	
3.	8	

602527 13.83212

# POND SIZING CALCULATIONS

# I-75 Pond Siting

#### FPID: 452074-2-32-01

		Po	ond Name: Date:	32-3 2/28/	2024		Full	Typica	al Section Wie	jth
PRE-DEVELOPMENT RU				el 201	2024					
Insite Basin Area	31.28		TERS				R	asin Lim	its	
						1		10	_	
ond Parcel Area	10.05	ac					2126+80	to	2159+00	
otal Area	41.33	ac								
URVE NUMBER CALCUA	TION:					-				
I	TYPE A SOILS		TYPE B SOILS		TYPE C SO	ILS	TYPE D SOILS			
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft²)	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CN*A	TOTAL AREA
npvervious	6.51	98							637.49	6.5
rass	24.77	39							966.22	24.7
ond Site Pre Condition	10.05	39							391.95	10.0
									0.00	0.0
									0.00	0.0
									0.00	0.0
									0.00	0.0
									0.00	0.0
TOTALS	41.33		0		0		0		1995.67	41.3
							WEIGH	IED CN		4
	ff Depth (Q) = 2S) <sup>2</sup> /(P + 0.8S) RUNOFF P	)				Lotinia	<b>ted Runoff Vo</b> Peak Volume		29.45 a	ac-ft
Onsite Basin Area	31.28	ас					Basin Limits			
ond Parcel Area	10.05	ac				1	2126+80	to	2159+00	
otal Area	41.33	ac								
URVE NUMBER CALCUA	TION:									
	TYPE A SOILS		TYPE B SOILS		TYPE C SOILS		TYPE D SOILS			
LAND USE	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	AREA (ft <sup>2</sup> )	CN	CN*A	TOTAL AREA
npervious	19.96	98							1955.95	19.9
		39							441.53	11.3
rass	11.32									
	2.65	39							103.35	2.6
ond Site (Pervious)		39 100								
ond Site (Pervious)	2.65	-							103.35	7.4
ond Site (Pervious)	2.65	-							103.35 740.00	7.4 0.0 0.0
ond Site (Pervious)	2.65	-							103.35 740.00 0.00	7.4 0.0 0.0 0.0
ond Site (Pervious)	2.65	-							103.35 740.00 0.00 0.00	2.6 7.4 0.0 0.0 0.0 0.0
ond Site (Pervious)	2.65 7.40	-	0		0		0		103.35 740.00 0.00 0.00 0.00	7.4 0.0 0.0 0.0 0.0 41.3
irass ond Site (Pervious) ond Site (Impervious) TOTALS	2.65 7.40	-	0		0		0 WEIGH	TED CN	103.35 740.00 0.00 0.00 0.00 0.00	7.4 0.0 0.0 0.0 0.0

Estimated Runoff Volume = 48.20 ac-ft Peak Volume = A x Q

**Runoff Depth (Q)** = 14.0 in Q =  $(P - 0.2S)^2/(P + 0.8S)$ 

# POND SIZING CALCULATIONS I-75 Pond Siting FPID: 452074-2-32-01

# Pond Name: 32-3 Date: 2/28/2024

## POND SIZING ESTIMATION

# 1) Treatment Volume (Proposed Basin Area x 1" Runoff):

Area Inside R/W		31.28 ac				
		0.68				
Weighted C Total Imperviou	s 0.95	19.96 ac				
Total Perviou		11.32 ac				
	3 0.20	N				
Outstanding FL Water (Y/N)[multiply x 1.5]		1.77 ac-ft ך				
Required Treatment (Runoff from 1" Rainfall)		1.30 ac-ft	(whichever	is greater)		
Required Treatment (1/2" over Area)		1.30 ac-ft				
		1.77 at-it				
2) Estimated Peak Attenuation Volume (EPAV):						
2) Estimated Fear Attendation Column (2007)						
Existing Runoff Volume		29.45 ac-ft				
Proposed Runoff Volume	-			48.20 ac-ft		
•	EPAV = Proposed Runoff - Existing Runoff Volume					
Floodplain Con	npensation	9.24 ac-ft				
ΤΟΤΑ	TOTAL STORAGE					
3) Estimated Pond Configuration:						
Maintenance Berm Width	20.0 ft	Freeboard	1	1.0 ft		
	2.0	Side Slopes (1:H)		4.0		
L/W Ratio	1.5 ft			Dry		
Maximum Treatment Volume Depth	5.0 ft			60.00 ft		
Maximum Pond Depth Below Freeboard						
4) Estimated Pond Dimensions Including Freeboard						
4) Latinuccu Fond Binchions metalog, Feederal						
	- 744 6					

LTOP OF SLOPE	741 ft
WTOP OF SLOPE	370 ft
Area	6.29 ac

# 5) Minimum Site Dimensions (Considering Maintenance Berm and 20% Factor of Safety)

LSITE	937 ft
WSITE	492 ft
Area	10.59 ac

	Pond	<u>32-3</u>						
	<u>Contour</u>	Area	<u>Storage</u>	Cumulative	Notes			
GIS	66	69450	0.0	0.0	Soil 15			
GIS	71	146650	540250.0	540250.0				
GIS	75	195450	684200.0	1224450.0				
			Cumulative Ret (ac-ft) Below Freeboard					
				28.11				

## Pond Area 4.5

602527 13.83212 **APPENDIX C** I-75 Flood Hazard Zones and Soils





- DFW Aquatic Preserves
- C Other OFWs
- C Special OFWs

# **Flood Hazard Zones**

# Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard Riverine

- - Area with Reduced Risk Due to Levee
  - Service Area with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland -
- 1000 Freshwater Pond
- 1 Lake
- Other

I-75 FROM

0 50100 200

Feet

**FLORIDA TURNPIKE TO SR 200** 



- Serves OFW Aquatic Preserves
- C Other OFWs
- Special OFWs

# **Flood Hazard Zones**

## Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard 100
- Future Conditions 1% Annual Chance Flood Hazard 🧮 Riverine 5076

- Hydraulic Soil Group
  - Mission Area with Reduced Risk Due to Levee
  - Marea with Risk Due to Levee

#### WETLANDS

- 100 Estuarine and Marine Deepwater
- Estuarine and Marine Wetland 1
- Freshwater Emergent Wetland 1
- Freshwater Forested/Shrub Wetland 1915
- 1000 Freshwater Pond
- Lake
- Other

0 50100 200 Feet

I-75 FROM **FLORIDA TURNPIKE TO SR 200** 



- OFW Aquatic Preserves
- C Other OFWs
- C Special OFWs

## **Flood Hazard Zones**

#### Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- 🍧 Future Conditions 1% Annual Chance Flood Hazard 🂻 Riverine

- Hydraulic Soil Group
  - Misk Due to Levee
  - 🦗 Area with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland **C**
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond 200
- 100 Lake
- Other

I-75 FROM **FLORIDA TURNPIKE TO SR 200** 

0 50100 200

Feet



- OFW Aquatic Preserves
- C Other OFWs
- Special OFWs

# **Flood Hazard Zones**

## Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard Riverine

- Hydraulic Soil Group
  - Area with Reduced Risk Due to Levee
  - Area with Risk Due to Levee

#### **WETLANDS**

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
  - Freshwater Pond
- Lake
- Other

I-75 FROM **FLORIDA TURNPIKE TO SR 200** 

0 50100 200

Feet



- OFW Aquatic Preserves
- C Other OFWs
- 🗖 Special OFWs

## **Flood Hazard Zones**

# Zone Type

- 1% Annual Chance Flood Hazard
- 100 **Regulatory Floodway**
- Special Floodway 100
- Area of Undetermined Flood Hazard -
- 0.2% Annual Chance Flood Hazard 100
- 🍧 Future Conditions 1% Annual Chance Flood Hazard 🧮 Riverine

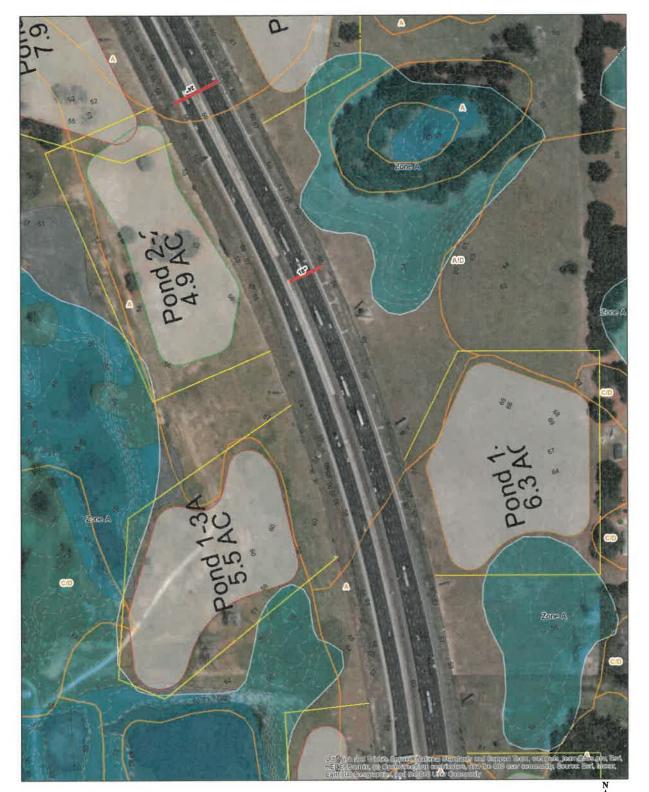
- 🚞 Hydraulic Soil Group
  - Area with Reduced Risk Due to Levee
  - Misk Due to Levee

## WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake 10
- Cther 🔍



I-75 FROM **FLORIDA TURNPIKE TO SR 200** 



- OFW Aquatic Preserves
- C Other OFWs
- **D** Special OFWs

# **Flood Hazard Zones**

# Zone Type

- = 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard 10.0
- 10 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard Riverine

- Hydraulic Soil Group
  - Marea with Reduced Risk Due to Levee
  - Misk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- **Estuarine and Marine Wetland**
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland -
  - Freshwater Pond
- Lake
- Other

I-75 FROM FLORIDA TURNPIKE **TO SR 200** 

0 50100 200 Feet



- OFW Aquatic Preserves
- Cher OFWs
- 📛 Special OFWs

# Flood Hazard Zones

# Zone Type

- 1% Annual Chance Flood Hazard
- **Regulatory Floodway**
- Special Floodway
- Area of Undetermined Flood Hazard -
- 0.2% Annual Chance Flood Hazard -
- 🍧 Future Conditions 1% Annual Chance Flood Hazard 🂻 Riverine

- Hydraulic Soil Group
  - Area with Reduced Risk Due to Levee
  - Area with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland 120
- Freshwater Emergent Wetland 122
- Freshwater Forested/Shrub Wetland 100
- Freshwater Pond **E**35
- Lake
- 100 Other

I-75 FROM **FLORIDA TURNPIKE TO SR 200** 

0 50100 200

Feet



- SFW Aquatic Preserves
- Cher OFWs
- Special OFWs

# **Flood Hazard Zones**

# Zone Type

- 1% Annual Chance Flood Hazard
- **Regulatory Floodway**
- Special Floodway 1000
- Area of Undetermined Flood Hazard
- -0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard Riverine

- Hydraulic Soil Group
  - Area with Reduced Risk Due to Levee
  - Misk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- -Estuarine and Marine Wetland
- Freshwater Emergent Wetland -
- Freshwater Forested/Shrub Wetland
  - Freshwater Pond
- Lake
- Other

I-75 FROM FLORIDA TURNPIKE **TO SR 200** 

0 50100 200 Feet



- OFW Aquatic Preserves
- Cher OFWs
- 📁 Special OFWs

# **Flood Hazard Zones**

#### Zone Type

- 1% Annual Chance Flood Hazard
- -Regulatory Floodway
- 68 Special Floodway
- Area of Undetermined Flood Hazard -
- 0.2% Annual Chance Flood Hazard -
- 🍧 Future Conditions 1% Annual Chance Flood Hazard 🂻 Riverine

- C Hydraulic Soil Group
  - Area with Reduced Risk Due to Levee
  - Area with Risk Due to Levee

#### **WETLANDS**

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland 100
- Freshwater Pond
- Lake
- -Other



I-75 FROM FLORIDA TURNPIKE **TO SR 200** 



- DFW Aquatic Preserves
- C Other OFWs
- Special OFWs

# **Flood Hazard Zones**

## Zone Type

- 1% Annual Chance Flood Hazard
- 100 **Regulatory Floodway**
- Special Floodway 100
- Area of Undetermined Flood Hazard
- 100 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard Riverine

- Hydraulic Soil Group
  - Mrea with Reduced Risk Due to Levee
  - Marea with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- 100 Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- 100 Freshwater Pond
- 1000 Lake
- Other



0 50100 200 Feet



- 📖 OFW Aquatic Preserves
- C Other OFWs
- 🗖 Special OFWs

#### **Flood Hazard Zones**

### Zone Type

- 1% Annual Chance Flood Hazard
- **Regulatory Floodway**
- Special Floodway 100
- Area of Undetermined Flood Hazard -
- 0.2% Annual Chance Flood Hazard
- 🍧 Future Conditions 1% Annual Chance Flood Hazard 🂻 Riverine

- 🚞 Hydraulic Soil Group
  - Area with Reduced Risk Due to Levee
  - 🥗 Area with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland **1**
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- -Lake
- Other

**I-75** FROM **FLORIDA TURNPIKE TO SR 200** 

0 50100 200

Feet



- DFW Aquatic Preserves
- C Other OFWs
- C Special OFWs

# **Flood Hazard Zones**

#### Zone Type

- 1% Annual Chance Flood Hazard
- 100 **Regulatory Floodway**
- Special Floodway
- Area of Undetermined Flood Hazard
- 100 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard 🧮 Riverine 100

- Time Hydraulic Soil Group
  - Area with Reduced Risk Due to Levee
  - Misk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater -
- ER. **Estuarine and Marine Wetland**
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- 100 Freshwater Pond
- Lake
- -Other



I-75 FROM FLORIDA TURNPIKE **TO SR 200** 



- OFW Aquatic Preserves
- C Other OFWs
- Special OFWs

# **Flood Hazard Zones**

# Zone Type

- 1% Annual Chance Flood Hazard
- 100 **Regulatory Floodway**
- Special Floodway 12.0
- Area of Undetermined Flood Hazard 100
- 0.2% Annual Chance Flood Hazard 100
- 🍧 Future Conditions 1% Annual Chance Flood Hazard 🧮 Riverine

- Hydraulic Soil Group
  - Area with Reduced Risk Due to Levee
  - Misk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater 100
- Estuarine and Marine Wetland 100
- Freshwater Emergent Wetland 100
- Freshwater Forested/Shrub Wetland test i
- Freshwater Pond
- Lake
- Long St. Other



I-75 FROM FLORIDA TURNPIKE **TO SR 200** 



- OFW Aquatic Preserves
- C Other OFWs
- C Special OFWs

# **Flood Hazard Zones**

# Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard 100
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard Riverine

- Hydraulic Soil Group
  - Area with Reduced Risk Due to Levee
  - Marea with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other

- FROM **FLORIDA TURNPIKE TO SR 200**
- 0 50100 200 Feet
- I-75



- OFW Aquatic Preserves
- Mar Of Ws
- Special OFWs

# **Flood Hazard Zones**

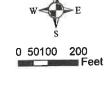
# Zone Type

- 1% Annual Chance Flood Hazard
- **Regulatory Floodway**
- Special Floodway 100
- Area of Undetermined Flood Hazard -
- 0.2% Annual Chance Flood Hazard 1.1
- 🍧 Future Conditions 1% Annual Chance Flood Hazard 🧮 Riverine

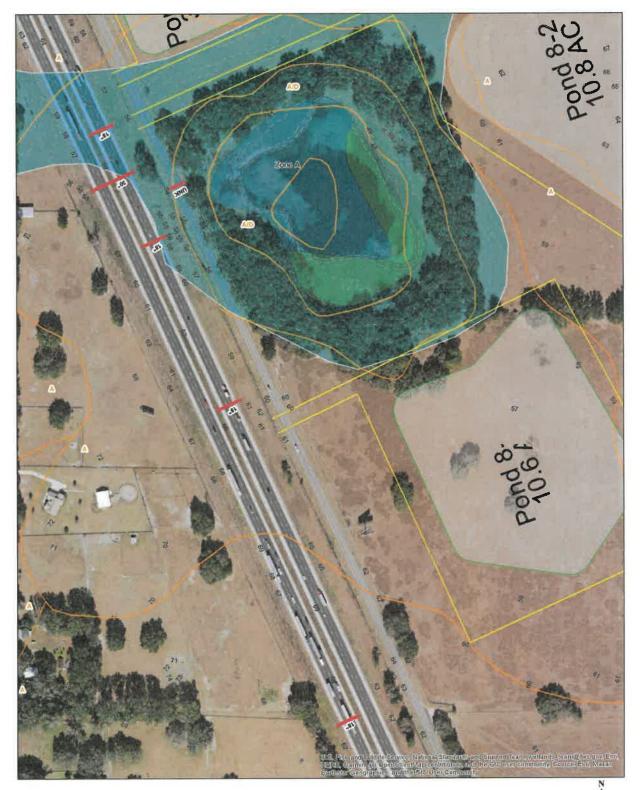
- Hydraulic Soil Group
  - Area with Reduced Risk Due to Levee
  - Mrea with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater -
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other



I-75 FROM **FLORIDA TURNPIKE TO SR 200** 



- OFW Aquatic Preserves
- C Other OFWs
- Special OFWs

# **Flood Hazard Zones**

# Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Rrea of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard Riverine

- Hydraulic Soil Group
  - Marea with Reduced Risk Due to Levee
  - Area with Risk Due to Levee

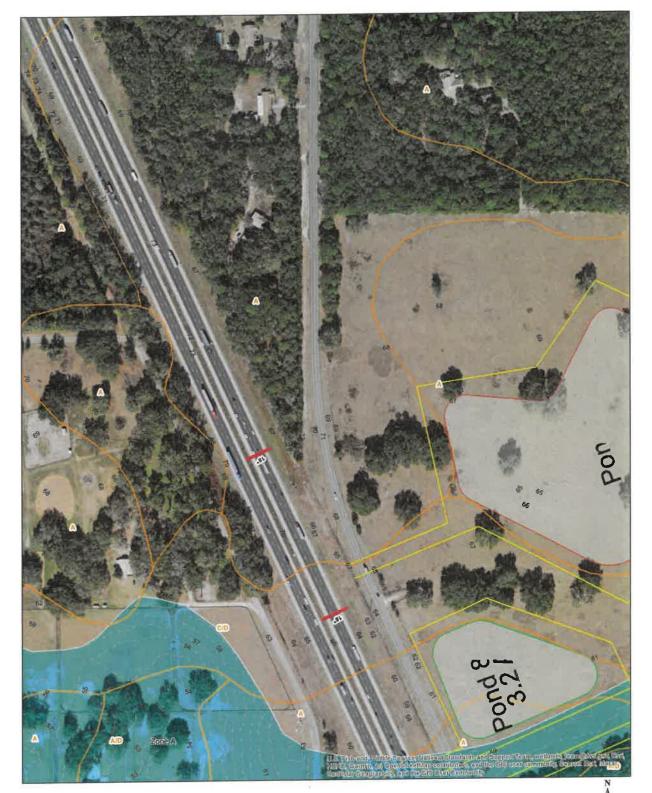
#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland ----
- Freshwater Pond
- -Lake
- Other

I-75 FROM **FLORIDA TURNPIKE TO SR 200** 

0 50100 200

Feet



- OFW Aquatic Preserves
- Cher OFWs
- Special OFWs

## **Flood Hazard Zones**

#### Zone Type

- 1% Annual Chance Flood Hazard
- 100 **Regulatory Floodway**
- 1 Special Floodway
- Area of Undetermined Flood Hazard -
- 0.2% Annual Chance Flood Hazard 1000
- 🍧 Future Conditions 1% Annual Chance Flood Hazard 💻 Riverine

- Hydraulic Soil Group
  - Area with Reduced Risk Due to Levee
  - Marea with Risk Due to Levee

## WETLANDS

- Estuarine and Marine Deepwater -
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland 100
- Freshwater Forested/Shrub Wetland 100
- Freshwater Pond
- Lake -
- Other



0 50100 200

Feet

**TO SR 200** 



- I OFW Aquatic Preserves
- C Other OFWs
- Special OFWs

# **Flood Hazard Zones**

# Zone Type

- in t 1% Annual Chance Flood Hazard
- 100 **Regulatory Floodway**
- Special Floodway 100
- Area of Undetermined Flood Hazard 10.0
- -0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard Riverine

- Hydraulic Soil Group
  - Area with Reduced Risk Due to Levee
  - Marea with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland let i
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- 1005 Freshwater Pond
- -Lake
- Other



0 50100 200

Feet



- Serves OFW Aquatic Preserves
- C Other OFWs
- Special OFWs

## Flood Hazard Zones

#### Zone Type

- 1% Annual Chance Flood Hazard
- 100 **Regulatory Floodway**
- 100 Special Floodway
- Area of Undetermined Flood Hazard -
- 0.2% Annual Chance Flood Hazard 1001
- 😁 Future Conditions 1% Annual Chance Flood Hazard 🧮 Riverine

- Hydraulic Soil Group
  - Area with Reduced Risk Due to Levee
  - Area with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland -
- Freshwater Forested/Shrub Wetland .....
- Freshwater Pond
- 1.00 Lake
- Other



I-75 FROM **FLORIDA TURNPIKE TO SR 200** 



# **Flood Hazard Zones**

# Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

- Hydraulic Soil Group
  - Misk Due to Levee

#### **WETLANDS**

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
  - Freshwater Pond
- 💻 Lake
- Other

Tool i

Riverine



0 50100 200 Feet



# **Flood Hazard Zones**

# Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

- Hydraulic Soil Group
  - Misk Due to Levee

# WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine





# **Flood Hazard Zones**

## Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

- Hydraulic Soil Group
  - Area with Risk Due to Levee

# WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- 💻 Lake
- Other
- Eiverine



0 50100 200 Feet



# **Flood Hazard Zones**

# Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

- Hydraulic Soil Group
  - Area with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine





# **Flood Hazard Zones**

## Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

#### 

Marea with Risk Due to Levee

## WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- 💻 Lake
- Other
- Riverine

W S E

0 50100 200 Feet



# **Flood Hazard Zones**

# Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

- Hydraulic Soil Group
  - 🥗 Area with Risk Due to Levee

## WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- 💻 Lake
- Other
- 💻 Riverine





## **Flood Hazard Zones**

#### Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

- Hydraulic Soil Group
- Area with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- 💻 Lake
- Other
- Riverine



0 50100 200 Feet



## **Flood Hazard Zones**

#### Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

- Hydraulic Soil Group
- Misk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- 💻 Lake
- Other
- miverine 🔤





## **Flood Hazard Zones**

#### Zone Type

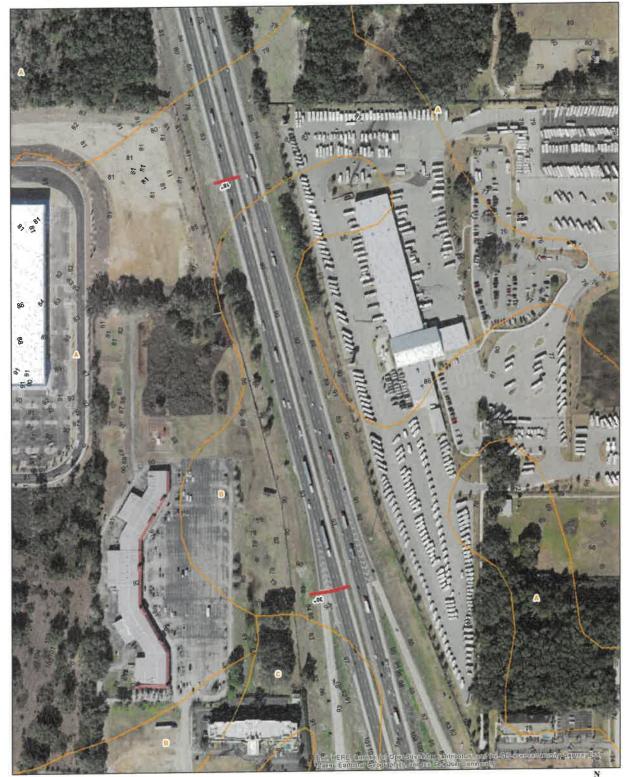
- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

- 🥙 Area with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- 💻 Lake
- Other
- Riverine





## **Flood Hazard Zones**

#### Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

- 🚞 Hydraulic Soil Group
- Area with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- 💻 Lake
- Other
- Riverine





## **Flood Hazard Zones**

#### Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Marea with Reduced Risk Due to Levee

- Hydraulic Soil Group
- Area with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
  - Freshwater Pond
- Lake
- Other

1

Riverine



FLORIDA TURNPIKE TO SR 200



## **Flood Hazard Zones**

## Zone Type

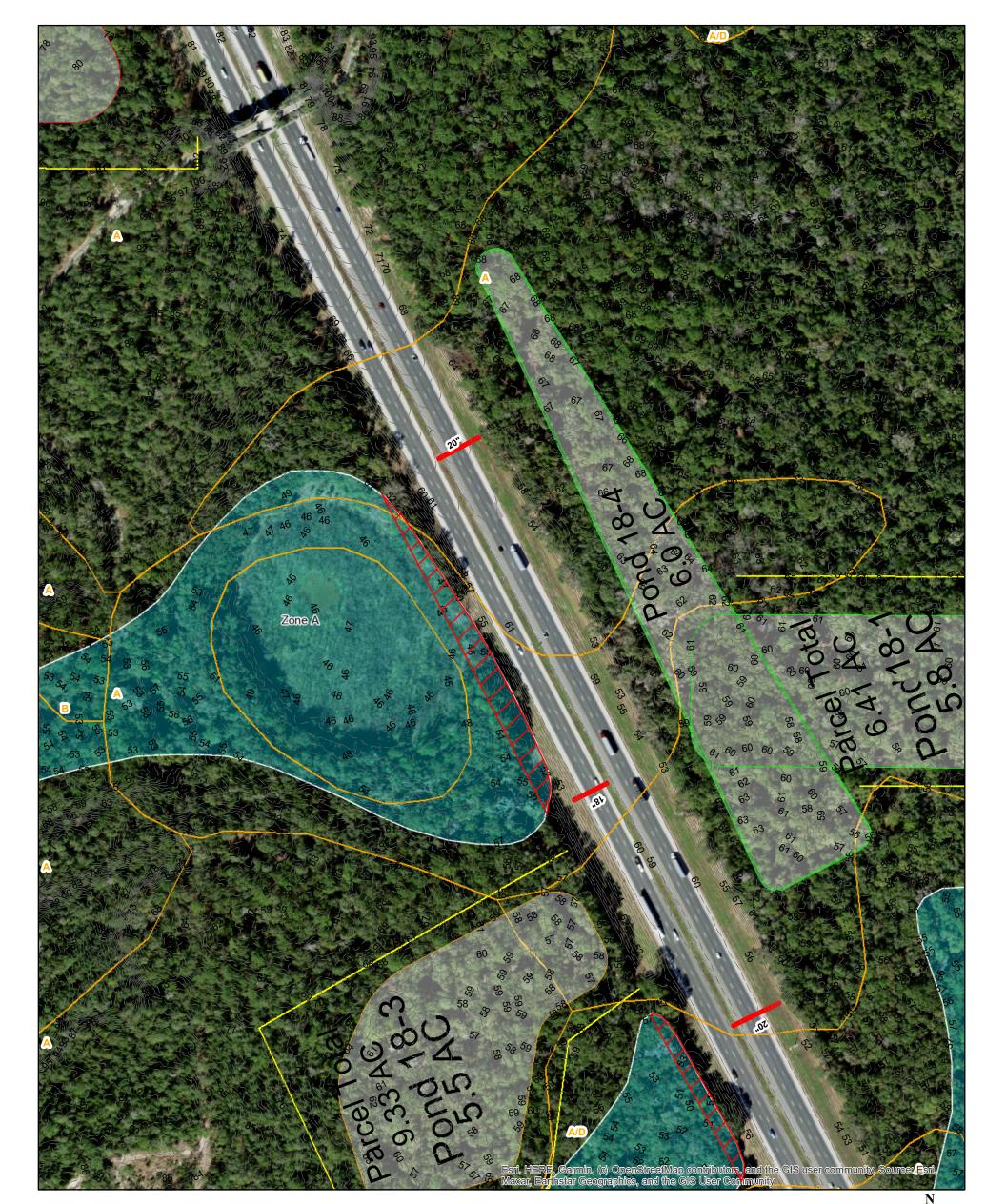
- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Minimized Area with Reduced Risk Due to Levee

- 🚞 Hydraulic Soil Group
- Area with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- 💻 Lake
- Other
- Riverine





# **Flood Hazard Zones**

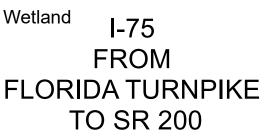
# Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- Z Floodplain Encroachment

- Hydraulic Soil Group
- Area with Risk Due to Levee

# WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine



0 50100 200

Feet



## **Flood Hazard Zones**

#### Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

- Hydraulic Soil Group
- Area with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine



0 50100 200 Feet



## **Flood Hazard Zones**

#### Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

- Hydraulic Soil Group
- Area with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
  - Freshwater Pond
- Lake
- Other

Riverine



0 50100 200 Feet



## **Flood Hazard Zones**

## Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

- Hydraulic Soil Group
- Area with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- 💻 Lake
- Other
- Riverine





## **Flood Hazard Zones**

#### Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

- Hydraulic Soil Group
- Misk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
  - Freshwater Pond
- 🔲 Lake
- 🥌 Other

Riverine





## **Flood Hazard Zones**

## Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

- Hydraulic Soil Group
- Area with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine





## **Flood Hazard Zones**

#### Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

- Marea with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
   Lake
- Other
- Riverine



## 0 50100 200 Feet



## **Flood Hazard Zones**

#### Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

- Area with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- 💻 Lake
- Other
- Riverine





## **Flood Hazard Zones**

#### Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Mission Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

- Hydraulic Soil Group
- Area with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
  - Freshwater Pond
- Lake
- Other
- Riverine



0 50100 200 Feet



## **Flood Hazard Zones**

#### Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Minimized Risk Due to Levee

- Hydraulic Soll Group
- Area with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine





## **Flood Hazard Zones**

#### Zone Type

- 1% Annual Chance Flood Hazard
- **Regulatory Floodway** 100
- Special Floodway 121
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard 2.75
- Area with Reduced Risk Due to Levee E.M.

- Hydraulic Soil Group
- Misk Due to Levee

#### **WETLANDS**

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland 200
- Freshwater Emergent Wetland -
- Freshwater Forested/Shrub Wetland
  - **Freshwater Pond**
- -Lake
- Other

1

Riverine



Feet

1-75 FROM **FLORIDA TURNPIKE TO SR 200** 



## **Flood Hazard Zones**

## Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

- 🖂 Hydraulic Soil Group
- Area with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine





## **Flood Hazard Zones**

#### Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

- Hydraulic Soil Group
- Area with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
  - Freshwater Pond Lake
- Other

2100

Riverine

W S E

0 50100 200 Feet



## **Flood Hazard Zones**

#### Zone Type

- 1% Annual Chance Flood Hazard
- 🛤 Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

- Hydraulic Soil Group
- Area with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
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- Freshwater Pond
- 💻 Lake
- 🧶 Other
- Riverine





## **Flood Hazard Zones**

## Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

- Hydraulic Soil Group
- Area with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
  - Freshwater Pond
- Lake
- Other
- Riverine



0 50100 200 Feet



## **Flood Hazard Zones**

#### Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

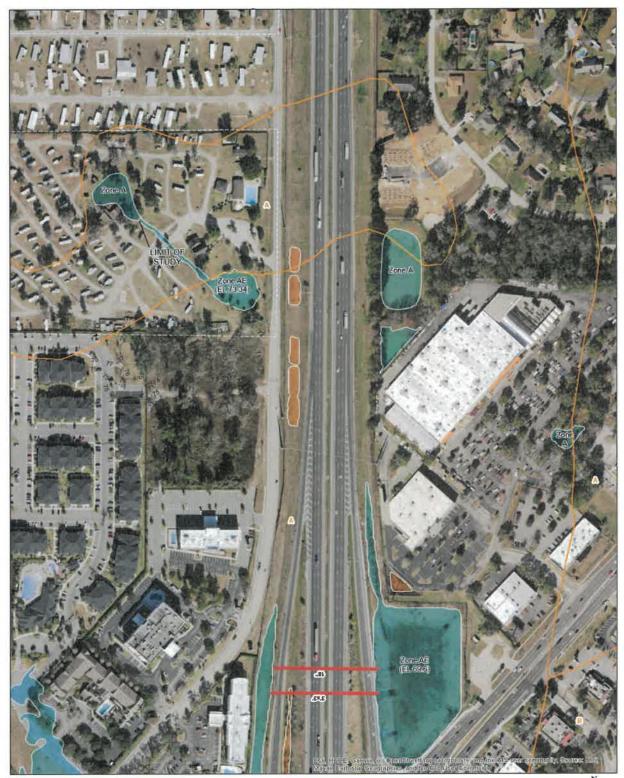
- Hydraulic Soil Group
- Misk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- 💻 Lake
- Other
- Riverine



0 50100 200 Feet



## **Flood Hazard Zones**

#### Zone Type

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

- 🗀 Hydraulic Soil Group
- Area with Risk Due to Levee

#### WETLANDS

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- 💻 Lake
- Other
- Riverine



0 50100 200 Feet





## Stephen Browning, PE

Florida Department of Transportation District Five 719 S. Woodland Blvd DeLand, FL 32720 (904) 769-6595 Stephen.Browning@dot.state.fl.us