



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Consent

F.5.

10/11/2022

Subject:

Waiver Request, Re: Waiver of Stormwater Management Criteria for Corporate Hanger(22WV00015)
(21AD00020)(District 2)

Fiscal Impact:

None

Dept/Office:

Planning and Development and Public Works

Requested Action:

The applicant is requesting that the Board of County Commissioners grant a waiver of Section 62-3751, Exhibit A-Stormwater Management Criteria, subsection 4.4 to allow for underdrains underneath the pond in order to lower the groundwater table on the Merritt Island (barrier island) and to allow for no plantings within the bottom of the pond.

Summary Explanation and Background:

Section 62-3751, Exhibit A - Stormwater Management Criteria, subsection 4.4(d) stipulates the seasonal high groundwater table may be lowered to the normal groundwater table depth with the following exceptions:

1. When a lowering of the groundwater table results in adverse impacts to the hydrology and beneficial functions of adjacent wetlands.
2. Barrier islands.
3. When facilities which would negatively impact an aquifer are located in an aquifer recharge zone or when lowering of the groundwater table adversely impacts users of the surficial aquifer as a drinking water supply.
4. When the tailwater will not allow positive outfall for retention recovery or detention discharges.
5. The County's wetlands and aquifer recharge ordinances shall be used as a guide in determining the above exceptions.

Section 62-3751, Exhibit A - Stormwater Management Criteria, subsection 4.4(k) stipulates dry ponds may be used if the bottom of the pond is at least one-foot above the seasonal high ground water level. In type I and II aquifer recharge areas, as defined by the county comprehensive plan, the bottom of a retention pond shall be at least two feet above the seasonal high water table. The reviewer may require a ground water mounding analysis where appropriate. This may occur for soils with low permeability rates, perched groundwater, high pond storage depths, or other reasons. If the bottom of a dry pond is less than one-foot above the seasonal high ground water level due to physical constraints of the site, or with the approval of the reviewer, the bottom of the pond shall be planted with the wetland vegetation to control cattail growth.

Per the geotechnical report the wet season water table is estimated to be at 0.5' below the pond bottom. The

applicant is proposing underdrains underneath the proposed pond to ensure the pond remains dry by lowering the seasonal high-water table another 6". Per the Federal Aviation Administration (FAA) regulations wet ponds or plantings are not allowed inside the Merritt Island Airport as they can attract wildlife and consequently establish a safety issue for the planes and public. The applicant has additionally submitted a proposal to include cleanouts to the project design to ensure the airport can clean and maintain the proposed underdrains.

The Brevard County Public Works Engineering Department is in support of the waiver request. The applicant has supplied designs of the underdrains and cleanouts to demonstrate to the Board that the proposed underdrains will only serve and effect the area of the pond.

Staff has not granted approval of waiver request 22WV00015, and pursuant to Section 62-3207 of the Code, requests that it be evaluated by the Board of County Commissioners. Board approval of this waiver does not relieve the developer from obtaining all other necessary jurisdictional permits. Approval of this waiver shall be subject to the engineering design depicted in the attached plans, unless minor engineering revision are approved by the appropriate department. Future tenants may be required to meet the aforementioned code section requirements.

Clerk to the Board Instructions:



Kimberly Powell, Clerk to the Board, 400 South Street • P.O. Box 999, Titusville, Florida 32781-0999

Telephone: (321) 637-2001
Fax: (321) 264-6972
Kimberly.Powell@brevardclerk.us

October 12, 2022

M E M O R A N D U M

TO: Tad Calkins, Planning and Development Director

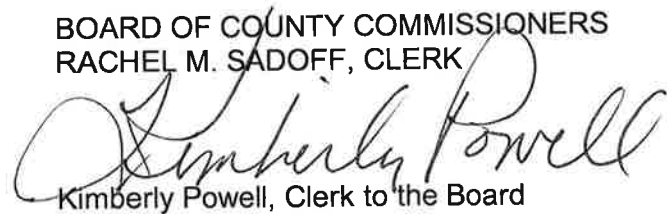
RE: Item F.5., Waiver Request of Stormwater Management Criteria for Corporate Hanger
(22WV00015) (21AD00020)

The Board of County Commissioners, in regular session on October 11, 2022, granted a waiver of Section 62-3751, Exhibit A - Stormwater Management Criteria, Subsection 4.4, to allow for underdrains underneath the pond in order to lower the groundwater table on Merritt Island (barrier Island) and to allow for no plantings within the bottom of the pond.

Your continued cooperation is always appreciated.

Sincerely,

BOARD OF COUNTY COMMISSIONERS
RACHEL M. SADOFF, CLERK


Kimberly Powell, Clerk to the Board

cc: Public Works



BOARD OF COUNTY COMMISSIONERS

Planning and Development
Planning and Zoning
2725 Judge Fran Jamieson Way
Building A, Room 114
Viera, Florida 32940
(321) 633-2070 Phone

LAND DEVELOPMENT WAIVER APPLICATION

This form should be used for all waiver requests or appeals associated with the Code of Ordinances, Section 62, as it relates to Subdivisions, Minor Subdivisions, and Site Plans. Fees for Waivers are \$775.00.

Application Type:

☐ Subdivision Waiver ☒ Site Plan Waiver ☐ Other

If other, please indicate

Tax Account Numbers:

Tax Account 1 Tax Account 2

Project Information and Site Address:

Corporate Hangar		Titusville-Cocoa Airport Authority	
Project Name		Property Owner	
450 Manor Dr	Merritt Island	FL	32952
Street	City	State	Zip Code

Applicant Information:

Kevin Daugherty, AAE		Titusville-Cocoa Airport Authority	
Applicant Name		Company	
355 Golden Knights Blvd	Titusville	FL	32780
Street	City	State	Zip Code
321 267 8780	kdaugherty@flyspacecoast.org		
Primary Phone	Secondary Phone	Email Address	

Engineer/Contractor (if different from applicant):

Bruno Chiappe		Michael Baker International	
Engineer or Project Manager		Company	
12740 Gran Bay Parkway West Suite 2110		Jacksonville	FL 32259
Street	City	State	Zip Code
9042358183		bruno.chiappe@mbakerintl.com	
Primary Phone	Secondary Phone	Email Address	

Description of Waiver Request and Code Section:

Section 62-3751, Exhibit A – Stormwater Management Criteria, subsection 4.4

The proposed pond is located inside the Merritt Island Airport and has a TOB elevation at 5ft NAVD88 and BOT elevation at 3ft NAVD88. Per the geotech report the wet season water table is estimated to be at 2.5 ft (0.5 ft below pond bottom). Underdrains are proposed underneath the pond to ensure the pond stays dry by lowering the season high water table another 6" below the pond bottom, and also aid in the recovery of the pond.

Per FAA criteria wet ponds or plantings are not allowed because they can become a wildlife attract hazard, which becomes a safety issue for planes and the public. In order to ensure the pond stays dry, underdrains are proposed underneath the pond which will lower the water table only underneath the pond by 6". We respectfully submit the request to use underdrains for this pond.

The proposed underdrains will not have any effects outside the pond footprint and will be maintained by the airport. Cleanouts have been added to the design to allow the airport to clean and maintain the underdrains.

If you wish to appeal any decision made by County staff on the waiver, you may request that the Board of County Commissioners make a determination. The Board's decision approving or disapproving the waiver or interpretation is final.

	Kevin Daugherty
Owner/Applicant Signature	Print Name

Land Development Application Document Submittal Requirements

Waivers for Site Plans or Subdivisions require an application, waiver criteria (listed below), an 8 ½-inch x 11 inch vicinity map, and a fee of \$775.00.

Waiver Criteria for Subdivisions and Site Plans

For a waiver to be considered and approved by staff, your request must comply with all of the following criteria. Please explain, in detail, how your request meets the following conditions.

1. The particular physical conditions, shape, or topography of the specific property involved causes an undue hardship to the applicant if the strict letter of the code is carried out.

If Underdrains not allowed the pond runs the risk of staying wet for longer periods of time. As mentioned above per FAA criteria dry ponds are required and must stay dry to prevent a wildlife attractant.

2. The granting of the waiver will not be injurious to the other adjacent property.

The proposed underdrains only serve and effect directly underneath pond footprint which is relatively small. Underdrains will have no effect outside the pond footprint or to the normal water table.

3. The conditions, upon which a request for waivers are based, are particular to the property for which the waiver is sought and are not generally applicable to other property and do not result from actions of the applicant.

Due to site constraints the use of underdrains ensure the pond stays dry which is a requirement per FAA criteria.

4. The waiver is consistent with the intent and purpose of the county zoning regulations, the county land use plan, and the requirements of this article.

The waiver is consistent.

5. Delays attributed to state or federal permits.

None

6. Natural disasters.

None

7. County development engineer and affected agencies concur that an undue hardship was placed on the applicant. (To be filled out by County staff)

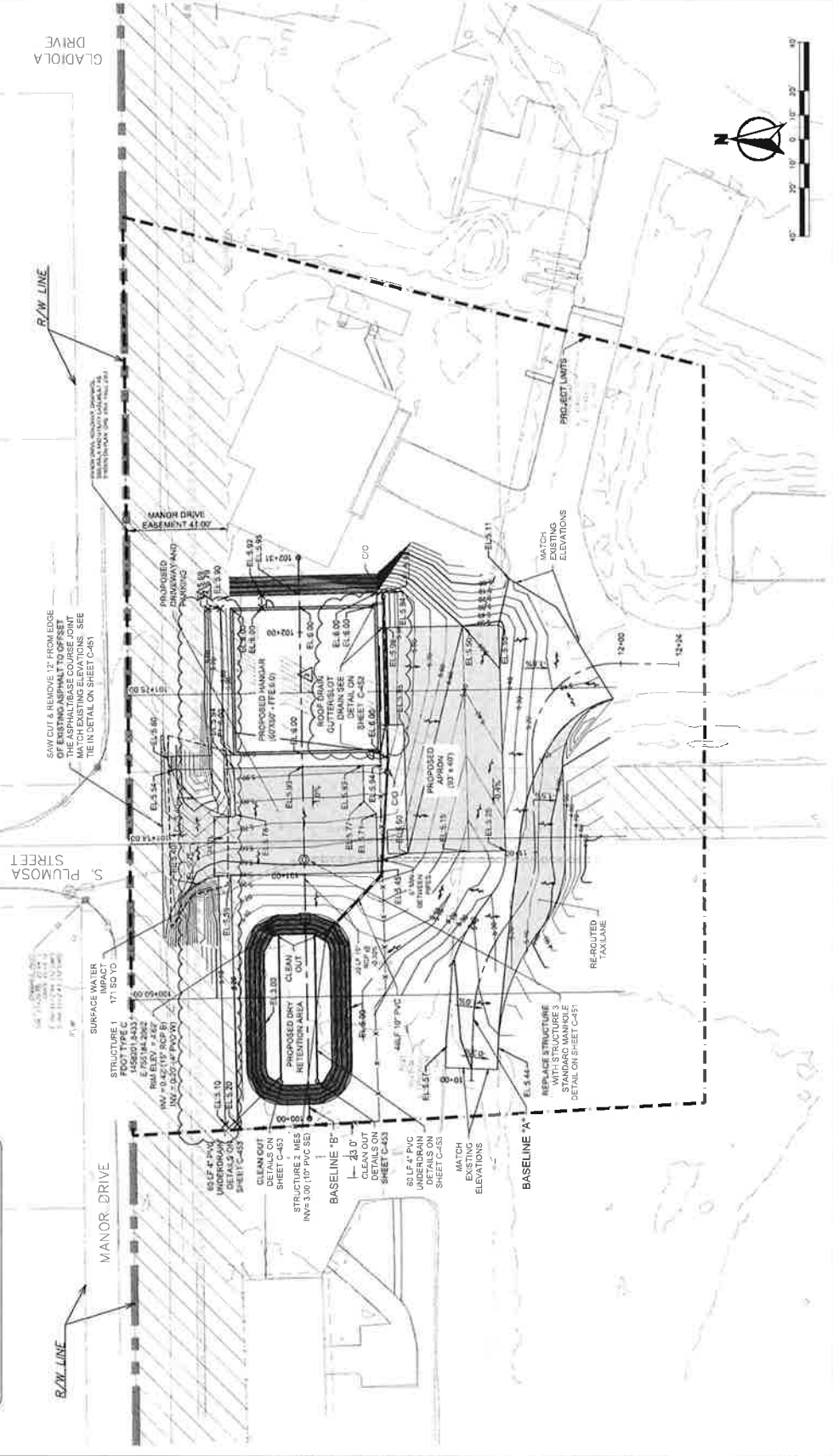
Office Use Only

Request Date	Fees	Board Date
Original Project Number	Waiver Number	
Coordinator Initials	Reference Files	
County Manager/Designee Approval		

EARTHWORK QUANTITIES			
ITEM DESCRIPTION	QUANTITIES	UNITS	
UNCLASSIFIED EXCAVATION *	234	CY	
EMBANKMENT	220	CY	

- NOTES:
- PROPOSED PIPE LENGTHS ARE MEASURED FROM CENTER STRUCTURE TO THE CENTER OF THE STRUCTURE.
 - STRUCTURE NORTHING AND EASTING ARE TAKEN AT THE CENTER POINT OF THE STRUCTURE.
 - AT DRIVEWAY GRAVING IS SHOWN FROM PROPOSED 184000014 FOR THE CONTIGUOUS.

LEGEND	
PAVING AND RESURFACING	
ASPHALT PAVEMENT (DETAILS ON SHEET C-401)	
CONCRETE	
PAVEMENT REPAIR	
FINISHED GRADE CONTOUR	
EXISTING GRADE CONTOUR	
PROPOSED STORM PIPE AND STRUCTURE	
BY OTHERS STORM PIPE AND STRUCTURE	
PROPOSED SURFACE FLOW DIRECTION	
MERRITT ISLAND AIRPORT PROPERTY LINE	
LIMITS OF CONSTRUCTION	



MERRITT ISLAND AIRPORT

Michael Baker
INTERNATIONAL

515 NORTH FLAGLER DRIVE, SUITE 303
WEST PALM BEACH, FL 33411
PHONE (561) 812-6400
CORPORATE LICENSE NUMBER 28861

PROJECT NO. 179595

DATE: 07/22/2022

PROJECT AREA

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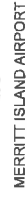
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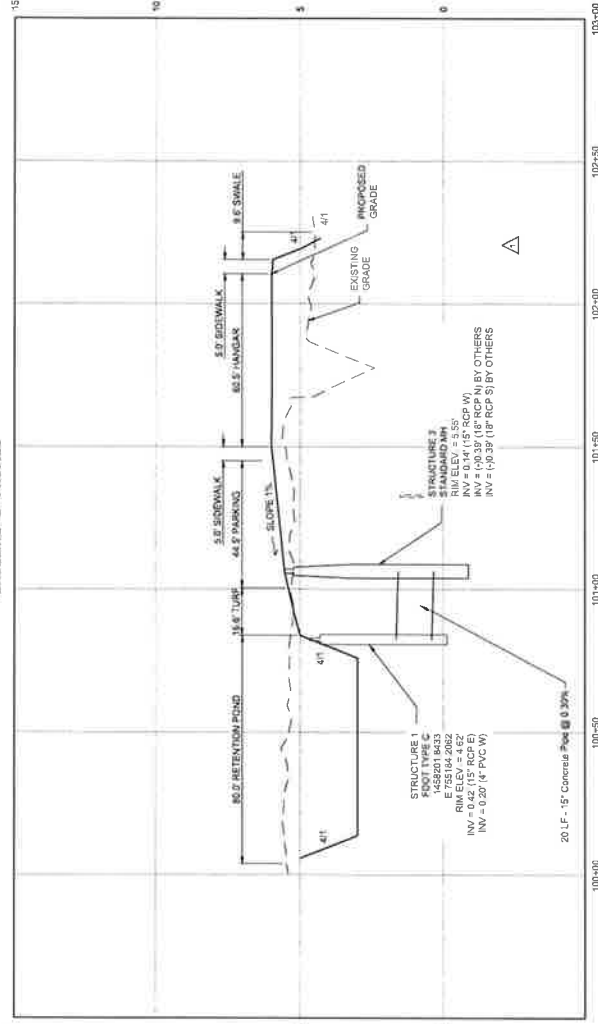
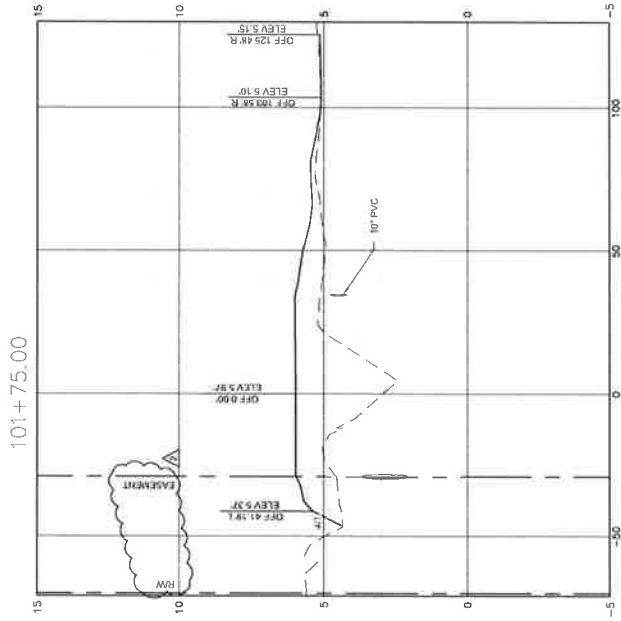
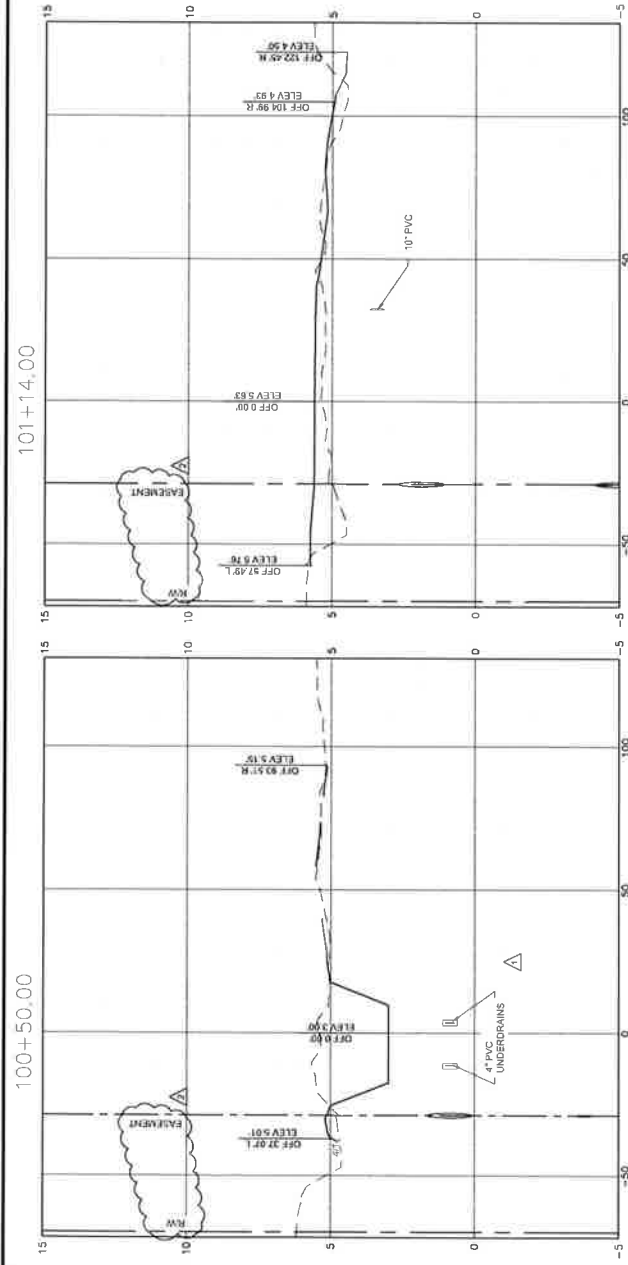
PROJECT AREA



03/01/2015

Michael Baker
INTERNATIONAL

515 NORTH FLAGLER DRIVE, SUITE 303
WEST PALM BEACH, FLORIDA 33401
PHONE: (561) 812-8400
CORPORATE LICENSE NUMBER 28861



Ref.	Date (optional)	REVISIONS	Date	By
1		REVISION 1: COUNTY COMMENTS	04/26/2022	JN
2		REVISION 2: COUNTY COMMENTS	07/16/2022	JN

MERRITT ISI AND AIRPORT

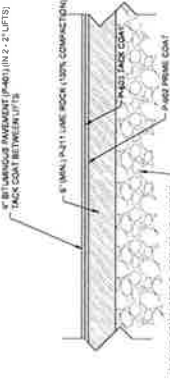
CORPORATE HANGAR

GRADING AND DRAINAGE PROFILE

100% NUTRIMENT

July 22 1795

NA
438461-1-94-01



MANOR DR. TIE-IN SECTION DETAIL

EXIST. PAVEMENT
MANOR DRIVE

MILLING

2' MILLING DEPTH

2' ASPHALT

EXIST. LIMESTONE BASE

2' ASPHALT PAVEMENT
SP-12.5 OR S-1

SLOPE WARPS

TACK COAT PER FOOT

SPECIFICATIONS SECTION 300

8" LIME ROCK MIN. LBR 120

95% COMPACTION T160

12" SURFBASE TYPE 2P 500 LBR 410

95% COMPACTION T160

N.T.S.

STRUCTURE 3 STANDARD MANHOLE

N.T.S.

- IV ST-6RS
18" x 24" RS
MAN T-022P
- IV ST-6RS
RAILWAY S/S
- 1" ROP PIPE
MAN N.T.S.
- 1" ROP PIPE
MAN T-022P

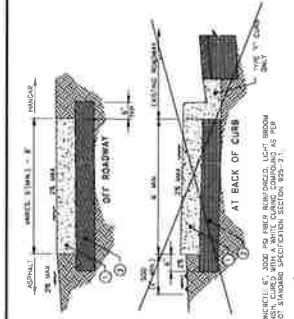
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Figure 1 is a schematic diagram of a circular test specimen. The diagram shows a cross-section of the specimen, which is a thick-walled cylinder. The outer diameter is labeled as 30.0 mm. The inner diameter of the central hole is labeled as 10.0 mm. The specimen is composed of three concentric layers. The central core has a diameter of 10.0 mm. The intermediate layer has a thickness of 10.0 mm. The outer layer has a thickness of 10.0 mm. The total thickness of the specimen is 30.0 mm. The layers are labeled as '10.0 mm' and '10.0 mm'.

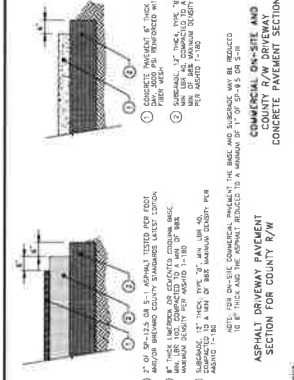
NOTES:

1. NUMBER OF LIFTS REQUIRED FOR PIPE SIZES IN EXCESS OF THOSE SHOWN IN CHART. RIGGING AND TOWERING COSTS WILL BE BASED ON CHART AND BEYOND COUNTY ENGINEERING, IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR WATER MAINS.

2. FUTURE CONSIDERATION APPLIES TO ALL SUBSTANCES PUBLIC OR PRIVATE, DRINKABLE OR NON-DRINKABLE, ALL CASUALTIES, PUBLIC OR PRIVATE. ALL OTHER TOWNSHIP PIPE INSTALLATIONS THAT WILL BECOME COUNTY MAINTAINED INFRASTRUCTURE.

3. BUCKLE ANDING 30" MINOR TOWER STRUCTURES SHALL BE COMPACTED IN 12"

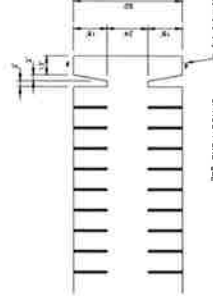
POP. SIZE	NUMBER OF α
10	1
100	2
200	2
500	3
1000	4
2000	5
5000	7
10000	8



Abstract: Many of the most important new technologies are being developed in the United States, but the United States is not doing enough to ensure that these technologies are being commercialized. The report discusses the importance of commercialization and the role of the federal government in this process. It also discusses the importance of the private sector in commercialization and the role of the federal government in this process. The report concludes that the federal government should take a more active role in commercialization, particularly in the areas of research and development, and that the private sector should be encouraged to take a more active role in commercialization.

[illegible]

PARKING LOT AISLE DEAD END AND TURNAROUND ALTERNATIVES



BREVARD COUNTY LAND DEVELOPMENT
1128 JENSEN ROAD JAMISON WAY
FT. WA. FL 32404

No.	Revising Juris.	Revisions	Date	By
1	REVISION 1	COUNTY COMMENTS	06/23/22	JM

1000

MERRITT ISLAND AIRPORT

CORPORATE HANGAR

CORPORATE HANGAR

GRADING AND DRAINAGE DETAILS

Order My Module

Cell Number	179595	Date	JULY 22
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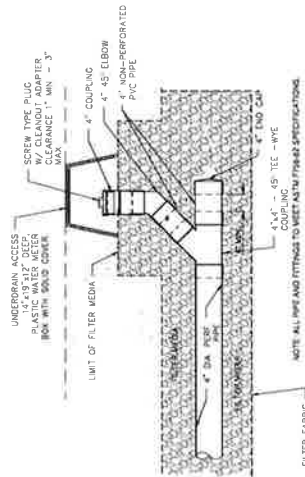
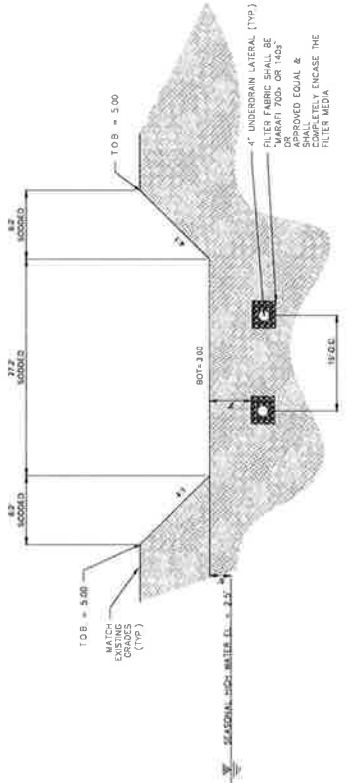
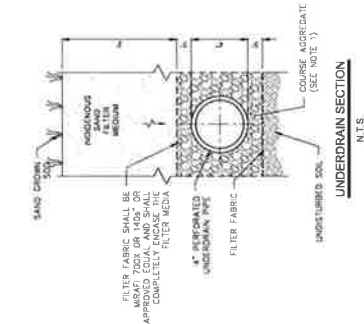
438461-1-95
NA
11935

NA
438461-1-94-01
C-451



Michael Baker
INTERNATIONAL

15 NORTH FLAGLER DRIVE, SUITE 303
WEST PALM BEACH, FLORIDA 33401
PHONE: (561) 812-5400
CORPORATE LICENSE NUMBER 28861

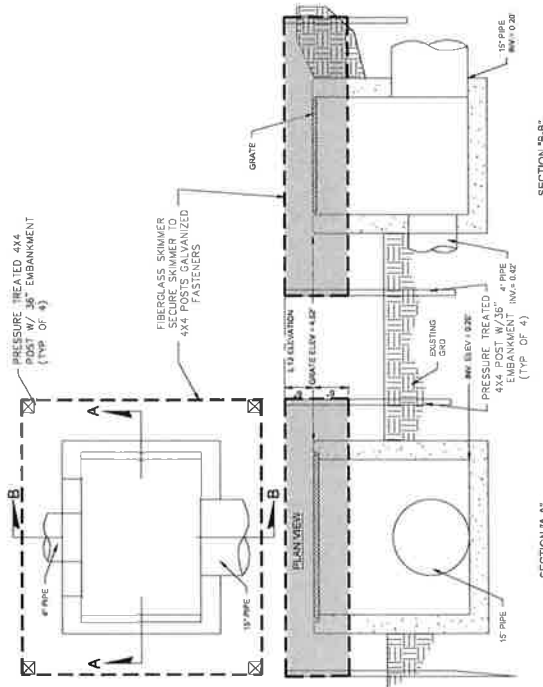


POND CROSS-SECTION DETAIL

NOTES:

1. COURSE AGGREGATE SHALL BE GRAVEL OR STONE MEETING THE REQUIREMENTS OF FOOT SECTION 601-2 OR 601-3, RESPECTIVELY. THE GRADATION SHALL BE:
2. SECTION 601-2: 100% PASSING 3/4" (19.0 mm) SIEVE; 10% PASSING 20" (50.8 mm) SIEVE; 0% PASSING 425" (10.6 mm) SIEVE.
3. POLYETHYLENE OR POLYPROPYLENE SMOOTH INTERIOR PIPE OR ASTM F756 FOR 4" POLYETHYLENE PIPE AND 6" POLYPROPYLENE PIPE.
4. 3" FIBER GLASS SHALL BE "MINUT 700" OR 100" OR APPROVED EQUAL AND SHALL BE WRAPIED OVER THE TOP OF THE FILTER MEDIA, UNDER THE SODS AND OVER THE SODS.
5. SODS TO BE USED FOR SAND FILLER MEDIA SHALL BE CALI, INDOGENOUS SOILS AVERAGE WEATHRATION RATE IS 75 FJ/HR FROM 0.00-0.70.
6. REGULATION TESTS PERFORMED BY THOMAS CORP. SHALL BE REPORTED ON DR-01-70.
7. ALL SODS SHALL BE PLACED IN A LINE WITHIN 10' OF EACH OTHER. SODS WHICH HAVE CRACKS OR FRACTURES WHICH EXTENDED TO THE GROUND SURFACE AT ANY 420 FEET OR LESS LENGTH OF 45" OR MORE, HOWEVER IS SHORPER.

UNDERDRAIN CLEANOUT DETAIL FOR RETENTION POND



STRUCTURE 1 -TYPE C CONTROL STRUCTURE

N T S

[illegible]

MERRITT ISI AND AIRPORT

CORPORATE HANGAR

GRADING AND DRAINAGE DETAILS

Project Number	179595	Date	July 22
NA			
438461-1-94-01			C-453

MERRITT ISLAND AIRPORT CORPORATE HANGAR

DRAINAGE REPORT

PREPARED FOR THE



AT THE

MERRITT ISLAND AIRPORT

Prepared by

Michael Baker International

May 2022



12740 Gran Bay Parkway W | Suite 2110 | Jacksonville, FL 32258

Phone: (904) 380-2500 | Website: www.mbakercorp.com

Michael Baker
INTERNATIONAL

Warner, Jenny

Digitally signed by Warner, Jenny
Date: 2020.12.08 13:51:14 -05'00'

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 ICPR BASIN INPUT REPORT (POST-DEVELOPMENT)..... C80

 ICPR LINK INPUT REPORT (POST-DEVELOPMENT)..... C87

 ICPR RUNOFF SUMMARY (POST-DEVELOPMENT) C102

 ICPR NODE MAX CONDITION REPORT (POST-DEVELOPMENT)..... C109

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SECTION 1.0: PROJECT DESCRIPTION

The Titusville-Cocoa Airport Authority (TCAA) is proposing to construct a new hangar at Merritt Island Airport (Airport). This new facility will include a proposed 60 ft by 60 ft pre-engineered hangar used to store aircraft. A small (5 car) parking lot will be built adjacent to Manor Drive to accommodate the hangar, as well as a 93 ft by 40 ft attached apron that connects to the existing taxiway adjacent to the project site.

A dry retention facility is proposed within the project limits to provide water quality and quantity for the proposed development. The purpose of this report is to document the proposed drainage design and support the Environmental Resource Permitting process with the St. Johns River Water Management District (SJRWMD) and Brevard County.



Figure 1. Project Layout

SECTION 2.0: EXISTING SITE CHARACTERISTICS

The project area is approximately 0.6 acres and is located on the north side of the Airport near Manor Drive. Stormwater runoff from the undeveloped site flows into an existing roadside ditch along Manor Drive, which ultimately outfalls to Sykes Creek. Sykes Creek is part of the Indian River Lagoon system, which is also part of the Banana River Aquatic Preserve and is classified as an Outstanding Florida Water (OFW) and a nutrient impaired waterbody.

The existing site has a slight grade from south to north with existing ground elevations around 5 FT NAVD 88. The site consists mainly of grass-covered open space and approximately 0.1 acres of existing impervious area to remain in place.

2.1 Land Use

The project site is located within Airport property. The area of interest consists of hangars, aprons, office space, taxilanes, and green space. The location of these areas is shown on the FLUCFS classifications maps as Airport.

2.2 Soils

Based on USDA soil survey, soils within the project site and the proposed pond area are classified as Mykka-Urban land complex, which is predominantly sandy marine deposits. The seasonal high water table is found 2.5 feet below grade. A geotechnical investigation was conducted by Thomas Geotechnical Services on November 17, 2021, including two 10-ft SPT borings and an exfiltration test. The findings from this investigation are included in Appendix E.

2.3 Floodplains

The FEMA Flood Insurance Rate Map Firmette (Effective Date January 29, 2021) was used to identify the 100-year floodplain. Based on the maps, no portions of the project site fall within the 100-year floodplain. No adverse impacts are anticipated to the flood plain from this project. The FEMA Floodplain map of the project site is in Appendix A.

2.4 Wetlands and Other Surface Waters

Based on the Wetland Inventory Map, the proposed project will not impact any existing wetlands. A copy of the Wetland Inventory Map is included in Appendix A.

SECTION 3.0: PROPOSED CONDITIONS

The design approach for this project is to grade a dry retention pond with underdrains (SWMF-1) that will provide the required water quality and quantity treatment volumes. The proposed project will add a total of 0.29 acres of impervious area and 0.07 acres of retention area. Runoff from the proposed project site from subbasin 1 will enter the proposed dry pond via surface flow. Runoff from the proposed hangar, subbasin 2, will be captured via inlets. An existing inlet will capture runoff from the realigned taxilane south of the project area. The proposed dry pond will discharge into an existing roadside ditch to the north of the project site via an 18-inch pipe to be installed as part of the North Area Security and Infrastructure (NASI) project.

SJRWMD's design criteria for dry retention facilities include:

- A stormwater treatment volume greatest among the following conditions: (a) Off-line retention of the first one-half inch of runoff or 1.25 inches of runoff from the impervious area, whichever is greater. (b) On-line retention of an additional one half inch of runoff from the drainage area over that volume specified for off-line treatment.
- The retention system must provide the capacity for the appropriate treatment volume of stormwater required within 72 hours following a storm event assuming average antecedent moisture conditions. In retention systems, the stormwater is drawn down by natural soil infiltration.
- For direct discharges to Class I, Class II, OFWs, or Class III waters which are approved, conditionally approved, restricted, or conditionally restricted for shellfish harvesting the

applicant shall provide retention for one of the following: (b) On-line retention of an additional fifty percent of the treatment volume required. (c) On-line retention of the runoff from the three-year, one-hour storm.

The proposed dry pond will provide the required treatment volume of 0.082 ac-ft for a Class II and OFW receiving waterbody and was designed following SJWMD’s methodologies. See Calculations below.

STORMWATER MANAGEMENT FACILITY CALCULATIONS

Project: COI Corporate Hangar By: NB Date: 12-May-22
Condition: PROPOSED Facility: SWMF-1

STAGE (ft.)	AREA (sq. ft.)	AREA (ac.)	INCREMENTAL VOLUME (ac-ft)	CUMULATIVE VOLUME (ac-ft)
3	1,644	0.0377	0.0000	0.0000
3.5	1,989	0.0457	0.0209	0.0209
4	2,360	0.0542	0.0250	0.0458
4.5	2,756	0.0633	0.0294	0.0752
5	3,176	0.0729	0.0340	0.1092

SJRWMD Water Quality Requirements			
DRAINAGE AREA THROUGH SWMF:	0.60 acres		
REQUIRED TREATMENT DEPTH:	0.50 inches		
0.5" OF RUNOFF TREATMENT VOLUME:	0.025 ac-ft		
IMPERVIOUS AREA THROUGH SWMF:	0.29 acres		
REQUIRED TREATMENT DEPTH:	1.25 inches		
RUNOFF FROM 1.25" OF IMPERVIOUS RUNOFF TREATMENT VOLUME:	0.030 ac-ft	< 1.25" over impervious is greater vol.	
ON-LINE SYSTEM TREATMENT VOLUME:	0.055 ac-ft	< Add additional 0.5" over drainage area	
OFW 50% ADDITIONAL TREATMENT VOLUME:	0.027 ac-ft		
REQUIRED TREATMENT VOLUME:	0.082 ac-ft		
REQUIRED TREATMENT ELEVATION:	4.62 ft		

3.1 Design Details

Using Interconnected Channel and Pond Routing (ICPR) 4.07.01 software, the pre- and post-development models for this project were built on an ICPR model from the associated NASI project. The Corporate Hangar project basins, nodes, and links were added to the NASI model for the post-development scenario. The NASI project will be constructed first, and the Corporate Hangar project will connect to its existing stormwater pipe network. The model calculated peak discharge rates and peak stages for various storm events. Post-development peak discharge rates were reduced to the greatest extent possible, lesser than pre-development rates for all storm events. A summary of the results is included below.

PEAK DISCHARGE RATE COMPARISONS					
NODE	STORM SIMULATION	PRE CONDITION PEAK FLOWS (CFS)	PROP. CONDITION PEAK FLOW (CFS)	REDUCTION IN FLOW (CFS)	SWMF-1 PEAK STAGES (FT)
BNDY	FDOT 001Y-024H	8.02	7.99	0.03	3.00
BNDY	FDOT 010Y-024H	11.89	11.70	0.19	3.00
BNDY	FDOT 025Y-024H	13.89	13.73	0.16	3.00
BNDY	FDOT 100Y-024H	16.94	16.92	0.02	3.06
BNDY	SCSII 025Y-024H	93.19	89.90	3.29	4.80

A curve number table was created in ICPR for the hydrologic soils group found within the project site. ICPR uses this table along with the soils map and the land use map to generate a weighted curve number for each manual basin. A copy of this table is included in Appendix A.

Due to the close proximity to Sykes Creek, tailwater conditions in the outfall ditch are controlled by tide elevation in Sykes Creek. The ditch located along Manor Drive and Kemp Street is directly connected to Sykes Creek, with a peak tide elevation of 0.5 feet NAVD88 per data provided by NOAA station. Tailwater conditions for the ditch along Manor Drive were set to 2.0 feet NAVD88 for conservative purposes.

The dry retention pond includes two 4-inch underdrains to aid stormwater storage and infiltration (see Appendix A for underdrain calculations). The retention system successfully recovered the treatment volume of stormwater within 72 hours following a storm event. The results for the recovery analysis can be found in Appendix A.

A small portion of the taxiway at the southern extent of the project limits will be realigned (see exhibit in Appendix A, page A6). Runoff from this new impervious area does not pass through the proposed stormwater treatment facility due to site limitations. Instead, runoff from this small area will gradually sheet flow into an inlet directly south of the project site. Treatment for this area will be accounted for in the proposed pond by providing overtreatment volume compensation in accordance with the SJRWMD Manual dated June 1, 2018. Overtreatment Calculations are included below.

OVERTREATMENT CALCULATION

Treated Area
0.6

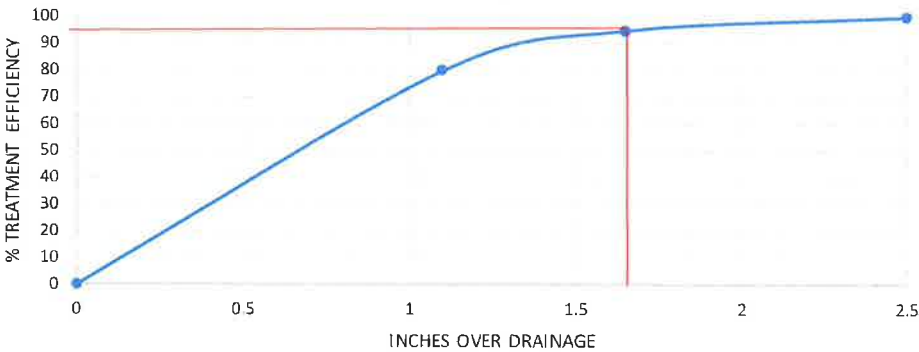
Impervious Area
0.29

Untreated Area
0.033 acres

Rule requires 1.25" over Impervious + 0.5" over Drainage Area. Convert everything in terms of "Inches over Drainage Area"
1.25" over Impervious converted to "inches over Drainage Area"
 $1.25 \times 0.29 = Z \times 0.60$
Z is the equivalent amount of 1.25" over the entire area: 0.60 inches

80% treatment requires: $0.6" + 0.5" = 1.1"$ over drainage area
95% treatment requires: $1.1" \times 1.5 = 1.65"$ over drainage area

From figure below, 95% treatment requires 1.65" over drainage area

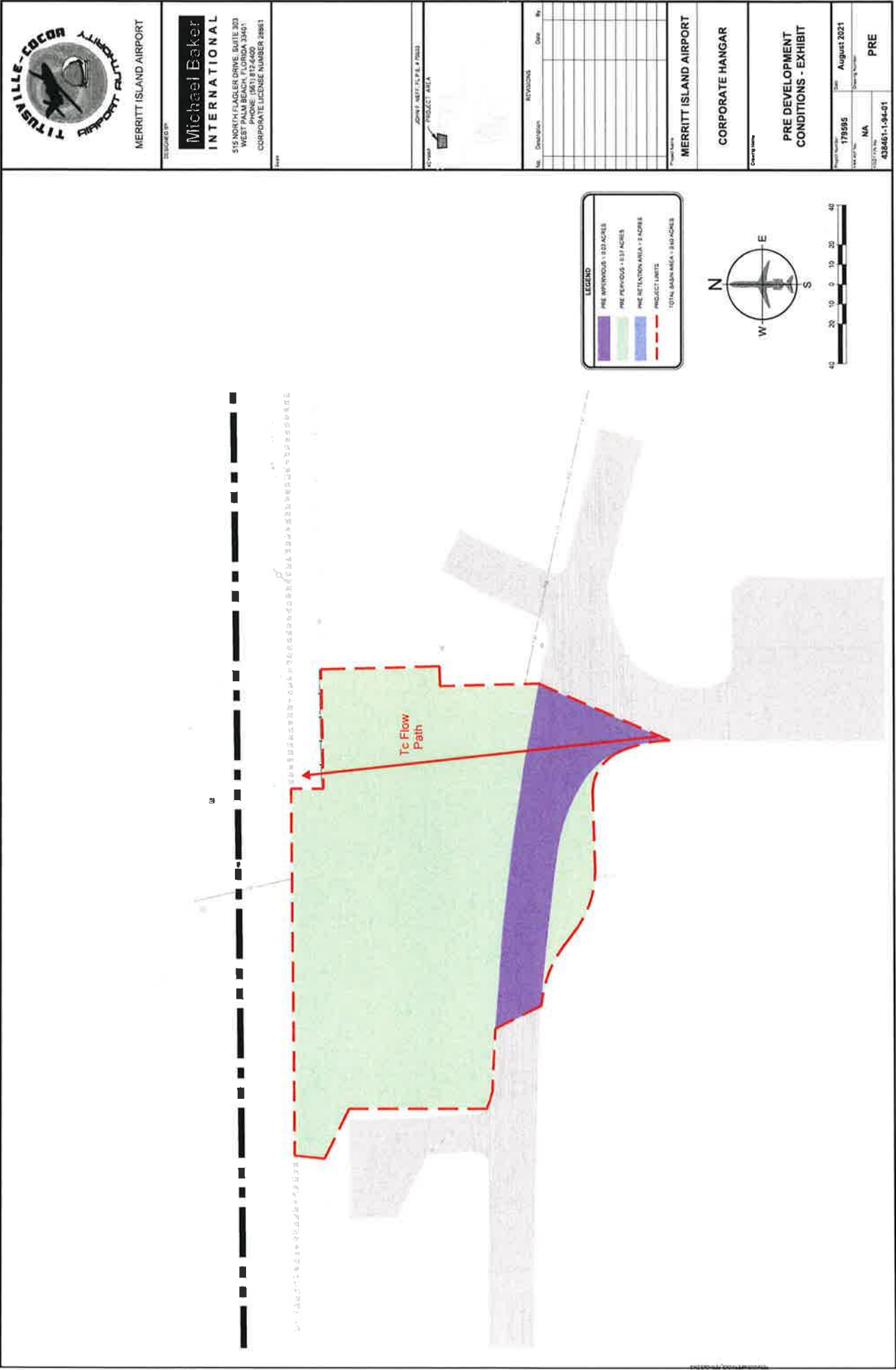


Treatment Volume Provided = 0.102 acre-ft
Which is equivalent to: $\frac{0.102 \text{ ac-ft} \times 12 \text{ in/ft}}{0.60 \text{ ac}} = 2.04$ inches over drainage area

2.04" > 1.65", Therefore adequate treatment is provided.

APPENDIX A
FIGURES, MAPS, AND TABLES

DRAINAGE BASIN MAP
(PRE-DEVELOPMENT)



CALCULATION FOR TIME OF CONCENTRATION

PRE-CONDITION		
VARIABLE	VALUE	UNIT
n:	0.15	AV. VELOCITY
*L1:	175	LF
**L2:	0	LF
P:	5	IN
S:	0.017	%
**V:	2.00	FPS

PRE-CONDITION		
VARIABLE	VALUE	UNIT
*T=	13.19	MIN
**T=	0	MIN
TOTAL T=	13.19	MIN

NOTES:
*: USE THIS FOR THE FIRST 300 LF ONLY!
**: USE THIS FOR REMAINING LF (SHALLOW CONCENTRATED FLOW)

Time of Concentration

For the first 100 LF of flow, assume sheet flow

From 0' to 100' :

$$T = \frac{0.007(nL)^{0.8}}{(P_2)^{0.3} S^{0.4}}$$

T₁ = Travel Time (hr)
n = 0.8 *From TR-55, Table 3-1 assume Dense Underbrush
L = 100 ft
P₂ = 5.04 in *FDOT Intensity-Duration Curve Figure 5-5
S = 0.8%
T₁ = 0.70 hrs

For remaining distance use Shallow Concentrated Flow

From 100' to 995' (Overland) : s = 0.50%

Velocity is estimated using TR-55, Fig. 3-1 (pp. 3-2).

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

V = 0.84 fps *TR-55, Appendix Fig. 7 Unpaved average velocity
L = 895 ft (subcategory Cultivated Straight Row)
T₂ = 0.39 hrs

DRAINAGE BASIN MAP
(POST-DEVELOPMENT)



MERRITT ISLAND AIRPORT

118

Michael Baker
INTERNATIONAL

515 NORTH FLAGLER DRIVE SUITE 303
WEST PALM BEACH, FLORIDA 33401
PHONE: (561) 812-6400
CORPORATE LICENSE NUMBER 20861

11

JOHN F. MURPHY, F.L.P.S., is President

NAME	PROJECT AREA	NUMBER, DATE, TIME

[illegible]

2

MERRITT ISLAND AIRPORT

CORPORATE HANGAR

g. Nährstoff

Displaying Name

**POST DEVELOPMENT
CONDITIONS - EXHIBIT**

100

Case Number	Date
179595	August 2021

NA

438461-1-

94-01

POST



.....

2

NRCS HYDROLOGIC SOIL GROUP MAP



Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

C

C/D

D

Not rated or not available

Soils

Soil Rating Polygons

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

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

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

MAP INFORMATION

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

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

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

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

Soil Survey Area: Brevard County, Florida
Survey Area Data: Version 20, Jun 8, 2020

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

Date(s) aerial images were photographed: Mar 28, 2015—May 18, 2015

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

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
39	Myakka-Urban land complex	B/D	1.9	100.0%
Totals for Area of Interest			1.9	100.0%

Description

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

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

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

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

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

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

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

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

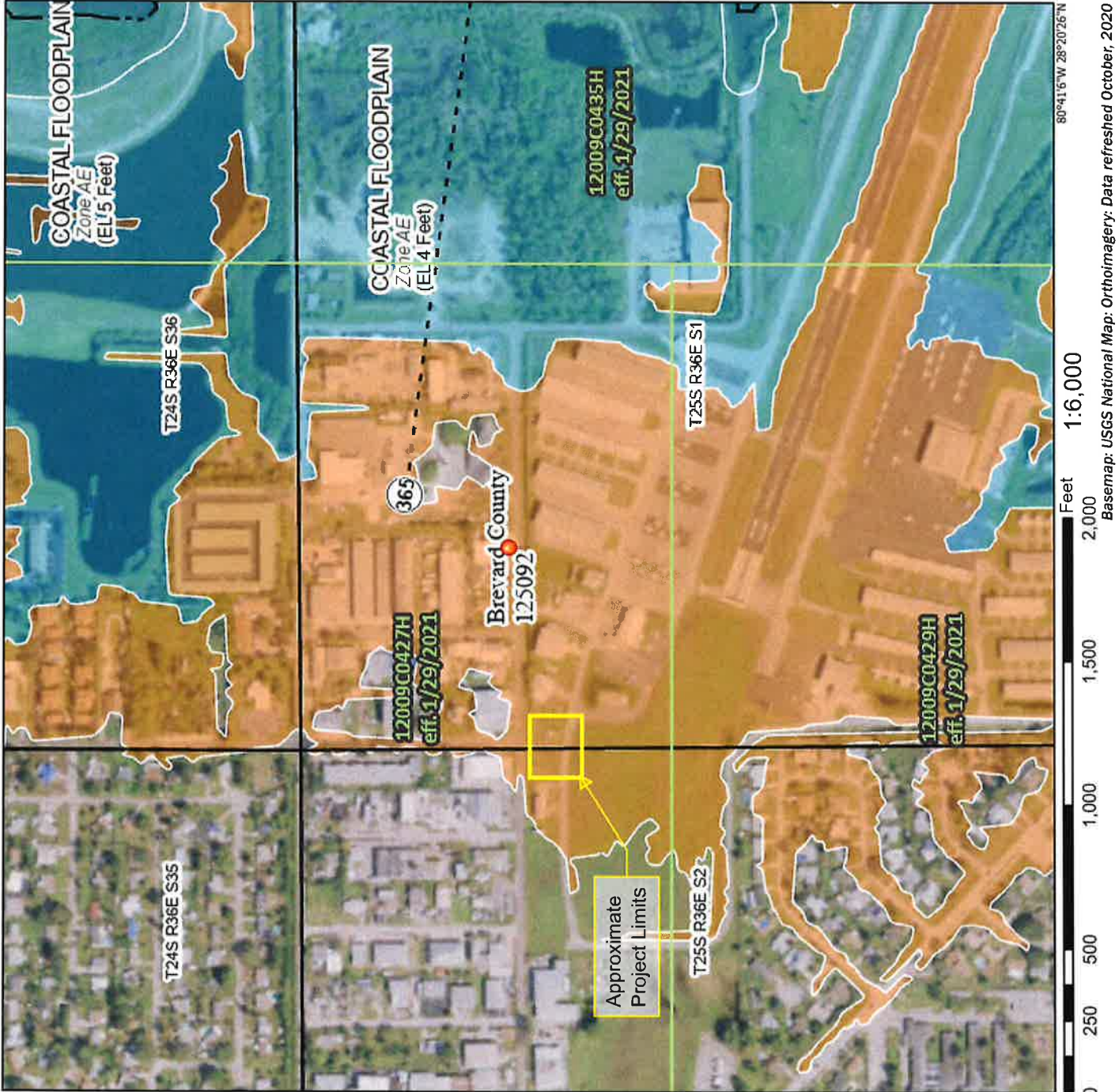
Tie-break Rule: Higher

FEMA FLOOD MAP

National Flood Hazard Layer FIRMette



80°41'43"W 28°20'58"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

Without Base Flood Elevation (BFE)
Zone A, V, A99

With BFE or Depth Zone AE, AO, AH, VE, AR

Regulatory Floodway

SPECIAL FLOOD HAZARD AREAS

0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X

Future Conditions 1% Annual Chance Flood Hazard Zone X

Area with Reduced Flood Risk due to Levee. See Notes. Zone X

Area with Flood Risk due to Levee Zone D

OTHER AREAS OF FLOOD HAZARD

NO SCREEN

Area of Minimal Flood Hazard Zone X

Effective LOMRs

Area of Undetermined Flood Hazard Zone D

OTHER AREAS

Channel, Culvert, or Storm Sewer

Levee, Dike, or Floodwall

GENERAL STRUCTURES

Cross Sections with 1% Annual Chance Water Surface Elevation

Coastal Transect

Base Flood Elevation Line (BFE)

Limit of Study

Jurisdiction Boundary

Coastal Transect Baseline

Profile Baseline

Hydrographic Feature

OTHER FEATURES

Digital Data Available

No Digital Data Available

Unmapped

MAP PANELS

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps. If it is not valid as described below. The basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **4/23/2021 at 1:39 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

WETLAND MAP



April 23, 2021

Wetlands

- | | | | | | |
|--|--------------------------------|--|-----------------------------------|--|----------|
| | Estuarine and Marine Deepwater | | Freshwater Emergent Wetland | | Lake |
| | Estuarine and Marine Wetland | | Freshwater Forested/Shrub Wetland | | Other |
| | | | Freshwater Pond | | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

CURVE NUMBER TABLE

Curve Number: Curve Number Set [Set]

Land Cover Zone	Soil Zone	Curve Number [dec]
1400: Commercial and services	B/D	95.0
5400: Bays and estuaries	Water	98.0
8110: Airports	A	39.0
8110: Airports	A/D	80.0
8110: Airports	B/D	80.0
8110: Airports	C/D	80.0
8110: Airports	D	80.0
8110: Airports	Pavement	98.0
8110: Airports	Water	98.0
8370: Surface water collection basins	Water	98.0
Dry Pond	Water	80.0

UNDERDRAIN CALCULATIONS

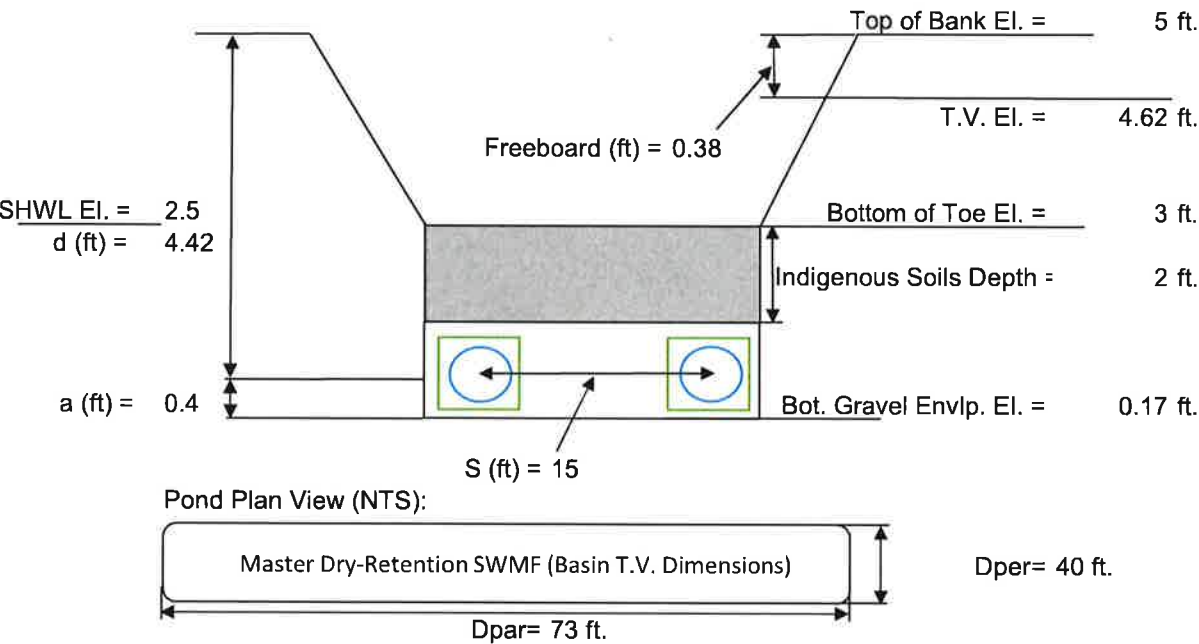
Underdrain Design Calculations per SJRWMD Criteria



Project Name: Corporate Hangar
EOR: NB

Design Data:

- Top of Bank (TOB) Elevation = 5 ft.
- Bottom of Toe (BOT) Elevation = 3 ft.
- Desired basin freeboard = 0.38 ft.
- Treatment Volume (TV) Elevation = 4.62 ft.
- Area of Basin (Area Measured from TV Elevation) = 2842 ft.²
- Depth from TV to BOT = 1.62 ft.
- Seasonal High Water Level (SHWL) Elevation = 2.5 ft.
- Indigenous Soil Depth = 2 ft.
- Distance between BOT and water level after drawdown (r) = 6 in.
- Gravel envelope on each side of the drainage pipe = 3 in.
- Desired Drain Size = 4 in.
- Permeability Rate (K) = 0.75 ft./hr.*
- Slope of Laterals = 0.10%
- n = 0.011
- Safety Factor = 2
- "T" Shaped Drainge Network



Objective:

Design an underdrain system to lower the water level to a level 6" below the basin bottom within 72 hours.

Design Calculations:

Calculating the required drain spacing:

$$m = d - c \qquad q = \frac{c}{t} \qquad s = \sqrt{\frac{4K(m^2 + 2am)}{q}} \qquad a = D - d$$

Depth to the drain line from natural ground surface (d) =	4.42 ft.
Depth to water table after drawdown (c) =	2.50 ft.
Height of the water table above the drain (m) =	1.92 ft.
Height of the drain above the impermeable layer (a) =	0.4 ft.
Depth from natural ground to impermeable layer (D) =	4.83 ft.
Recovery time (t) =	72 hr.
Drainage coefficient (q) (FS=2 included in t) =	0.07 ft./hr.
Drain Spacing (S) =	15.04 ft.
Approx. =	15.00 ft. on-center

Determine the number of laterals (N):

Dper=	40 ft.
N >=	2.67
Approx. =	2 units of underdrains

Calculate the length of the laterals (L):

Dpar=	73 ft.
Length of each lateral (L) =	58 ft. each
Approx. =	60 ft. each lateral

Sizing Drain Laterals:

$$Q_r = \frac{q S \left(L + \frac{S}{2} \right)}{CF}$$

Drain spacing (S)	15.00 ft
Drain length (L)	60 ft
Drainage coefficient (q)	0.83 in/hr
Conversion factor (CF)	43200
Relief drain discharge (Q _r)	0.01953 cfs

From Figure 24-3 with slope = 0.001 and n = 0.011, the capacity of a 4" pipe is 0.07 cfs

Drain Discharge per unit ft (Q _r / L)=	0.00033 cfs/ft
Distance down gradient 4" is adequate for (4" pipe capacity/discharge per ft)=	215 ft

	# of pipes	Flow rate (cfs)	Diam. (in)	Capacity (cfs)
Collector	2	0.039	4	0.07

APPENDIX B
ICPR ROUTING MAPS

PRE-DEVELOPMENT ROUTING MAP



515 NORTH FLAGLER DRIVE SUITE 303
WEST PALM BEACH, FLORIDA 33401
PHONE (561) 812-6400
CORPORATE LICENSE NUMBER 28861

515 NORTH FLAGLER DRIVE SUITE 303
WEST PALM BEACH, FLORIDA 33401
PHONE (561) 812-6400
CORPORATE LICENSE NUMBER 28861

John J. McF. N. L. P. L. 8 100723

Product Area

[illegible]

MERRITT ISLAND AIRPORT

CORPORATE HANGAR

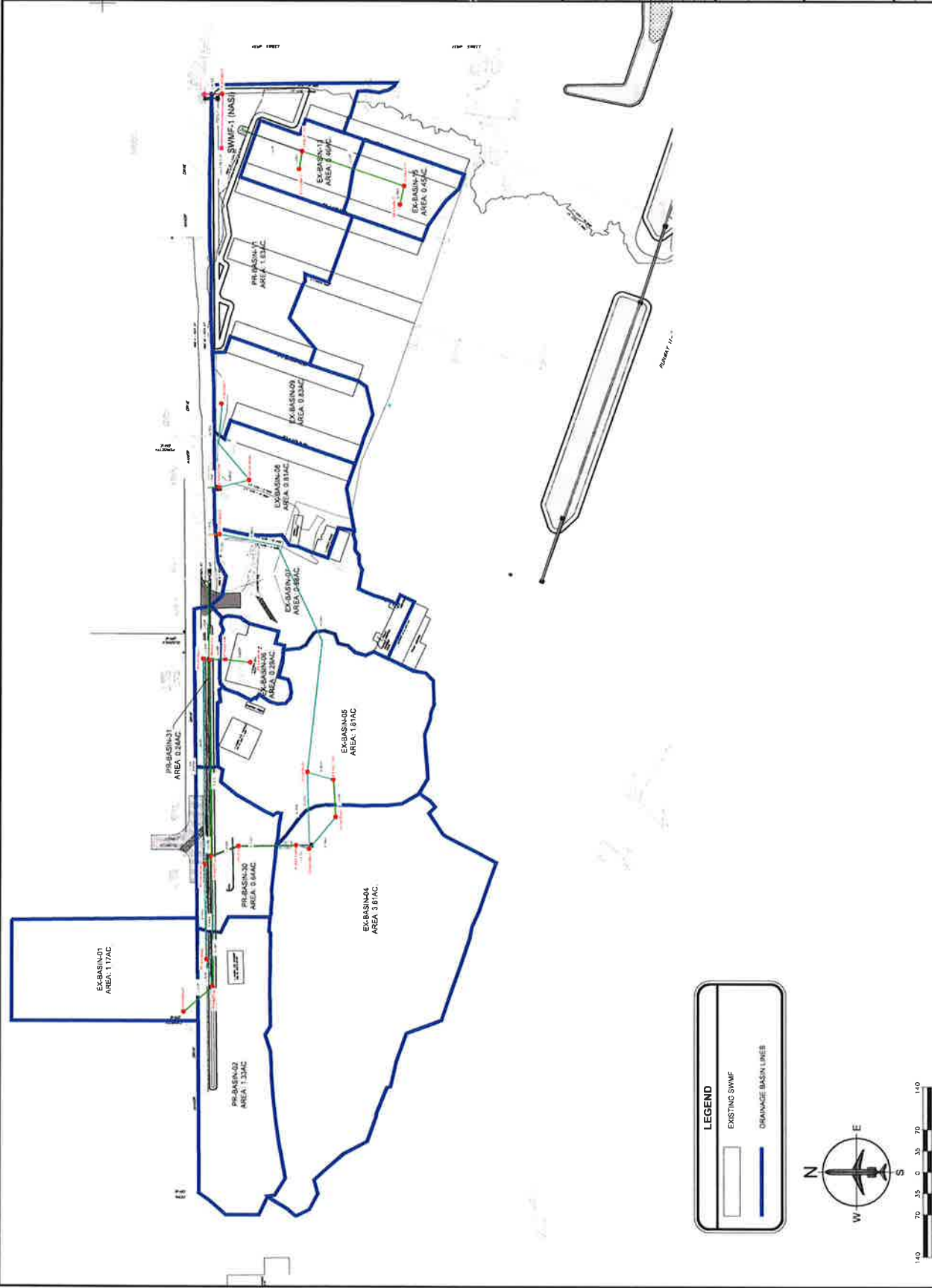
**PRE-DEVELOPMENT
DRAINAGE PLAN**

Year	August 2021
170505	

NA

330

NA



POST-DEVELOPMENT ROUTING MAP



MERRITT ISLAND AIRPORT

Michael Baker
INTERNATIONAL

515 NORTH FLAGLER DRIVE, SUITE 303
WEST PALM BEACH, FLORIDA 33401
PHONE: (561) 812-6400
CORPORATE LICENSE NUMBER 28861

JOURNAL OF METEOROLOGICAL SOCIETY OF JAPAN

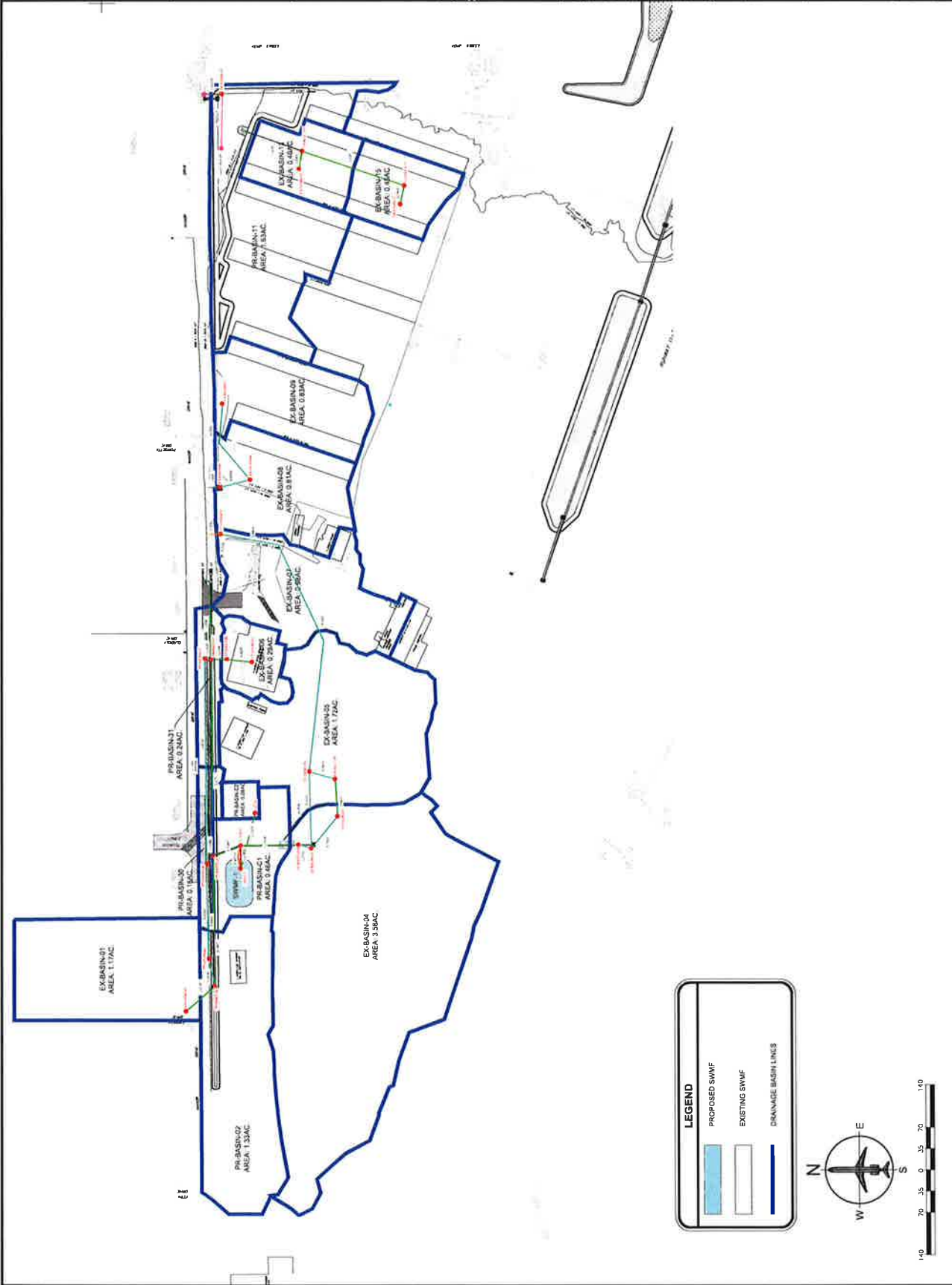
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MERRITT ISLAND AIRPORT

CORPORATE HANGAR

POST-DEVELOPMENT DRAINAGE PLAN

179595	August 2021
NA	POST
438461-1-94-01	



APPENDIX C
ICPR ROUTING ANALYSIS

ICPR NODE INPUT REPORT
(PRE-DEVELOPMENT)

Node: BNDY-01

Scenario: Pre-Development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 0.50 ft
Warning Stage: 4.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	2.00
0	0	0	9999.0000	2.00

Comment:

Node: EX-BASIN-01

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 6.10 ft
Warning Stage: 6.10 ft

Comment:

Node: EX-BASIN-04

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 4.02 ft
Warning Stage: 5.31 ft

Stage [ft]	Area [ac]	Area [ft2]
4.02	0.0006	26
4.12	0.0017	74
4.23	0.0043	187
4.32	0.0063	274
4.43	0.0132	575
4.52	0.0195	849
4.62	0.0356	1551
4.72	0.0568	2474
4.82	0.0763	3324
4.92	0.1062	4626
5.02	0.1481	6451
5.12	0.2060	8973
5.22	0.4758	20726

Stage [ft]	Area [ac]	Area [ft2]
5.32	0.7989	34800
5.42	1.1989	52224
5.52	1.4578	63502
5.62	1.6621	72401
5.72	1.8463	80425
5.82	2.0173	87874
5.92	2.1987	95775
6.02	2.3846	103873
6.12	2.5958	113073
6.22	2.7227	118601
6.32	2.8656	124826
6.42	2.9907	130275
6.52	3.0877	134500
6.62	3.1554	137449
6.72	3.2140	140002
6.82	3.2759	142698
6.92	3.3351	145277
7.02	3.4108	148574
7.12	3.4848	151798
7.22	3.5273	153649
7.32	3.5508	154673
7.42	3.5675	155400
7.52	3.5790	155901
7.62	3.5893	156350
7.73	3.5956	156624
7.83	3.5993	156786
7.93	3.5993	156786

Comment:

Node: EX-BASIN-05

Scenario: Pre-Development

Type: Stage/Area

Base Flow: 0.00 cfs

Initial Stage: 2.39 ft

Warning Stage: 5.31 ft

Stage [ft]	Area [ac]	Area [ft2]
2.39	0.0006	26
2.49	0.0013	57
2.59	0.0019	83
2.69	0.0026	113
2.79	0.0031	135
2.89	0.0037	161
2.99	0.0050	218
3.09	0.0068	296

Stage [ft]	Area [ac]	Area [ft2]
3.19	0.0080	348
3.29	0.0092	401
3.39	0.0101	440
3.49	0.0798	3476
3.59	0.1245	5423
3.69	0.1326	5776
3.79	0.1412	6151
3.89	0.1515	6599
3.99	0.1565	6817
4.09	0.1630	7100
4.19	0.1689	7357
4.29	0.1762	7675
4.39	0.1860	8102
4.49	0.2083	9074
4.59	0.2606	11352
4.69	0.3644	15873
4.79	0.5154	22451
4.89	0.7231	31498
4.99	0.9114	39701
5.09	1.1019	47999
5.19	1.3240	57673
5.29	1.5152	66002
5.39	1.6575	72201
5.49	1.7321	75450
5.59	1.7568	76526
5.69	1.7688	77049
5.79	1.7786	77476
5.89	1.7843	77724
5.99	1.7877	77872
6.09	1.7922	78068
6.19	1.7981	78325
6.29	1.8067	78700
6.39	1.8108	78878
6.49	1.8108	78878

Comment:

Node: EX-BASIN-06

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 3.62 ft
Warning Stage: 5.50 ft

Stage [ft]	Area [ac]	Area [ft2]
3.62	0.0006	26

Stage [ft]	Area [ac]	Area [ft2]
3.73	0.0040	174
3.83	0.0072	314
3.93	0.0122	531
4.03	0.0159	693
4.12	0.0172	749
4.23	0.0201	876
4.32	0.0270	1176
4.43	0.0307	1337
4.53	0.0356	1551
4.62	0.0396	1725
4.73	0.0476	2073
4.83	0.0558	2431
4.92	0.0631	2749
5.02	0.0706	3075
5.13	0.0786	3424
5.22	0.0872	3798
5.32	0.0924	4025
5.43	0.0947	4125
5.52	0.0981	4273
5.63	0.1027	4474
5.72	0.1073	4674
5.82	0.1142	4975
5.92	0.1222	5323
6.02	0.1377	5998
6.12	0.2066	8999
6.22	0.2594	11299
6.32	0.2870	12502
6.42	0.2883	12558
6.52	0.2883	12558

Comment:

Node: EX-BASIN-07

Scenario: Pre-Development

Type: Stage/Area

Base Flow: 0.00 cfs

Initial Stage: 1.89 ft

Warning Stage: 4.50 ft

Stage [ft]	Area [ac]	Area [ft2]
1.89	0.0006	26
2.00	0.0007	30
2.10	0.0008	35
2.20	0.0009	39
2.30	0.0010	44
2.40	0.0011	48

Stage [ft]	Area [ac]	Area [ft2]
2.50	0.0014	61
2.60	0.0017	74
2.70	0.0027	118
2.80	0.0044	192
2.90	0.0060	261
3.00	0.0084	366
3.10	0.0097	423
3.20	0.0109	475
3.30	0.0147	640
3.39	0.0178	775
3.50	0.0218	950
3.59	0.0247	1076
3.70	0.0288	1255
3.79	0.0339	1477
3.89	0.0562	2448
3.99	0.0947	4125
4.09	0.1291	5624
4.19	0.1785	7775
4.29	0.2491	10851
4.39	0.3598	15673
4.49	0.4798	20900
4.59	0.5917	25774
4.69	0.6623	28850
4.79	0.7088	30875
4.89	0.7490	32626
4.99	0.7978	34752
5.09	0.8419	36673
5.19	0.8907	38799
5.29	0.9332	40650
5.40	0.9507	41412
5.50	0.9563	41656
5.60	0.9601	41822
5.70	0.9645	42014
5.80	0.9676	42149
5.90	0.9698	42244
6.00	0.9714	42314
6.10	0.9729	42380
6.19	0.9745	42449
6.30	0.9762	42523
6.40	0.9781	42606
6.50	0.9781	42606

Comment:

Node: EX-BASIN-08

Scenario: Pre-Development

Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 2.12 ft
Warning Stage: 4.50 ft

Stage [ft]	Area [ac]	Area [ft2]
2.12	0.0006	26
2.22	0.0011	48
2.32	0.0046	200
2.42	0.0763	3324
2.52	0.1142	4975
2.62	0.1270	5532
2.72	0.1349	5876
2.82	0.1433	6242
2.92	0.1544	6726
3.02	0.1649	7183
3.12	0.1750	7623
3.22	0.1808	7876
3.32	0.1882	8198
3.42	0.1969	8577
3.52	0.2051	8934
3.62	0.2146	9348
3.72	0.2250	9801
3.82	0.2370	10324
3.92	0.2525	10999
4.02	0.2703	11774
4.12	0.2784	12127
4.22	0.2875	12523
4.32	0.2951	12855
4.42	0.3042	13251
4.52	0.3145	13700
4.62	0.3306	14401
4.72	0.3455	15050
4.82	0.3983	17350
4.92	0.4517	19676
5.02	0.5108	22250
5.12	0.5596	24376
5.22	0.6261	27273
5.32	0.7128	31050
5.42	0.8117	35358
5.52	0.8117	35358

Comment:

Node: EX-BASIN-09

Scenario: Pre-Development
Type: Stage/Area

Base Flow: 0.00 cfs
Initial Stage: 1.45 ft
Warning Stage: 4.50 ft

Stage [ft]	Area [ac]	Area [ft2]
1.45	0.0006	26
1.56	0.0012	52
1.66	0.0013	57
1.76	0.0013	57
1.86	0.0014	61
1.96	0.0014	61
2.06	0.0015	65
2.16	0.0016	70
2.26	0.0016	70
2.36	0.0017	74
2.46	0.0022	96
2.55	0.0063	274
2.66	0.0107	466
2.75	0.0126	549
2.85	0.0178	775
2.95	0.0241	1050
3.06	0.0296	1289
3.15	0.0350	1525
3.26	0.0377	1642
3.35	0.0407	1773
3.46	0.0444	1934
3.56	0.0462	2012
3.66	0.0485	2113
3.76	0.0516	2248
3.86	0.0549	2391
3.95	0.0603	2627
4.06	0.0657	2862
4.15	0.0694	3023
4.25	0.0758	3302
4.35	0.0826	3598
4.45	0.0947	4125
4.55	0.1067	4648
4.65	0.1251	5449
4.75	0.1463	6373
4.85	0.1791	7802
4.95	0.2158	9400
5.05	0.2749	11975
5.15	0.3908	17023
5.25	0.5269	22952
5.35	0.8259	35976
5.45	0.8294	36129
5.55	0.8294	36129

Comment:

Node: EX-BASIN-13

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 3.81 ft
Warning Stage: 3.81 ft

Stage [ft]	Area [ac]	Area [ft2]
3.81	0.0003	13
3.82	0.0006	26
3.93	0.0068	296
4.02	0.0201	876
4.12	0.0436	1899
4.22	0.0792	3450
4.32	0.1102	4800
4.42	0.1808	7876
4.52	0.2072	9026
4.62	0.2376	10350
4.72	0.2657	11574
4.82	0.2910	12676
4.92	0.3162	13774
5.02	0.3512	15298
5.12	0.4590	19994
5.22	0.4590	19994

Comment:

Node: EX-BASIN-15

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 3.81 ft
Warning Stage: 3.81 ft

Stage [ft]	Area [ac]	Area [ft2]
3.81	0.0006	26
3.97	0.0080	348
4.07	0.0264	1150
4.17	0.0551	2400
4.27	0.0924	4025
4.37	0.2525	10999
4.47	0.2761	12027
4.57	0.2916	12702
4.67	0.3070	13373
4.77	0.3231	14074
4.87	0.3380	14723
4.97	0.3524	15351

Stage [ft]	Area [ac]	Area [ft2]
5.07	0.4484	19532
5.17	0.4484	19532

Comment:

Node: EX-INLET-04A

Scenario: Pre-Development

Type: Stage/Area

Base Flow: 0.00 cfs

Initial Stage: 1.91 ft

Warning Stage: 5.31 ft

Comment:

Node: EX-INLET-05

Scenario: Pre-Development

Type: Stage/Area

Base Flow: 0.00 cfs

Initial Stage: 1.98 ft

Warning Stage: 5.31 ft

Comment:

Node: EX-INLET-06

Scenario: Pre-Development

Type: Stage/Area

Base Flow: 0.00 cfs

Initial Stage: 2.57 ft

Warning Stage: 5.50 ft

Comment:

Node: EX-INLET-08

Scenario: Pre-Development

Type: Stage/Area

Base Flow: 0.00 cfs

Initial Stage: 0.50 ft
Warning Stage: 3.29 ft

Comment:

Node: EX-INLET-13

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 0.74 ft
Warning Stage: 3.81 ft

Comment:

Node: EX-INLET-15

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 1.95 ft
Warning Stage: 3.81 ft

Comment:

Node: GROUNDWATER

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

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	0.00
0	0	0	9999.0000	0.00

Comment:

Node: PR-BASIN-02

Scenario: Pre-Development

Type: Stage/Area

Base Flow: 0.00 cfs

Initial Stage: 5.02 ft

Warning Stage: 6.00 ft

Comment:

Node: PR-BASIN-11

Scenario: Pre-Development

Type: Stage/Area

Base Flow: 0.00 cfs

Initial Stage: 1.25 ft

Warning Stage: 4.00 ft

Stage [ft]	Area [ac]	Area [ft2]
1.25	0.2475	10781
1.50	0.2644	11517
2.00	0.3002	13077
2.50	0.3754	16352
4.00	0.4528	19724

Comment: SWMF-01

Node: PR-BASIN-30

Scenario: Pre-Development

Type: Stage/Area

Base Flow: 2.68 cfs

Initial Stage: 4.53 ft

Warning Stage: 6.00 ft

Comment:

Node: PR-BASIN-31

Scenario: Pre-Development

Type: Stage/Area

Base Flow: 0.00 cfs

Initial Stage: 3.88 ft

Warning Stage: 4.50 ft

Comment:

Node: PR-INLET-02

Scenario: Pre-Development

Type: Stage/Area

Base Flow: 0.00 cfs

Initial Stage: 0.50 ft

Warning Stage: 6.00 ft

Stage [ft]	Area [ac]	Area [ft2]
0.30	0.0003	12
5.02	0.0003	12

Comment:

Node: PR-INLET-04B

Scenario: Pre-Development

Type: Stage/Area

Base Flow: 0.00 cfs

Initial Stage: 0.50 ft

Warning Stage: 5.31 ft

Stage [ft]	Area [ac]	Area [ft2]
-0.27	0.0003	12
4.45	0.0003	12

Comment:

Node: PR-INLET-30

Scenario: Pre-Development

Type: Stage/Area

Base Flow: 0.00 cfs

Initial Stage: 0.50 ft

Warning Stage: 6.00 ft

Stage [ft]	Area [ac]	Area [ft2]
-0.44	0.0003	12
4.53	0.0003	12

Comment:

Node: PR-INLET-31

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 0.50 ft
Warning Stage: 4.50 ft

Stage [ft]	Area [ac]	Area [ft2]
-0.88	0.0003	12
3.88	0.0003	12

Comment:

Node: ST0-03A

Scenario: Pre-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 0.50 ft
Warning Stage: 6.00 ft

Stage [ft]	Area [ac]	Area [ft2]
-0.39	0.0004	16
5.43	0.0004	16

Comment:

ICPR BASIN INPUT REPORT
(PRE-DEVELOPMENT)

Manual Basin: EX-BASIN-01

Scenario: Pre-Development
Node: EX-BASIN-01
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0
Area: 1.1692 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0444	8110: Airports	B/D			
1.1248	1400: Commercial and services	B/D			

Comment: No change from Pre-Dev

Manual Basin: EX-BASIN-04

Scenario: Pre-Development
Node: EX-BASIN-04
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0
Area: 3.6106 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
3.2788	8110: Airports	B/D			
0.3318	8110: Airports	Pavement			

Comment: No change from Pre-Dev

Manual Basin: EX-BASIN-05

Scenario: Pre-Development
Node: EX-BASIN-05
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr

Unit Hydrograph: UH484
Peaking Factor: 484.0
Area: 1.8106 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.7573	8110: Airports	B/D			
1.0533	8110: Airports	Pavement			

Comment: No change from Pre-Dev

Manual Basin: EX-BASIN-06

Scenario: Pre-Development
Node: EX-BASIN-06
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0
Area: 0.2886 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.1073	8110: Airports	B/D			
0.1813	8110: Airports	Pavement			

Comment: No change from Pre-Dev

Manual Basin: EX-BASIN-07

Scenario: Pre-Development
Node: EX-BASIN-07
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0
Area: 0.9777 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.3497	8110: Airports	B/D			
0.6280	8110: Airports	Pavement			

Comment: No change from Pre-Dev

Manual Basin: EX-BASIN-08

Scenario: Pre-Development
Node: EX-BASIN-08
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0
Area: 0.8117 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.3463	8110: Airports	B/D			
0.4654	8110: Airports	Pavement			

Comment: No change from Pre-Dev

Manual Basin: EX-BASIN-09

Scenario: Pre-Development
Node: EX-BASIN-09
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0
Area: 0.8291 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.6915	8110: Airports	Pavement			
0.1376	8110: Airports	B/D			

Comment: No change from Pre-Dev

Manual Basin: EX-BASIN-13

Scenario: Pre-Development
Node: EX-BASIN-13
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 0.4588 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.4588	8110: Airports	Pavement			

Comment: No change from Pre-Dev

Manual Basin: EX-BASIN-15

Scenario: Pre-Development

Node: EX-BASIN-15

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 10.0000 min

Max Allowable Q: 0.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 0.4485 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.4485	8110: Airports	Pavement			

Comment: No change from Pre-Dev

Manual Basin: PR-BASIN-02

Scenario: Pre-Development

Node: PR-BASIN-02

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 10.0000 min

Max Allowable Q: 0.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 1.3291 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
1.1000	8110: Airports	B/D			
0.2291	8110: Airports	Pavement			

Comment:

Manual Basin: PR-BASIN-11

Scenario: Pre-Development
Node: PR-BASIN-11
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0
Area: 1.6300 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.2705	8110: Airports	A/D			
0.2338	8110: Airports	B/D			
0.8781	8110: Airports	Pavement			
0.2475	Dry Pond	Water			

Comment:

Manual Basin: PR-BASIN-30

Scenario: Pre-Development
Node: PR-BASIN-30
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0
Area: 0.6393 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.5853	8110: Airports	B/D			
0.0540	8110: Airports	Pavement			

Comment:

Manual Basin: PR-BASIN-31

Scenario: Pre-Development
Node: PR-BASIN-31
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs

Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0
Area: 0.2373 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.1753	8110: Airports	B/D			
0.0620	8110: Airports	Pavement			

Comment:

ICPR LINK INPUT REPORT
(PRE-DEVELOPMENT)

Pipe Link: L-01P		Upstream	Downstream
Scenario:	Pre-Development	Invert: 2.34 ft	Invert: 2.34 ft
From Node:	EX-BASIN-01	Manning's N: 0.0110	Manning's N: 0.0110
To Node:	PR-INLET-02	Geometry: Circular	Geometry: Circular
Link Count:	1	Max Depth: 1.25 ft	Max Depth: 1.25 ft
Flow Direction:	Both	Bottom Clip	
Damping:	0.0000 ft	Default: 0.00 ft	Default: 0.00 ft
Length:	58 ft	Op Table:	Op Table:
FHWA Code:	0	Ref Node:	Ref Node:
Entr Loss Coef:	0.00	Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef:	0.00	Top Clip	
Bend Loss Coef:	0.20	Default: 0.00 ft	Default: 0.00 ft
Bend Location:	0 dec	Op Table:	Op Table:
Energy Switch:	Energy	Ref Node:	Ref Node:
		Manning's N: 0.0000	Manning's N: 0.0000
Comment:			

Percolation Link: L-01PERC			
Scenario:	Pre-Development	Surface Area Option:	Vary Based on Stage/Area
From Node:	PR-BASIN-11		Table
To Node:	GROUNDWATER	Vertical Flow Termination:	Horizontal Flow Algorithm
Link Count:	1	Perimeter 1:	1135 ft
Flow Direction:	Both	Perimeter 2:	1514 ft
Aquifer Base Elevation:	-9.00 ft	Perimeter 3:	5489 ft
Water Table Elevation:	0.00 ft	Distance P1 to P2:	50 ft
Annual Recharge Rate:	0 ipy	Distance P2 to P3:	500 ft
Horizontal Conductivity:	17.160 fpd	# of Cells P1 to P2:	10
Vertical Conductivity:	7.625 fpd	# of Cells P2 to P3:	50
Fillable Porosity:	0.250		
Layer Thickness:	0.00 ft		
Comment:			

Weir Link: L-01W		
Scenario:	Pre-Development	Bottom Clip
From Node:	EX-BASIN-04	Default: 0.00 ft
To Node:	PR-INLET-04B	Op Table:
Link Count:	1	Ref Node:
Flow Direction:	Both	Top Clip
Damping:	0.0000 ft	Default: 0.00 ft
Weir Type:	Horizontal	Op Table:
Geometry Type:	Rectangular	Ref Node:
Invert:	4.44 ft	Discharge Coefficients
Control Elevation:	4.44 ft	Weir Default: 2.800
Max Depth:	2.00 ft	Weir Table:
Max Width:	3.00 ft	Orifice Default: 0.600

Fillet: 0.00 ft

Orifice Table:

Comment:

Drop Structure Link: L-02DS

	Upstream Pipe	Downstream Pipe
Scenario: Pre-Development	Invert: -1.25 ft	Invert: -1.27 ft
From Node: PR-BASIN-11	Manning's N: 0.0090	Manning's N: 0.0090
To Node: BNDY-01	Geometry: Circular	Geometry: Circular
Link Count: 1	Max Depth: 1.25 ft	Max Depth: 1.25 ft
Flow Direction: Both	Bottom Clip	
Solution: Combine	Default: 0.00 ft	Default: 0.00 ft
Increments: 10	Op Table:	Op Table:
Pipe Count: 1	Ref Node:	Ref Node:
Damping: 0.0000 ft	Manning's N: 0.0000	Manning's N: 0.0000
Length: 17 ft	Top Clip	
FHWA Code: 0	Default: 0.00 ft	Default: 0.00 ft
Entr Loss Coef: 0.00	Op Table:	Op Table:
Exit Loss Coef: 1.00	Ref Node:	Ref Node:
Bend Loss Coef: 0.00	Manning's N: 0.0000	Manning's N: 0.0000
Bend Location: 0 dec		
Energy Switch: Energy		

Pipe Comment:

Weir Component

Weir: 1	Bottom Clip
Weir Count: 1	Default: 0.00 ft
Weir Flow Direction: Both	Op Table:
Damping: 0.0000 ft	Ref Node:
Weir Type: Sharp Crested Vertical	Top Clip
Geometry Type: Rectangular	Default: 0.00 ft
Invert: 2.69 ft	Op Table:
Control Elevation: 2.69 ft	Ref Node:
Max Depth: 0.81 ft	Discharge Coefficients
Max Width: 3.08 ft	Weir Default: 3.200
Fillet: 0.00 ft	Weir Table:
	Orifice Default: 0.600
	Orifice Table:

Weir Comment:

Weir Component

Weir: 2	Bottom Clip
Weir Count: 1	Default: 0.00 ft
Weir Flow Direction: Both	Op Table:
Damping: 0.0000 ft	Ref Node:
Weir Type: Horizontal	Top Clip
Geometry Type: Rectangular	Default: 0.00 ft
Invert: 3.50 ft	Op Table:

Control Elevation:	3.50 ft	
Max Depth:	2.00 ft	Ref Node:
Max Width:	3.08 ft	Discharge Coefficients
Fillet:	0.00 ft	Weir Default: 3.200
		Weir Table:
		Orifice Default: 0.600
		Orifice Table:

Weir Comment:

Drop Structure Comment:

Weir Link: L-02W	
Scenario: Pre-Development	Bottom Clip
From Node: EX-BASIN-05	Default: 0.00 ft
To Node: EX-INLET-05	Op Table:
Link Count: 1	Ref Node:
Flow Direction: Both	Top Clip
Damping: 0.0000 ft	Default: 0.00 ft
Weir Type: Horizontal	Op Table:
Geometry Type: Rectangular	Ref Node:
Invert: 4.53 ft	Discharge Coefficients
Control Elevation: 4.53 ft	Weir Default: 2.800
Max Depth: 2.00 ft	Weir Table:
Max Width: 3.00 ft	Orifice Default: 0.600
Fillet: 0.00 ft	Orifice Table:

Comment:

Pipe Link: L-03P	Upstream	Downstream
Scenario: Pre-Development	Invert: 1.98 ft	Invert: 1.91 ft
From Node: EX-INLET-05	Manning's N: 0.0110	Manning's N: 0.0110
To Node: EX-INLET-04A	Geometry: Circular	Geometry: Circular
Link Count: 1	Max Depth: 1.50 ft	Max Depth: 1.50 ft
Flow Direction: Both	Bottom Clip	
Damping: 0.0000 ft	Default: 0.00 ft	Default: 0.00 ft
Length: 62 ft	Op Table:	Op Table:
FHWA Code: 0	Ref Node:	Ref Node:
Entr Loss Coef: 0.00	Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef: 0.00	Top Clip	
Bend Loss Coef: 0.00	Default: 0.00 ft	Default: 0.00 ft
Bend Location: 0 dec	Op Table:	Op Table:
Energy Switch: Energy	Ref Node:	Ref Node:
	Manning's N: 0.0000	Manning's N: 0.0000

Comment:

Weir Link: L-03W		
Scenario:	Pre-Development	Bottom Clip
From Node:	EX-BASIN-06	Default: 0.00 ft
To Node:	EX-INLET-06	Op Table:
Link Count:	1	Ref Node:
Flow Direction:	Both	Top Clip
Damping:	0.0000 ft	Default: 0.00 ft
Weir Type:	Horizontal	Op Table:
Geometry Type:	Rectangular	Ref Node:
Invert:	4.84 ft	Discharge Coefficients
Control Elevation:	4.84 ft	Weir Default: 2.800
Max Depth:	2.00 ft	Weir Table:
Max Width:	3.00 ft	Orifice Default: 0.600
Fillet:	0.00 ft	Orifice Table:
Comment:		

Pipe Link: L-04P		
	Upstream	Downstream
Scenario:	Pre-Development	Invert: 1.98 ft
From Node:	EX-INLET-06	Manning's N: 0.0090
To Node:	PR-INLET-31	Manning's N: 0.0090
Link Count:	1	Geometry: Circular
Flow Direction:	Both	Max Depth: 1.00 ft
Damping:	0.0000 ft	Max Depth: 1.00 ft
Length:	7 ft	Bottom Clip
FHWA Code:	0	Default: 0.00 ft
Entr Loss Coef:	0.00	Op Table:
Exit Loss Coef:	1.00	Op Table:
Bend Loss Coef:	0.00	Ref Node:
Bend Location:	0 dec	Ref Node:
Energy Switch:	Energy	Manning's N: 0.0000
	Manning's N: 0.0000	Manning's N: 0.0000
		Top Clip
		Default: 0.00 ft
		Op Table:
		Ref Node:
		Manning's N: 0.0000
Comment:		

Weir Link: L-04W		
Scenario:	Pre-Development	Bottom Clip
From Node:	EX-BASIN-08	Default: 0.00 ft
To Node:	EX-INLET-08	Op Table:
Link Count:	1	Ref Node:
Flow Direction:	Both	Top Clip
Damping:	0.0000 ft	Default: 0.00 ft
Weir Type:	Horizontal	Op Table:
Geometry Type:	Rectangular	Ref Node:
Invert:	3.29 ft	Discharge Coefficients
Control Elevation:	3.29 ft	Weir Default: 2.800
Max Depth:	2.00 ft	Weir Table:

Max Width: 3.00 ft	
Fillet: 0.00 ft	Orifice Default: 0.600
	Orifice Table:
Comment:	

Weir Link: L-05W	
Scenario: Pre-Development	Bottom Clip
From Node: EX-BASIN-09	Default: 0.00 ft
To Node: EX-BASIN-08	Op Table:
Link Count: 1	Ref Node:
Flow Direction: Both	Top Clip
Damping: 0.0000 ft	Default: 0.00 ft
Weir Type: Broad Crested Vertical	Op Table:
Geometry Type: Irregular	Ref Node:
Invert: 3.00 ft	Discharge Coefficients
Control Elevation: 3.00 ft	Weir Default: 2.800
Cross Section: X-05W	Weir Table:
	Orifice Default: 0.600
	Orifice Table:
Comment:	

Pipe Link: L-06P		Upstream	Downstream
Scenario: Pre-Development	Invert: 0.34 ft	Invert: 0.01 ft	
From Node: EX-INLET-08	Manning's N: 0.0110	Manning's N: 0.0110	
To Node: BNDY-01	Geometry: Horizontal Ellipse	Geometry: Horizontal Ellipse	
Link Count: 1	Max Depth: 1.58 ft	Max Depth: 1.58 ft	
Flow Direction: Both	Bottom Clip		
Damping: 0.0000 ft	Default: 0.00 ft	Default: 0.00 ft	
Length: 18 ft	Op Table:	Op Table:	
FHWA Code: 0	Ref Node:	Ref Node:	
Entr Loss Coef: 0.00	Manning's N: 0.0000	Manning's N: 0.0000	
Exit Loss Coef: 1.00	Top Clip		
Bend Loss Coef: 0.00	Default: 0.00 ft	Default: 0.00 ft	
Bend Location: 0 dec	Op Table:	Op Table:	
Energy Switch: Energy	Ref Node:	Ref Node:	
	Manning's N: 0.0000	Manning's N: 0.0000	
Comment:			

Weir Link: L-08W	
Scenario: Pre-Development	Bottom Clip
From Node: EX-BASIN-05	Default: 0.00 ft
To Node: EX-BASIN-07	Op Table:

Link Count:	1	
Flow Direction:	Both	Ref Node:
Damping:	0.0000 ft	Top Clip
Weir Type:	Broad Crested Vertical	Default: 0.00 ft
Geometry Type:	Irregular	Op Table:
Invert:	4.47 ft	Ref Node:
Control Elevation:	4.47 ft	Discharge Coefficients
Cross Section:	X-08W	Weir Default: 2.800
		Weir Table:
		Orifice Default: 0.600
		Orifice Table:

Comment:

Weir Link: L-09W		
Scenario:	Pre-Development	Bottom Clip
From Node:	EX-BASIN-13	Default: 0.00 ft
To Node:	EX-INLET-13	Op Table:
Link Count:	1	Ref Node:
Flow Direction:	Both	Top Clip
Damping:	0.0000 ft	Default: 0.00 ft
Weir Type:	Horizontal	Op Table:
Geometry Type:	Rectangular	Ref Node:
Invert:	3.81 ft	Discharge Coefficients
Control Elevation:	3.81 ft	Weir Default: 2.800
Max Depth:	2.00 ft	Weir Table:
Max Width:	3.00 ft	Orifice Default: 0.600
Fillet:	0.00 ft	Orifice Table:

Comment:

Weir Link: L-10W		
Scenario:	Pre-Development	Bottom Clip
From Node:	EX-BASIN-15	Default: 0.00 ft
To Node:	EX-INLET-15	Op Table:
Link Count:	1	Ref Node:
Flow Direction:	Both	Top Clip
Damping:	0.0000 ft	Default: 0.00 ft
Weir Type:	Horizontal	Op Table:
Geometry Type:	Rectangular	Ref Node:
Invert:	3.81 ft	Discharge Coefficients
Control Elevation:	3.81 ft	Weir Default: 2.800
Max Depth:	2.00 ft	Weir Table:
Max Width:	3.00 ft	Orifice Default: 0.600
Fillet:	0.00 ft	Orifice Table:

Comment:

Pipe Link: L-138P		Upstream	Downstream
Scenario:	Pre-Development	Invert: -0.39 ft	Invert: -0.44 ft
From Node:	ST0-03A	Manning's N: 0.0110	Manning's N: 0.0110
To Node:	PR-INLET-30	Geometry: Circular	Geometry: Circular
Link Count:	1	Max Depth: 1.50 ft	Max Depth: 1.50 ft
Flow Direction:	Both	Bottom Clip	
Damping:	0.0000 ft	Default: 0.00 ft	Default: 0.00 ft
Length:	48 ft	Op Table:	Op Table:
FHWA Code:	0	Ref Node:	Ref Node:
Entr Loss Coef:	0.00	Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef:	0.00	Top Clip	
Bend Loss Coef:	0.00	Default: 0.00 ft	Default: 0.00 ft
Bend Location:	0 dec	Op Table:	Op Table:
Energy Switch:	Energy	Ref Node:	Ref Node:
		Manning's N: 0.0000	Manning's N: 0.0000
Comment:			

Pipe Link: L-139P		Upstream	Downstream
Scenario:	Pre-Development	Invert: -0.27 ft	Invert: -0.39 ft
From Node:	PR-INLET-04B	Manning's N: 0.0110	Manning's N: 0.0110
To Node:	ST0-03A	Geometry: Circular	Geometry: Circular
Link Count:	1	Max Depth: 1.50 ft	Max Depth: 1.50 ft
Flow Direction:	Both	Bottom Clip	
Damping:	0.0000 ft	Default: 0.00 ft	Default: 0.00 ft
Length:	120 ft	Op Table:	Op Table:
FHWA Code:	0	Ref Node:	Ref Node:
Entr Loss Coef:	0.00	Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef:	0.00	Top Clip	
Bend Loss Coef:	0.00	Default: 0.00 ft	Default: 0.00 ft
Bend Location:	0 dec	Op Table:	Op Table:
Energy Switch:	Energy	Ref Node:	Ref Node:
		Manning's N: 0.0000	Manning's N: 0.0000
Comment:			

Channel Link: L-13C		Upstream	Downstream
Scenario:	Pre-Development	Invert: 2.39 ft	Invert: -1.20 ft
From Node:	EX-BASIN-07	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	BNDY-01	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-13C	Cross Section: X-13C
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	31 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		

Exit Loss Coef: 0.00

Bend Loss Coef: 0.00

Bend Location: 0 dec

Energy Switch: Energy

Comment:

Weir Link: L-16W

Scenario: Pre-Development

From Node: EX-INLET-04A

To Node: EX-BASIN-04

Link Count: 1

Flow Direction: Both

Damping: 0.0000 ft

Weir Type: Horizontal

Geometry Type: Rectangular

Invert: 4.49 ft

Control Elevation: 4.49 ft

Max Depth: 2.00 ft

Max Width: 3.00 ft

Fillet: 0.00 ft

Bottom Clip

Default: 0.00 ft

Op Table:

Ref Node:

Top Clip

Default: 0.00 ft

Op Table:

Ref Node:

Discharge Coefficients

Weir Default: 2.800

Weir Table:

Orifice Default: 0.600

Orifice Table:

Comment:

Pipe Link: L-22P

Scenario: Pre-Development

From Node: EX-INLET-15

To Node: EX-INLET-13

Link Count: 1

Flow Direction: Both

Damping: 0.0000 ft

Length: 177 ft

FHWA Code: 0

Entr Loss Coef: 0.00

Exit Loss Coef: 0.00

Bend Loss Coef: 0.00

Bend Location: 0 dec

Energy Switch: Energy

Upstream

Invert: 1.95 ft

Manning's N: 0.0110

Geometry: Circular

Max Depth: 1.50 ft

Bottom Clip

Default: 0.00 ft

Op Table:

Ref Node:

Manning's N: 0.0000

Top Clip

Default: 0.00 ft

Op Table:

Ref Node:

Manning's N: 0.0000

Downstream

Invert: 0.74 ft

Manning's N: 0.0110

Geometry: Circular

Max Depth: 1.50 ft

Bottom Clip

Default: 0.00 ft

Op Table:

Ref Node:

Manning's N: 0.0000

Top Clip

Default: 0.00 ft

Op Table:

Ref Node:

Manning's N: 0.0000

Comment:

Pipe Link: L-23P

Scenario: Pre-Development

From Node: EX-INLET-13

Upstream

Invert: 0.74 ft

Manning's N: 0.0110

Downstream

Invert: 0.03 ft

Manning's N: 0.0110

To Node:	PR-BASIN-11	Geometry: Circular	Geometry: Circular
Link Count:	1	Max Depth: 1.50 ft	Max Depth: 1.50 ft
Flow Direction:	Both	Bottom Clip	
Damping:	0.0000 ft	Default: 0.00 ft	Default: 0.00 ft
Length:	106 ft	Op Table:	Op Table:
FHWA Code:	0	Ref Node:	Ref Node:
Entr Loss Coef:	0.00	Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef:	0.00	Top Clip	
Bend Loss Coef:	0.00	Default: 0.00 ft	Default: 0.00 ft
Bend Location:	0 dec	Op Table:	Op Table:
Energy Switch:	Energy	Ref Node:	Ref Node:
		Manning's N: 0.0000	Manning's N: 0.0000
Comment:			

Pipe Link: L-30P	Upstream	Downstream
Scenario: Pre-Development	Invert: 0.30 ft	Invert: 0.00 ft
From Node: PR-INLET-02	Manning's N: 0.0110	Manning's N: 0.0110
To Node: PR-INLET-30	Geometry: Circular	Geometry: Circular
Link Count: 1	Max Depth: 3.00 ft	Max Depth: 3.00 ft
Flow Direction: Both	Bottom Clip	
Damping: 0.0000 ft	Default: 0.00 ft	Default: 0.00 ft
Length: 216 ft	Op Table:	Op Table:
FHWA Code: 0	Ref Node:	Ref Node:
Entr Loss Coef: 0.00	Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef: 0.00	Top Clip	
Bend Loss Coef: 0.00	Default: 0.00 ft	Default: 0.00 ft
Bend Location: 0 dec	Op Table:	Op Table:
Energy Switch: Energy	Ref Node:	Ref Node:
	Manning's N: 0.0000	Manning's N: 0.0000
Comment:		

Pipe Link: L-31P	Upstream	Downstream
Scenario: Pre-Development	Invert: 0.00 ft	Invert: -0.88 ft
From Node: PR-INLET-30	Manning's N: 0.0110	Manning's N: 0.0110
To Node: PR-INLET-31	Geometry: Circular	Geometry: Circular
Link Count: 1	Max Depth: 3.00 ft	Max Depth: 3.00 ft
Flow Direction: Both	Bottom Clip	
Damping: 0.0000 ft	Default: 0.00 ft	Default: 0.00 ft
Length: 322 ft	Op Table:	Op Table:
FHWA Code: 0	Ref Node:	Ref Node:
Entr Loss Coef: 0.00	Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef: 0.00	Top Clip	
Bend Loss Coef: 0.00	Default: 0.00 ft	Default: 0.00 ft
Bend Location: 0 dec	Op Table:	Op Table:
Energy Switch: Energy	Ref Node:	Ref Node:

Manning's N: 0.0000Manning's N: 0.0000

Comment:

Pipe Link: L-32P

	Upstream	Downstream
Scenario:	Pre-Development	Invert: -0.88 ft
From Node:	PR-INLET-31	Invert: -1.02 ft
To Node:	BNDY-01	Manning's N: 0.0110
Link Count:	1	Manning's N: 0.0110
Flow Direction:	Both	Geometry: Circular
Damping:	0.0000 ft	Geometry: Circular
Length:	142 ft	Max Depth: 3.00 ft
FHWA Code:	0	Max Depth: 3.00 ft
Entr Loss Coef:	0.00	Bottom Clip
Exit Loss Coef:	0.00	Default: 0.00 ft
Bend Loss Coef:	0.00	Default: 0.00 ft
Bend Location:	0 dec	Op Table:
Energy Switch:	Energy	Op Table:
	Manning's N: 0.0000	Ref Node:
		Manning's N: 0.0000
		Top Clip
	Default: 0.00 ft	Default: 0.00 ft
	Op Table:	Op Table:
	Ref Node:	Ref Node:
	Manning's N: 0.0000	Manning's N: 0.0000

Comment:

Weir Link: L-35W

Scenario:	Pre-Development	Bottom Clip
From Node:	EX-BASIN-04	Default: 0.00 ft
To Node:	EX-BASIN-05	Op Table:
Link Count:	1	Ref Node:
Flow Direction:	Both	Top Clip
Damping:	0.0000 ft	Default: 0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:
Geometry Type:	Irregular	Ref Node:
Invert:	5.31 ft	Discharge Coefficients
Control Elevation:	5.31 ft	Weir Default: 2.800
Cross Section:	X-35W	Weir Table:
		Orifice Default: 0.600
		Orifice Table:

Comment:

Weir Link: L-36W

Scenario:	Pre-Development	Bottom Clip
From Node:	PR-BASIN-02	Default: 0.00 ft
To Node:	PR-INLET-02	Op Table:
Link Count:	1	Ref Node:
Flow Direction:	Both	Top Clip

Damping:	0.0000 ft	
Weir Type:	Horizontal	Default: 0.00 ft
Geometry Type:	Rectangular	Op Table:
Invert:	5.02 ft	Ref Node:
Control Elevation:	5.02 ft	Discharge Coefficients
Max Depth:	3.08 ft	Weir Default: 2.800
Max Width:	4.08 ft	Weir Table:
Fillet:	0.00 ft	Orifice Default: 0.600
		Orifice Table:
Comment:		

Weir Link: L-37W		
Scenario:	Pre-Development	Bottom Clip
From Node:	PR-BASIN-30	Default: 0.00 ft
To Node:	PR-INLET-30	Op Table:
Link Count:	1	Ref Node:
Flow Direction:	Both	Top Clip
Damping:	0.0000 ft	Default: 0.00 ft
Weir Type:	Horizontal	Op Table:
Geometry Type:	Rectangular	Ref Node:
Invert:	4.53 ft	Discharge Coefficients
Control Elevation:	4.53 ft	Weir Default: 2.800
Max Depth:	3.08 ft	Weir Table:
Max Width:	4.08 ft	Orifice Default: 0.600
Fillet:	0.00 ft	Orifice Table:
Comment:		

Weir Link: L-38W		
Scenario:	Pre-Development	Bottom Clip
From Node:	PR-BASIN-31	Default: 0.00 ft
To Node:	PR-INLET-31	Op Table:
Link Count:	1	Ref Node:
Flow Direction:	Both	Top Clip
Damping:	0.0000 ft	Default: 0.00 ft
Weir Type:	Horizontal	Op Table:
Geometry Type:	Rectangular	Ref Node:
Invert:	3.88 ft	Discharge Coefficients
Control Elevation:	3.55 ft	Weir Default: 2.800
Max Depth:	3.08 ft	Weir Table:
Max Width:	4.08 ft	Orifice Default: 0.600
Fillet:	0.00 ft	Orifice Table:
Comment:		

Weir Link: L-44W	
Scenario: Pre-Development	Bottom Clip
From Node: PR-BASIN-02	Default: 0.00 ft
To Node: PR-BASIN-30	Op Table:
Link Count: 1	Ref Node:
Flow Direction: Both	Top Clip
Damping: 0.0000 ft	Default: 0.00 ft
Weir Type: Broad Crested Vertical	Op Table:
Geometry Type: Irregular	Ref Node:
Invert: 4.81 ft	Discharge Coefficients
Control Elevation: 4.81 ft	Weir Default: 2.800
Cross Section: X-44W	Weir Table:
	Orifice Default: 0.600
	Orifice Table:
Comment:	

Weir Link: L-45W	
Scenario: Pre-Development	Bottom Clip
From Node: PR-BASIN-30	Default: 0.00 ft
To Node: PR-BASIN-31	Op Table:
Link Count: 1	Ref Node:
Flow Direction: Both	Top Clip
Damping: 0.0000 ft	Default: 0.00 ft
Weir Type: Broad Crested Vertical	Op Table:
Geometry Type: Irregular	Ref Node:
Invert: 4.10 ft	Discharge Coefficients
Control Elevation: 4.10 ft	Weir Default: 2.800
Cross Section: X-45W	Weir Table:
	Orifice Default: 0.600
	Orifice Table:
Comment:	

ICPR RUNOFF SUMMARY
(PRE-DEVELOPMENT)

Manual Basin Mass Balance Summary [Pre-Development]

Basin Name	Sim Name	Total Rainfall	Total Irrigation	Total Runoff	Total ET	Total Initial Abst	Total Recharge	Change Soil Storage
EX-BASIN-01 [in]	001Y-024H	4.50	0.00	3.87	0.00	0.00	0.00	0.63
EX-BASIN-01 [ft3]	001Y-024H	19099	0	16439	0	0	0	2660
EX-BASIN-01 [ac-ft]	001Y-024H	0.44	0.00	0.38	0.00	0.00	0.00	0.06
EX-BASIN-01 [in]	010Y-024H	7.90	0.00	7.24	0.00	0.00	0.00	0.66
EX-BASIN-01 [ft3]	010Y-024H	33529	0	30740	0	0	0	2789
EX-BASIN-01 [ac-ft]	010Y-024H	0.77	0.00	0.71	0.00	0.00	0.00	0.06
EX-BASIN-01 [in]	025Y-024H	9.00	0.00	8.34	0.00	0.00	0.00	0.66
EX-BASIN-01 [ft3]	025Y-024H	38198	0	35388	0	0	0	2810
EX-BASIN-01 [ac-ft]	025Y-024H	0.88	0.00	0.81	0.00	0.00	0.00	0.06
EX-BASIN-01 [in]	100Y-024H	11.00	0.00	10.33	0.00	0.00	0.00	0.67
EX-BASIN-01 [ft3]	100Y-024H	46686	0	43852	0	0	0	2834
EX-BASIN-01 [ac-ft]	100Y-024H	1.07	0.00	1.01	0.00	0.00	0.00	0.07
EX-BASIN-01 [in]	SJRWMD 025Y-024H	9.00	0.00	8.35	0.00	0.00	0.00	0.65
EX-BASIN-01 [ft3]	SJRWMD 025Y-024H	38198	0	35433	0	0	0	2765
EX-BASIN-01 [ac-ft]	SJRWMD 025Y-024H	0.88	0.00	0.81	0.00	0.00	0.00	0.06

Manual Basin Mass Balance Summary [Pre-Development]

Basin Name	Sim Name	Total Rainfall	Total Irrigation	Total Runoff	Total ET	Total Initial Abst	Total Recharge	Change Soil Storage
EX-BASIN-04 [in]	001Y-024H	4.50	0.00	2.63	0.00	0.00	0.00	1.87
EX-BASIN-04 [ft3]	001Y-024H	58979	0	34456	0	0	0	24523
EX-BASIN-04 [ac-ft]	001Y-024H	1.35	0.00	0.79	0.00	0.00	0.00	0.56
EX-BASIN-04 [in]	010Y-024H	7.90	0.00	5.73	0.00	0.00	0.00	2.17
EX-BASIN-04 [ft3]	010Y-024H	103541	0	75127	0	0	0	28414

Basin Name	Sim Name	Total Rainfall	Total Irrigation	Total Runoff	Total ET	Total Initial Abst	Total Recharge	Change Soil Storage
EX-BASIN-04 [ac-ft]	010Y-024H	2.38	0.00	1.72	0.00	0.00	0.00	0.65
EX-BASIN-04 [in]	025Y-024H	9.00	0.00	6.78	0.00	0.00	0.00	2.22
EX-BASIN-04 [ft3]	025Y-024H	117958	0	88808	0	0	0	29150
EX-BASIN-04 [ac-ft]	025Y-024H	2.71	0.00	2.04	0.00	0.00	0.00	0.67
EX-BASIN-04 [in]	100Y-024H	11.00	0.00	8.70	0.00	0.00	0.00	2.30
EX-BASIN-04 [ft3]	100Y-024H	144171	0	114009	0	0	0	30162
EX-BASIN-04 [ac-ft]	100Y-024H	3.31	0.00	2.62	0.00	0.00	0.00	0.69
EX-BASIN-04 [in]	SJRWMD 025Y-024H	9.00	0.00	6.79	0.00	0.00	0.00	2.21
EX-BASIN-04 [ft3]	SJRWMD 025Y-024H	117958	0	88941	0	0	0	29017
EX-BASIN-04 [ac-ft]	SJRWMD 025Y-024H	2.71	0.00	2.04	0.00	0.00	0.00	0.67

Manual Basin Mass Balance Summary [Pre-Development]

Basin Name	Sim Name	Total Rainfall	Total Irrigation	Total Runoff	Total ET	Total Initial Abst	Total Recharge	Change Soil Storage
EX-BASIN-05 [in]	001Y-024H	4.50	0.00	3.51	0.00	0.00	0.00	0.99
EX-BASIN-05 [ft3]	001Y-024H	29576	0	23093	0	0	0	6483
EX-BASIN-05 [ac-ft]	001Y-024H	0.68	0.00	0.53	0.00	0.00	0.00	0.15
EX-BASIN-05 [in]	010Y-024H	7.90	0.00	6.78	0.00	0.00	0.00	1.12
EX-BASIN-05 [ft3]	010Y-024H	51923	0	44543	0	0	0	7380
EX-BASIN-05 [ac-ft]	010Y-024H	1.19	0.00	1.02	0.00	0.00	0.00	0.17
EX-BASIN-05 [in]	025Y-024H	9.00	0.00	7.85	0.00	0.00	0.00	1.15
EX-BASIN-05 [ft3]	025Y-024H	59152	0	51605	0	0	0	7547
EX-BASIN-05 [ac-ft]	025Y-024H	1.36	0.00	1.18	0.00	0.00	0.00	0.17
EX-BASIN-05 [in]	100Y-024H	11.00	0.00	9.82	0.00	0.00	0.00	1.18
EX-BASIN-05 [ft3]	100Y-024H	72297	0	64522	0	0	0	7775

Basin Name	Sim Name	Total Rainfall	Total Irrigation	Total Runoff	Total ET	Total Initial Abst	Total Recharge	Change Soil Storage
5 [ft3]								
EX-BASIN-05 [ac-ft]	100Y-024H	1.66	0.00	1.48	0.00	0.00	0.00	0.18
EX-BASIN-05 [in]	SJRWMD025Y-024H	9.00	0.00	7.86	0.00	0.00	0.00	1.14
EX-BASIN-05 [ft3]	SJRWMD025Y-024H	59152	0	51674	0	0	0	7478
EX-BASIN-05 [ac-ft]	SJRWMD025Y-024H	1.36	0.00	1.19	0.00	0.00	0.00	0.17

Manual Basin Mass Balance Summary [Pre-Development]

Basin Name	Sim Name	Total Rainfall	Total Irrigation	Total Runoff	Total ET	Total Initial Abst	Total Recharge	Change Soil Storage
EX-BASIN-06 [in]	001Y-024H	4.50	0.00	3.60	0.00	0.00	0.00	0.90
EX-BASIN-06 [ft3]	001Y-024H	4714	0	3769	0	0	0	945
EX-BASIN-06 [ac-ft]	001Y-024H	0.11	0.00	0.09	0.00	0.00	0.00	0.02
EX-BASIN-06 [in]	010Y-024H	7.90	0.00	6.88	0.00	0.00	0.00	1.02
EX-BASIN-06 [ft3]	010Y-024H	8276	0	7204	0	0	0	1072
EX-BASIN-06 [ac-ft]	010Y-024H	0.19	0.00	0.17	0.00	0.00	0.00	0.02
EX-BASIN-06 [in]	025Y-024H	9.00	0.00	7.95	0.00	0.00	0.00	1.05
EX-BASIN-06 [ft3]	025Y-024H	9429	0	8332	0	0	0	1096
EX-BASIN-06 [ac-ft]	025Y-024H	0.22	0.00	0.19	0.00	0.00	0.00	0.03
EX-BASIN-06 [in]	100Y-024H	11.00	0.00	9.92	0.00	0.00	0.00	1.08
EX-BASIN-06 [ft3]	100Y-024H	11524	0	10396	0	0	0	1128
EX-BASIN-06 [ac-ft]	100Y-024H	0.26	0.00	0.24	0.00	0.00	0.00	0.03
EX-BASIN-06 [in]	SJRWMD025Y-024H	9.00	0.00	7.96	0.00	0.00	0.00	1.04
EX-BASIN-06 [ft3]	SJRWMD025Y-024H	9429	0	8343	0	0	0	1085
EX-BASIN-06 [ac-ft]	SJRWMD025Y-024H	0.22	0.00	0.19	0.00	0.00	0.00	0.02

Manual Basin Mass Balance Summary [Pre-Development]

Basin Name	Sim Name	Total Rainfall	Total Irrigation	Total Runoff	Total ET	Total Initial Abst	Total Recharge	Change Soil Storage
EX-BASIN-07 [in]	001Y-024H	4.50	0.00	3.62	0.00	0.00	0.00	0.88
EX-BASIN-07 [ft3]	001Y-024H	15971	0	12859	0	0	0	3112
EX-BASIN-07 [ac-ft]	001Y-024H	0.37	0.00	0.30	0.00	0.00	0.00	0.07
EX-BASIN-07 [in]	010Y-024H	7.90	0.00	6.91	0.00	0.00	0.00	0.99
EX-BASIN-07 [ft3]	010Y-024H	28038	0	24511	0	0	0	3526
EX-BASIN-07 [ac-ft]	010Y-024H	0.64	0.00	0.56	0.00	0.00	0.00	0.08
EX-BASIN-07 [in]	025Y-024H	9.00	0.00	7.98	0.00	0.00	0.00	1.02
EX-BASIN-07 [ft3]	025Y-024H	31941	0	28338	0	0	0	3603
EX-BASIN-07 [ac-ft]	025Y-024H	0.73	0.00	0.65	0.00	0.00	0.00	0.08
EX-BASIN-07 [in]	100Y-024H	11.00	0.00	9.96	0.00	0.00	0.00	1.04
EX-BASIN-07 [ft3]	100Y-024H	39040	0	35332	0	0	0	3707
EX-BASIN-07 [ac-ft]	100Y-024H	0.90	0.00	0.81	0.00	0.00	0.00	0.09
EX-BASIN-07 [in]	SJRWMD 025Y-024H	9.00	0.00	8.00	0.00	0.00	0.00	1.00
EX-BASIN-07 [ft3]	SJRWMD 025Y-024H	31941	0	28376	0	0	0	3566
EX-BASIN-07 [ac-ft]	SJRWMD 025Y-024H	0.73	0.00	0.65	0.00	0.00	0.00	0.08

Manual Basin Mass Balance Summary [Pre-Development]

Basin Name	Sim Name	Total Rainfall	Total Irrigation	Total Runoff	Total ET	Total Initial Abst	Total Recharge	Change Soil Storage
EX-BASIN-08 [in]	001Y-024H	4.50	0.00	3.50	0.00	0.00	0.00	1.00
EX-BASIN-08 [ft3]	001Y-024H	13259	0	10308	0	0	0	2951
EX-BASIN-08 [ac-ft]	001Y-024H	0.30	0.00	0.24	0.00	0.00	0.00	0.07
EX-BASIN-08 [in]	010Y-024H	7.90	0.00	6.76	0.00	0.00	0.00	1.14
EX-BASIN-08 [ft3]	010Y-024H	23277	0	19916	0	0	0	3361

Basin Name	Sim Name	Total Rainfall	Total Irrigation	Total Runoff	Total ET	Total Initial Abst	Total Recharge	Change Soil Storage
EX-BASIN-08 [ac-ft]	010Y-024H	0.53	0.00	0.46	0.00	0.00	0.00	0.08
EX-BASIN-08 [in]	025Y-024H	9.00	0.00	7.83	0.00	0.00	0.00	1.17
EX-BASIN-08 [ft3]	025Y-024H	26518	0	23081	0	0	0	3438
EX-BASIN-08 [ac-ft]	025Y-024H	0.61	0.00	0.53	0.00	0.00	0.00	0.08
EX-BASIN-08 [in]	100Y-024H	11.00	0.00	9.80	0.00	0.00	0.00	1.20
EX-BASIN-08 [ft3]	100Y-024H	32411	0	28869	0	0	0	3542
EX-BASIN-08 [ac-ft]	100Y-024H	0.74	0.00	0.66	0.00	0.00	0.00	0.08
EX-BASIN-08 [in]	SJRWMD 025Y-024H	9.00	0.00	7.84	0.00	0.00	0.00	1.16
EX-BASIN-08 [ft3]	SJRWMD 025Y-024H	26518	0	23111	0	0	0	3407
EX-BASIN-08 [ac-ft]	SJRWMD 025Y-024H	0.61	0.00	0.53	0.00	0.00	0.00	0.08

Manual Basin Mass Balance Summary [Pre-Development]

Basin Name	Sim Name	Total Rainfall	Total Irrigation	Total Runoff	Total ET	Total Initial Abst	Total Recharge	Change Soil Storage
EX-BASIN-09 [in]	001Y-024H	4.50	0.00	3.97	0.00	0.00	0.00	0.53
EX-BASIN-09 [ft3]	001Y-024H	13543	0	11946	0	0	0	1597
EX-BASIN-09 [ac-ft]	001Y-024H	0.31	0.00	0.27	0.00	0.00	0.00	0.04
EX-BASIN-09 [in]	010Y-024H	7.90	0.00	7.32	0.00	0.00	0.00	0.58
EX-BASIN-09 [ft3]	010Y-024H	23776	0	22017	0	0	0	1759
EX-BASIN-09 [ac-ft]	010Y-024H	0.55	0.00	0.51	0.00	0.00	0.00	0.04
EX-BASIN-09 [in]	025Y-024H	9.00	0.00	8.41	0.00	0.00	0.00	0.59
EX-BASIN-09 [ft3]	025Y-024H	27087	0	25298	0	0	0	1788
EX-BASIN-09 [ac-ft]	025Y-024H	0.62	0.00	0.58	0.00	0.00	0.00	0.04
EX-BASIN-09 [in]	100Y-024H	11.00	0.00	10.39	0.00	0.00	0.00	0.61
EX-BASIN-09 [in]	100Y-024H	33106	0	31279	0	0	0	1827

Basin Name	Sim Name	Total Rainfall	Total Irrigation	Total Runoff	Total ET	Total Initial Abst	Total Recharge	Change Soil Storage
9 [ft3]								
EX-BASIN-09 [ac-ft]	100Y-024H	0.76	0.00	0.72	0.00	0.00	0.00	0.04
EX-BASIN-09 [in]	SJRWMD025Y-024H	9.00	0.00	8.42	0.00	0.00	0.00	0.58
EX-BASIN-09 [ft3]	SJRWMD025Y-024H	27087	0	25330	0	0	0	1756
EX-BASIN-09 [ac-ft]	SJRWMD025Y-024H	0.62	0.00	0.58	0.00	0.00	0.00	0.04

Manual Basin Mass Balance Summary [Pre-Development]

Basin Name	Sim Name	Total Rainfall	Total Irrigation	Total Runoff	Total ET	Total Initial Abst	Total Recharge	Change Soil Storage
EX-BASIN-13 [in]	001Y-024H	4.50	0.00	4.27	0.00	0.00	0.00	0.23
EX-BASIN-13 [ft3]	001Y-024H	7494	0	7110	0	0	0	385
EX-BASIN-13 [ac-ft]	001Y-024H	0.17	0.00	0.16	0.00	0.00	0.00	0.01
EX-BASIN-13 [in]	010Y-024H	7.90	0.00	7.67	0.00	0.00	0.00	0.23
EX-BASIN-13 [ft3]	010Y-024H	13157	0	12773	0	0	0	384
EX-BASIN-13 [ac-ft]	010Y-024H	0.30	0.00	0.29	0.00	0.00	0.00	0.01
EX-BASIN-13 [in]	025Y-024H	9.00	0.00	8.77	0.00	0.00	0.00	0.23
EX-BASIN-13 [ft3]	025Y-024H	14989	0	14606	0	0	0	383
EX-BASIN-13 [ac-ft]	025Y-024H	0.34	0.00	0.34	0.00	0.00	0.00	0.01
EX-BASIN-13 [in]	100Y-024H	11.00	0.00	10.77	0.00	0.00	0.00	0.23
EX-BASIN-13 [ft3]	100Y-024H	18320	0	17940	0	0	0	380
EX-BASIN-13 [ac-ft]	100Y-024H	0.42	0.00	0.41	0.00	0.00	0.00	0.01
EX-BASIN-13 [in]	SJRWMD025Y-024H	9.00	0.00	8.78	0.00	0.00	0.00	0.22
EX-BASIN-13 [ft3]	SJRWMD025Y-024H	14989	0	14624	0	0	0	365
EX-BASIN-13 [ac-ft]	SJRWMD025Y-024H	0.34	0.00	0.34	0.00	0.00	0.00	0.01

Manual Basin Mass Balance Summary [Pre-Development]

Basin Name	Sim Name	Total Rainfall	Total Irrigation	Total Runoff	Total ET	Total Initial Abst	Total Recharge	Change Soil Storage
EX-BASIN-15 [in]	001Y-024H	4.50	0.00	4.27	0.00	0.00	0.00	0.23
EX-BASIN-15 [ft3]	001Y-024H	7326	0	6950	0	0	0	376
EX-BASIN-15 [ac-ft]	001Y-024H	0.17	0.00	0.16	0.00	0.00	0.00	0.01
EX-BASIN-15 [in]	010Y-024H	7.90	0.00	7.67	0.00	0.00	0.00	0.23
EX-BASIN-15 [ft3]	010Y-024H	12862	0	12486	0	0	0	375
EX-BASIN-15 [ac-ft]	010Y-024H	0.30	0.00	0.29	0.00	0.00	0.00	0.01
EX-BASIN-15 [in]	025Y-024H	9.00	0.00	8.77	0.00	0.00	0.00	0.23
EX-BASIN-15 [ft3]	025Y-024H	14652	0	14279	0	0	0	374
EX-BASIN-15 [ac-ft]	025Y-024H	0.34	0.00	0.33	0.00	0.00	0.00	0.01
EX-BASIN-15 [in]	100Y-024H	11.00	0.00	10.77	0.00	0.00	0.00	0.23
EX-BASIN-15 [ft3]	100Y-024H	17909	0	17537	0	0	0	371
EX-BASIN-15 [ac-ft]	100Y-024H	0.41	0.00	0.40	0.00	0.00	0.00	0.01
EX-BASIN-15 [in]	SJRWMD 025Y-024H	9.00	0.00	8.78	0.00	0.00	0.00	0.22
EX-BASIN-15 [ft3]	SJRWMD 025Y-024H	14652	0	14296	0	0	0	357
EX-BASIN-15 [ac-ft]	SJRWMD 025Y-024H	0.34	0.00	0.33	0.00	0.00	0.00	0.01

Manual Basin Mass Balance Summary [Pre-Development]

Basin Name	Sim Name	Total Rainfall	Total Irrigation	Total Runoff	Total ET	Total Initial Abst	Total Recharge	Change Soil Storage
PR-BASIN-02 [in]	001Y-024H	4.50	0.00	2.77	0.00	0.00	0.00	1.73
PR-BASIN-02 [ft3]	001Y-024H	21711	0	13385	0	0	0	8326
PR-BASIN-02 [ac-ft]	001Y-024H	0.50	0.00	0.31	0.00	0.00	0.00	0.19
PR-BASIN-02 [in]	010Y-024H	7.90	0.00	5.90	0.00	0.00	0.00	2.00
PR-BASIN-02 [ft3]	010Y-024H	38115	0	28484	0	0	0	9631

Basin Name	Sim Name	Total Rainfall	Total Irrigation	Total Runoff	Total ET	Total Initial Abst	Total Recharge	Change Soil Storage
PR-BASIN-02 [ac-ft]	010Y-024H	0.87	0.00	0.65	0.00	0.00	0.00	0.22
PR-BASIN-02 [in]	025Y-024H	9.00	0.00	6.95	0.00	0.00	0.00	2.05
PR-BASIN-02 [ft3]	025Y-024H	43422	0	33544	0	0	0	9878
PR-BASIN-02 [ac-ft]	025Y-024H	1.00	0.00	0.77	0.00	0.00	0.00	0.23
PR-BASIN-02 [in]	100Y-024H	11.00	0.00	8.88	0.00	0.00	0.00	2.12
PR-BASIN-02 [ft3]	100Y-024H	53071	0	42854	0	0	0	10217
PR-BASIN-02 [ac-ft]	100Y-024H	1.22	0.00	0.98	0.00	0.00	0.00	0.23
PR-BASIN-02 [in]	SJRWMD 025Y-024H	9.00	0.00	6.96	0.00	0.00	0.00	2.04
PR-BASIN-02 [ft3]	SJRWMD 025Y-024H	43422	0	33593	0	0	0	9828
PR-BASIN-02 [ac-ft]	SJRWMD 025Y-024H	1.00	0.00	0.77	0.00	0.00	0.00	0.23

Manual Basin Mass Balance Summary [Pre-Development]

Basin Name	Sim Name	Total Rainfall	Total Irrigation	Total Runoff	Total ET	Total Initial Abst	Total Recharge	Change Soil Storage
PR-BASIN-11 [in]	001Y-024H	4.50	0.00	3.44	0.00	0.00	0.00	1.06
PR-BASIN-11 [ft3]	001Y-024H	26625	0	20330	0	0	0	6296
PR-BASIN-11 [ac-ft]	001Y-024H	0.61	0.00	0.47	0.00	0.00	0.00	0.14
PR-BASIN-11 [in]	010Y-024H	7.90	0.00	6.69	0.00	0.00	0.00	1.21
PR-BASIN-11 [ft3]	010Y-024H	46742	0	39556	0	0	0	7186
PR-BASIN-11 [ac-ft]	010Y-024H	1.07	0.00	0.91	0.00	0.00	0.00	0.16
PR-BASIN-11 [in]	025Y-024H	9.00	0.00	7.76	0.00	0.00	0.00	1.24
PR-BASIN-11 [ft3]	025Y-024H	53251	0	45898	0	0	0	7353
PR-BASIN-11 [ac-ft]	025Y-024H	1.22	0.00	1.05	0.00	0.00	0.00	0.17
PR-BASIN-11 [in]	100Y-024H	11.00	0.00	9.72	0.00	0.00	0.00	1.28
PR-BASIN-11	100Y-024H	65084	0	57504	0	0	0	7580

Basin Name	Sim Name	Total Rainfall	Total Irrigation	Total Runoff	Total ET	Total Initial Abst	Total Recharge	Change Soil Storage
1 [ft3]								
PR-BASIN-1 1 [ac-ft]	100Y-024H	1.49	0.00	1.32	0.00	0.00	0.00	0.17
PR-BASIN-1 1 [in]	SJRWMD 025Y-024H	9.00	0.00	7.77	0.00	0.00	0.00	1.23
PR-BASIN-1 1 [ft3]	SJRWMD 025Y-024H	53251	0	45959	0	0	0	7291
PR-BASIN-1 1 [ac-ft]	SJRWMD 025Y-024H	1.22	0.00	1.06	0.00	0.00	0.00	0.17

Manual Basin Mass Balance Summary [Pre-Development]

Basin Name	Sim Name	Total Rainfall	Total Irrigation	Total Runoff	Total ET	Total Initial Abst	Total Recharge	Change Soil Storage
PR-BASIN-3 0 [in]	001Y-024H	4.50	0.00	2.62	0.00	0.00	0.00	1.88
PR-BASIN-3 0 [ft3]	001Y-024H	10443	0	6070	0	0	0	4373
PR-BASIN-3 0 [ac-ft]	001Y-024H	0.24	0.00	0.14	0.00	0.00	0.00	0.10
PR-BASIN-3 0 [in]	010Y-024H	7.90	0.00	5.72	0.00	0.00	0.00	2.18
PR-BASIN-3 0 [ft3]	010Y-024H	18333	0	13265	0	0	0	5068
PR-BASIN-3 0 [ac-ft]	010Y-024H	0.42	0.00	0.30	0.00	0.00	0.00	0.12
PR-BASIN-3 0 [in]	025Y-024H	9.00	0.00	6.76	0.00	0.00	0.00	2.24
PR-BASIN-3 0 [ft3]	025Y-024H	20886	0	15687	0	0	0	5199
PR-BASIN-3 0 [ac-ft]	025Y-024H	0.48	0.00	0.36	0.00	0.00	0.00	0.12
PR-BASIN-3 0 [in]	100Y-024H	11.00	0.00	8.68	0.00	0.00	0.00	2.32
PR-BASIN-3 0 [ft3]	100Y-024H	25527	0	20147	0	0	0	5380
PR-BASIN-3 0 [ac-ft]	100Y-024H	0.59	0.00	0.46	0.00	0.00	0.00	0.12
PR-BASIN-3 0 [in]	SJRWMD 025Y-024H	9.00	0.00	6.77	0.00	0.00	0.00	2.23
PR-BASIN-3 0 [ft3]	SJRWMD 025Y-024H	20886	0	15710	0	0	0	5176
PR-BASIN-3 0 [ac-ft]	SJRWMD 025Y-024H	0.48	0.00	0.36	0.00	0.00	0.00	0.12

Manual Basin Mass Balance Summary [Pre-Development]

Basin Name	Sim Name	Total Rainfall	Total Irrigation	Total Runoff	Total ET	Total Initial Abst	Total Recharge	Change Soil Storage
PR-BASIN-3 1 [in]	001Y-024H	4.50	0.00	2.93	0.00	0.00	0.00	1.57
PR-BASIN-3 1 [ft3]	001Y-024H	3876	0	2528	0	0	0	1348
PR-BASIN-3 1 [ac-ft]	001Y-024H	0.09	0.00	0.06	0.00	0.00	0.00	0.03
PR-BASIN-3 1 [in]	010Y-024H	7.90	0.00	6.09	0.00	0.00	0.00	1.81
PR-BASIN-3 1 [ft3]	010Y-024H	6805	0	5249	0	0	0	1556
PR-BASIN-3 1 [ac-ft]	010Y-024H	0.16	0.00	0.12	0.00	0.00	0.00	0.04
PR-BASIN-3 1 [in]	025Y-024H	9.00	0.00	7.15	0.00	0.00	0.00	1.85
PR-BASIN-3 1 [ft3]	025Y-024H	7753	0	6157	0	0	0	1595
PR-BASIN-3 1 [ac-ft]	025Y-024H	0.18	0.00	0.14	0.00	0.00	0.00	0.04
PR-BASIN-3 1 [in]	100Y-024H	11.00	0.00	9.09	0.00	0.00	0.00	1.91
PR-BASIN-3 1 [ft3]	100Y-024H	9475	0	7826	0	0	0	1649
PR-BASIN-3 1 [ac-ft]	100Y-024H	0.22	0.00	0.18	0.00	0.00	0.00	0.04
PR-BASIN-3 1 [in]	SJRWMD 025Y-024H	9.00	0.00	7.16	0.00	0.00	0.00	1.84
PR-BASIN-3 1 [ft3]	SJRWMD 025Y-024H	7753	0	6166	0	0	0	1587
PR-BASIN-3 1 [ac-ft]	SJRWMD 025Y-024H	0.18	0.00	0.14	0.00	0.00	0.00	0.04

ICPR NODE MAX CONDITION REPORT
(PRE-DEVELOPMENT)

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
BNDY-01	001Y-024H	4.00	2.00	0.0000	8.02	50.19	0
BNDY-01	010Y-024H	4.00	2.00	0.0000	11.89	50.19	0
BNDY-01	025Y-024H	4.00	2.00	0.0000	13.89	50.19	0
BNDY-01	100Y-024H	4.00	2.00	0.0000	16.94	50.19	0
BNDY-01	SJRWMD 025Y-024H	4.00	2.00	0.0000	93.19	50.19	0

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-BASIN-01	001Y-024H	6.10	6.10	-0.0015	0.51	14.79	100
EX-BASIN-01	010Y-024H	6.10	6.10	-0.0015	0.92	14.79	100
EX-BASIN-01	025Y-024H	6.10	6.10	-0.0015	1.05	14.79	100
EX-BASIN-01	100Y-024H	6.10	6.10	-0.0015	1.28	14.79	100
EX-BASIN-01	SJRWMD 025Y-024H	6.10	6.10	-0.0015	11.36	14.79	100

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-BASIN-04	001Y-024H	5.31	4.56	0.0003	1.23	1.22	1158
EX-BASIN-04	010Y-024H	5.31	4.63	0.0004	2.45	2.55	1642
EX-BASIN-04	025Y-024H	5.31	4.65	0.0004	2.87	2.93	1799
EX-BASIN-04	100Y-024H	5.31	4.68	0.0004	3.64	3.68	2067
EX-BASIN-04	SJRWMD 025Y-024H	5.31	5.35	-0.0005	31.20	22.26	40807

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-BASIN-05	001Y-024H	5.31	4.57	0.0009	0.71	0.72	10934
EX-BASIN-05	010Y-024H	5.31	4.62	0.0010	1.57	1.46	12792
EX-BASIN-05	025Y-024H	5.31	4.64	0.0010	1.83	1.77	13432
EX-BASIN-05	100Y-024H	5.31	4.66	0.0010	2.39	2.34	14449
EX-BASIN-05	SJRWMD	5.31	4.98	0.0010	23.49	19.65	38503

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
	025Y-024H						

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-BASIN-06	001Y-024H	5.50	4.87	0.0002	0.11	0.11	2557
EX-BASIN-06	010Y-024H	5.50	4.88	0.0002	0.22	0.22	2604
EX-BASIN-06	025Y-024H	5.50	4.88	0.0002	0.25	0.25	2618
EX-BASIN-06	100Y-024H	5.50	4.89	0.0002	0.31	0.31	2641
EX-BASIN-06	SJRWMD 025Y-024H	5.50	5.04	0.0002	2.70	2.58	3151

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-BASIN-07	001Y-024H	4.50	2.66	0.0008	1.01	1.01	521
EX-BASIN-07	010Y-024H	4.50	2.76	0.0009	2.19	2.19	591
EX-BASIN-07	025Y-024H	4.50	2.78	0.0009	2.62	2.62	614
EX-BASIN-07	100Y-024H	4.50	2.83	0.0009	3.38	3.38	648
EX-BASIN-07	SJRWMD 025Y-024H	4.50	3.40	0.0009	27.43	27.41	1291

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-BASIN-08	001Y-024H	4.50	3.37	0.0004	0.67	0.66	8397
EX-BASIN-08	010Y-024H	4.50	3.41	0.0005	1.24	1.24	8558
EX-BASIN-08	025Y-024H	4.50	3.43	0.0004	1.43	1.42	8603
EX-BASIN-08	100Y-024H	4.50	3.45	0.0005	1.76	1.76	8677
EX-BASIN-08	SJRWMD 025Y-024H	4.50	3.89	0.0004	14.87	12.94	10781

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning	Max Stage	Min/Max	Max Total	Max Total	Max Surface
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Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-BASIN-09	001Y-024H	4.50	3.38	0.0010	0.35	0.35	1820
EX-BASIN-09	010Y-024H	4.50	3.43	0.0010	0.64	0.64	1891
EX-BASIN-09	025Y-024H	4.50	3.44	0.0010	0.74	0.73	1912
EX-BASIN-09	100Y-024H	4.50	3.47	0.0010	0.90	0.90	1941
EX-BASIN-09	SJRWMD 025Y-024H	4.50	3.95	0.0010	7.99	7.38	2625

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-BASIN-13	001Y-024H	3.81	3.85	0.0000	0.21	0.21	100
EX-BASIN-13	010Y-024H	3.81	3.87	0.0000	0.37	0.37	138
EX-BASIN-13	025Y-024H	3.81	3.87	0.0000	0.42	0.42	150
EX-BASIN-13	100Y-024H	3.81	3.88	0.0000	0.51	0.51	171
EX-BASIN-13	SJRWMD 025Y-024H	3.81	4.10	-0.0002	4.52	4.47	1740

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-BASIN-15	001Y-024H	3.81	3.85	0.0000	0.20	0.20	101
EX-BASIN-15	010Y-024H	3.81	3.86	0.0000	0.36	0.36	136
EX-BASIN-15	025Y-024H	3.81	3.87	0.0000	0.41	0.41	146
EX-BASIN-15	100Y-024H	3.81	3.88	0.0000	0.50	0.50	163
EX-BASIN-15	SJRWMD 025Y-024H	3.81	4.12	-0.0003	4.42	4.31	1793

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-INLET-04 A	001Y-024H	5.31	4.57	0.0009	0.17	0.14	100
EX-INLET-04 A	010Y-024H	5.31	4.63	0.0010	0.29	0.48	100
EX-INLET-04 A	025Y-024H	5.31	4.64	-0.0010	0.32	0.57	100

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-INLET-04 A	100Y-024H	5.31	4.67	-0.0010	0.48	0.87	100
EX-INLET-04 A	SJRWMD 025Y-024H	5.31	5.29	0.0010	7.12	7.12	100

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-INLET-05	001Y-024H	5.31	4.57	0.0009	0.13	0.17	100
EX-INLET-05	010Y-024H	5.31	4.63	-0.0010	0.48	0.29	100
EX-INLET-05	025Y-024H	5.31	4.64	-0.0010	0.57	0.30	100
EX-INLET-05	100Y-024H	5.31	4.67	0.0010	0.87	0.47	100
EX-INLET-05	SJRWMD 025Y-024H	5.31	5.09	0.0010	7.12	7.12	100

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-INLET-06	001Y-024H	5.50	2.57	-0.0004	0.11	1.91	100
EX-INLET-06	010Y-024H	5.50	2.57	-0.0004	0.22	1.91	100
EX-INLET-06	025Y-024H	5.50	2.57	-0.0004	0.25	1.91	100
EX-INLET-06	100Y-024H	5.50	2.57	-0.0004	0.31	1.91	100
EX-INLET-06	SJRWMD 025Y-024H	5.50	3.06	-0.0008	2.58	2.57	100

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-INLET-08	001Y-024H	3.29	2.00	0.0012	11.52	1.10	100
EX-INLET-08	010Y-024H	3.29	2.00	0.0012	11.52	1.65	100
EX-INLET-08	025Y-024H	3.29	2.01	0.0012	11.52	1.78	100
EX-INLET-08	100Y-024H	3.29	2.01	0.0012	11.52	1.77	100
EX-INLET-08	SJRWMD 025Y-024H	3.29	2.30	0.0012	12.94	12.94	100

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-INLET-13	001Y-024H	3.81	2.58	0.0006	0.99	0.40	202
EX-INLET-13	010Y-024H	3.81	2.89	-0.0010	0.99	0.92	202
EX-INLET-13	025Y-024H	3.81	2.94	0.0010	1.10	0.98	202
EX-INLET-13	100Y-024H	3.81	3.05	-0.0010	1.24	1.09	202
EX-INLET-13	SJRWMD 025Y-024H	3.81	3.82	-0.0010	8.57	8.47	202

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-INLET-15	001Y-024H	3.81	2.58	0.0002	0.20	0.20	122
EX-INLET-15	010Y-024H	3.81	2.89	0.0008	0.36	0.61	122
EX-INLET-15	025Y-024H	3.81	2.94	-0.0009	0.41	0.68	122
EX-INLET-15	100Y-024H	3.81	3.05	0.0009	0.50	0.74	122
EX-INLET-15	SJRWMD 025Y-024H	3.81	3.99	0.0010	4.31	4.16	124

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
GROUNDWATER	001Y-024H	0.00	0.00	0.0000	0.29	0.00	0
GROUNDWATER	010Y-024H	0.00	0.00	0.0000	0.44	0.00	0
GROUNDWATER	025Y-024H	0.00	0.00	0.0000	0.44	0.00	0
GROUNDWATER	100Y-024H	0.00	0.00	0.0000	0.44	0.00	0
GROUNDWATER	SJRWMD 025Y-024H	0.00	0.00	0.0000	1.27	0.00	0

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
PR-BASIN-02	001Y-024H	6.00	5.02	-0.0001	0.44	1.47	100

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
PR-BASIN-02	010Y-024H	6.00	5.02	-0.0001	0.92	1.47	100
PR-BASIN-02	025Y-024H	6.00	5.02	-0.0001	1.07	1.47	100
PR-BASIN-02	100Y-024H	6.00	5.02	-0.0001	1.35	1.47	100
PR-BASIN-02	SJRWMD 025Y-024H	6.00	5.21	-0.0002	11.63	11.63	100

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
PR-BASIN-11	001Y-024H	4.00	2.58	0.0006	1.03	0.99	16535
PR-BASIN-11	010Y-024H	4.00	2.89	0.0007	2.12	1.16	17226
PR-BASIN-11	025Y-024H	4.00	2.94	0.0007	2.36	1.61	17335
PR-BASIN-11	100Y-024H	4.00	3.04	0.0006	2.80	2.47	17579
PR-BASIN-11	SJRWMD 025Y-024H	4.00	3.51	0.0009	23.52	8.59	18632

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
PR-BASIN-30	001Y-024H	6.00	4.54	0.0002	4.15	3.51	100
PR-BASIN-30	010Y-024H	6.00	4.56	0.0002	4.15	4.03	100
PR-BASIN-30	025Y-024H	6.00	4.56	0.0002	4.26	4.26	100
PR-BASIN-30	100Y-024H	6.00	4.58	0.0002	4.67	4.67	100
PR-BASIN-30	SJRWMD 025Y-024H	6.00	4.79	0.0002	16.53	16.53	100

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
PR-BASIN-31	001Y-024H	4.50	4.07	0.0003	3.47	3.40	100
PR-BASIN-31	010Y-024H	4.50	4.10	0.0003	4.01	4.01	100
PR-BASIN-31	025Y-024H	4.50	4.10	0.0003	4.20	4.20	100
PR-BASIN-31	100Y-024H	4.50	4.11	0.0003	4.52	4.52	100
PR-BASIN-31	SJRWMD 025Y-024H	4.50	4.36	0.0003	13.24	13.24	100

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
PR-INLET-02	001Y-024H	6.00	2.01	0.0010	14.79	4.93	336
PR-INLET-02	010Y-024H	6.00	2.02	0.0010	14.79	4.93	336
PR-INLET-02	025Y-024H	6.00	2.02	0.0010	14.79	4.93	336
PR-INLET-02	100Y-024H	6.00	2.03	0.0010	14.79	4.93	336
PR-INLET-02	SJRWMD 025Y-024H	6.00	3.20	0.0010	14.79	14.62	342

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
PR-INLET-04 B	001Y-024H	5.31	2.03	0.0010	2.32	1.23	102
PR-INLET-04 B	010Y-024H	5.31	2.08	0.0010	2.32	2.32	102
PR-INLET-04 B	025Y-024H	5.31	2.10	0.0010	2.63	2.64	102
PR-INLET-04 B	100Y-024H	5.31	2.14	0.0010	3.21	3.21	102
PR-INLET-04 B	SJRWMD 025Y-024H	5.31	5.12	-0.0010	15.39	15.44	102

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
PR-INLET-30	001Y-024H	6.00	2.01	-0.0010	21.28	6.52	796
PR-INLET-30	010Y-024H	6.00	2.02	-0.0010	21.28	6.52	796
PR-INLET-30	025Y-024H	6.00	2.02	-0.0010	21.28	6.52	796
PR-INLET-30	100Y-024H	6.00	2.03	0.0010	21.28	6.52	796
PR-INLET-30	SJRWMD 025Y-024H	6.00	3.13	-0.0010	33.39	33.39	796

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
PR-INLET-31	001Y-024H	4.50	2.01	-0.0010	42.93	17.03	746

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
PR-INLET-31	010Y-024H	4.50	2.01	-0.0010	42.93	17.03	746
PR-INLET-31	025Y-024H	4.50	2.01	-0.0010	42.93	17.03	746
PR-INLET-31	100Y-024H	4.50	2.02	-0.0010	42.93	17.03	746
PR-INLET-31	SJRWMD 025Y-024H	4.50	2.55	0.0010	49.14	49.13	746

Node Max Conditions [Pre-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
ST0-03A	001Y-024H	6.00	2.01	-0.0010	4.56	2.32	140
ST0-03A	010Y-024H	6.00	2.03	-0.0010	4.56	2.38	140
ST0-03A	025Y-024H	6.00	2.04	0.0010	4.56	2.67	140
ST0-03A	100Y-024H	6.00	2.06	0.0010	4.56	3.23	140
ST0-03A	SJRWMD 025Y-024H	6.00	3.69	-0.0010	15.44	15.48	140

ICPR SIMULATION REPORT
(PRE-DEVELOPMENT)

Simulation: 001Y-024H

Scenario: Pre-Development
 Run Date/Time: 5/2/2022 2:15:55 PM
 Program Version: ICPR4 4.07.04

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	24.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.0100	900.0000
Max Calculation Time:		5.0000	

Output Time Increments

Hydrology

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	360.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
 Reference ET Folder:
 Unit Hydrograph
 Folder:

Lookup Tables

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

 Green-Ampt Set:
 Vertical Layers Set:
 Impervious Set: Impervious Areas
 Roughness Set:
 Crop Coef Set:
 Fillable Porosity Set:

Conductivity Set:

Leakage Set:

Tolerances & Options			
Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	5	ET for Manual Basins:	False
Over-Relax Weight	0.5 dec		
Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain	Global
		Opt:	
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FDOT-24
		Rainfall Amount:	4.50 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0000 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area	100 ft2	Min Node Srf Area	100 ft2
(2D):		(1D):	
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 010Y-024H

Scenario: Pre-Development
Run Date/Time: 5/2/2022 2:16:09 PM
Program Version: ICPR4 4.07.04

General				
Run Mode:	Normal			
	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	24.0000
	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]	
Min Calculation Time:	60.0000	0.0100	900.0000	
Max Calculation Time:		5.0000		

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	360.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph
Folder:

Lookup Tables

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

Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Impervious Areas
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 5
Over-Relax Weight: 0.5 dec
Fact:
dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

Dflt Damping (2D): 0.0000 ft
Min Node Srf Area: 100 ft2
(2D):
Energy Switch (2D): Energy

IA Recovery Time: 24.0000 hr
ET for Manual Basins: False

Smp/Man Basin Rain: Global
Opt:
OF Region Rain Opt: Global
Rainfall Name: ~FDOT-24
Rainfall Amount: 7.90 in
Storm Duration: 24.0000 hr

Dflt Damping (1D): 0.0050 ft
Min Node Srf Area: 100 ft2
(1D):
Energy Switch (1D): Energy

Comment:

Simulation: 025Y-024H

Scenario: Pre-Development

Run Date/Time: 5/2/2022 2:16:24 PM

Program Version: ICPR4 4.07.04

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	24.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.0100	900.0000
Max Calculation Time:		5.0000	

Output Time Increments

Hydrology

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	360.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph
Folder:

Lookup Tables

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

Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Impervious Areas
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:

Conductivity Set:

Leakage Set:

Tolerances & Options	
Time Marching: SAOR	IA Recovery Time: 24.0000 hr
Max Iterations: 5	ET for Manual Basins: False
Over-Relax Weight: 0.5 dec	
Fact:	
dZ Tolerance: 0.0010 ft	Smp/Man Basin Rain: Global
	Opt:
Max dZ: 1.0000 ft	OF Region Rain Opt: Global
Link Optimizer Tol: 0.0001 ft	Rainfall Name: ~FDOT-24
	Rainfall Amount: 9.00 in
Edge Length Option: Automatic	Storm Duration: 24.0000 hr
Dflt Damping (2D): 0.0000 ft	Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (2D): 100 ft2	Min Node Srf Area (1D): 100 ft2
Energy Switch (2D): Energy	Energy Switch (1D): Energy
Comment:	

Simulation: 100Y-024H

Scenario: Pre-Development

Run Date/Time: 5/2/2022 2:16:38 PM

Program Version: ICPR4 4.07.04

General				
Run Mode:	Normal			
	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	24.0000
	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]	
Min Calculation Time:	60.0000	0.0100	900.0000	
Max Calculation Time:		5.0000		

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	360.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph
Folder:

Lookup Tables

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

Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Impervious Areas
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 5
Over-Relax Weight: 0.5 dec
Fact:
dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

Dflt Damping (2D): 0.0000 ft
Min Node Srf Area: 100 ft2
(2D):
Energy Switch (2D): Energy

IA Recovery Time: 24.0000 hr
ET for Manual Basins: False

Smp/Man Basin Rain: Global
Opt:
OF Region Rain Opt: Global
Rainfall Name: ~FDOT-24
Rainfall Amount: 11.00 in
Storm Duration: 24.0000 hr

Dflt Damping (1D): 0.0050 ft
Min Node Srf Area: 100 ft2
(1D):
Energy Switch (1D): Energy

Comment:

Simulation: SJRWMD 025Y-024H

Scenario: Pre-Development
 Run Date/Time: 5/2/2022 2:16:52 PM
 Program Version: ICPR4 4.07.04

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.0100	900.0000
Max Calculation Time:		5.0000	

Output Time Increments

Hydrology

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	360.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
 Reference ET Folder:
 Unit Hydrograph
 Folder:

Lookup Tables

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

 Green-Ampt Set:
 Vertical Layers Set:
 Impervious Set: Impervious Areas
 Roughness Set:
 Crop Coef Set:
 Fillable Porosity Set:

Conductivity Set:

Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	5	ET for Manual Basins:	False
Over-Relax Weight	0.5 dec		
Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain	Global
		Opt:	
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SCSII-24
		Rainfall Amount:	9.00 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0000 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area	100 ft2	Min Node Srf Area	100 ft2
(2D):		(1D):	
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

ICPR NODE INPUT REPORT
(POST-DEVELOPMENT)

Node: BNDY-01

Scenario: Post-Development
 Type: Time/Stage
 Base Flow: 0.00 cfs
 Initial Stage: 0.50 ft
 Warning Stage: 4.00 ft
 Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	2.00
0	0	0	9999.0000	2.00

Comment:

Node: EX-BASIN-01

Scenario: Post-Development
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 6.10 ft
 Warning Stage: 6.10 ft

Comment:

Node: EX-BASIN-04

Scenario: Post-Development
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 4.02 ft
 Warning Stage: 5.31 ft

Stage [ft]	Area [ac]	Area [ft2]
4.02	0.0006	26
4.12	0.0017	74
4.23	0.0043	187
4.32	0.0063	274
4.43	0.0132	575
4.52	0.0195	849
4.62	0.0356	1551
4.72	0.0568	2474
4.82	0.0763	3324
4.92	0.1062	4626
5.02	0.1481	6451
5.12	0.2060	8973
5.22	0.4758	20726

Stage [ft]	Area [ac]	Area [ft2]
5.32	0.7989	34800
5.42	1.1989	52224
5.52	1.4578	63502
5.62	1.6621	72401
5.72	1.8463	80425
5.82	2.0173	87874
5.92	2.1987	95775
6.02	2.3846	103873
6.12	2.5958	113073
6.22	2.7227	118601
6.32	2.8656	124826
6.42	2.9907	130275
6.52	3.0877	134500
6.62	3.1554	137449
6.72	3.2140	140002
6.82	3.2759	142698
6.92	3.3351	145277
7.02	3.4108	148574
7.12	3.4848	151798
7.22	3.5273	153649
7.32	3.5508	154673
7.42	3.5675	155400
7.52	3.5790	155901
7.62	3.5893	156350
7.73	3.5956	156624
7.83	3.5993	156786
7.93	3.5993	156786

Comment:

Node: EX-BASIN-05

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 2.39 ft
Warning Stage: 5.31 ft

Stage [ft]	Area [ac]	Area [ft2]
2.39	0.0006	26
2.49	0.0013	57
2.59	0.0019	83
2.69	0.0026	113
2.79	0.0031	135
2.89	0.0037	161
2.99	0.0050	218
3.09	0.0068	296

Stage [ft]	Area [ac]	Area [ft2]
3.19	0.0080	348
3.29	0.0092	401
3.39	0.0101	440
3.49	0.0798	3476
3.59	0.1245	5423
3.69	0.1326	5776
3.79	0.1412	6151
3.89	0.1515	6599
3.99	0.1565	6817
4.09	0.1630	7100
4.19	0.1689	7357
4.29	0.1762	7675
4.39	0.1860	8102
4.49	0.2083	9074
4.59	0.2606	11352
4.69	0.3644	15873
4.79	0.5154	22451
4.89	0.7231	31498
4.99	0.9114	39701
5.09	1.1019	47999
5.19	1.3240	57673
5.29	1.5152	66002
5.39	1.6575	72201
5.49	1.7321	75450
5.59	1.7568	76526
5.69	1.7688	77049
5.79	1.7786	77476
5.89	1.7843	77724
5.99	1.7877	77872
6.09	1.7922	78068
6.19	1.7981	78325
6.29	1.8067	78700
6.39	1.8108	78878
6.49	1.8108	78878

Comment:

Node: EX-BASIN-06

Scenario: Post-Development
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 3.62 ft
 Warning Stage: 5.50 ft

Stage [ft]	Area [ac]	Area [ft2]
3.62	0.0006	26

Stage [ft]	Area [ac]	Area [ft2]
3.73	0.0040	174
3.83	0.0072	314
3.93	0.0122	531
4.03	0.0159	693
4.12	0.0172	749
4.23	0.0201	876
4.32	0.0270	1176
4.43	0.0307	1337
4.53	0.0356	1551
4.62	0.0396	1725
4.73	0.0476	2073
4.83	0.0558	2431
4.92	0.0631	2749
5.02	0.0706	3075
5.13	0.0786	3424
5.22	0.0872	3798
5.32	0.0924	4025
5.43	0.0947	4125
5.52	0.0981	4273
5.63	0.1027	4474
5.72	0.1073	4674
5.82	0.1142	4975
5.92	0.1222	5323
6.02	0.1377	5998
6.12	0.2066	8999
6.22	0.2594	11299
6.32	0.2870	12502
6.42	0.2883	12558
6.52	0.2883	12558

Comment:

Node: EX-BASIN-07

Scenario: Post-Development
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 1.89 ft
 Warning Stage: 4.50 ft

Stage [ft]	Area [ac]	Area [ft2]
1.89	0.0006	26
2.00	0.0007	30
2.10	0.0008	35
2.20	0.0009	39
2.30	0.0010	44
2.40	0.0011	48

Stage [ft]	Area [ac]	Area [ft2]
2.50	0.0014	61
2.60	0.0017	74
2.70	0.0027	118
2.80	0.0044	192
2.90	0.0060	261
3.00	0.0084	366
3.10	0.0097	423
3.20	0.0109	475
3.30	0.0147	640
3.39	0.0178	775
3.50	0.0218	950
3.59	0.0247	1076
3.70	0.0288	1255
3.79	0.0339	1477
3.89	0.0562	2448
3.99	0.0947	4125
4.09	0.1291	5624
4.19	0.1785	7775
4.29	0.2491	10851
4.39	0.3598	15673
4.49	0.4798	20900
4.59	0.5917	25774
4.69	0.6623	28850
4.79	0.7088	30875
4.89	0.7490	32626
4.99	0.7978	34752
5.09	0.8419	36673
5.19	0.8907	38799
5.29	0.9332	40650
5.40	0.9507	41412
5.50	0.9563	41656
5.60	0.9601	41822
5.70	0.9645	42014
5.80	0.9676	42149
5.90	0.9698	42244
6.00	0.9714	42314
6.10	0.9729	42380
6.19	0.9745	42449
6.30	0.9762	42523
6.40	0.9781	42606
6.50	0.9781	42606

Comment:

Node: EX-BASIN-08

Scenario: Post-Development

Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 2.12 ft
 Warning Stage: 4.50 ft

Stage [ft]	Area [ac]	Area [ft ²]
2.12	0.0006	26
2.22	0.0011	48
2.32	0.0046	200
2.42	0.0763	3324
2.52	0.1142	4975
2.62	0.1270	5532
2.72	0.1349	5876
2.82	0.1433	6242
2.92	0.1544	6726
3.02	0.1649	7183
3.12	0.1750	7623
3.22	0.1808	7876
3.32	0.1882	8198
3.42	0.1969	8577
3.52	0.2051	8934
3.62	0.2146	9348
3.72	0.2250	9801
3.82	0.2370	10324
3.92	0.2525	10999
4.02	0.2703	11774
4.12	0.2784	12127
4.22	0.2875	12523
4.32	0.2951	12855
4.42	0.3042	13251
4.52	0.3145	13700
4.62	0.3306	14401
4.72	0.3455	15050
4.82	0.3983	17350
4.92	0.4517	19676
5.02	0.5108	22250
5.12	0.5596	24376
5.22	0.6261	27273
5.32	0.7128	31050
5.42	0.8117	35358
5.52	0.8117	35358

Comment:

Node: EX-BASIN-09

Scenario: Post-Development
 Type: Stage/Area

Base Flow: 0.00 cfs
 Initial Stage: 1.45 ft
 Warning Stage: 4.50 ft

Stage [ft]	Area [ac]	Area [ft2]
1.45	0.0006	26
1.56	0.0012	52
1.66	0.0013	57
1.76	0.0013	57
1.86	0.0014	61
1.96	0.0014	61
2.06	0.0015	65
2.16	0.0016	70
2.26	0.0016	70
2.36	0.0017	74
2.46	0.0022	96
2.55	0.0063	274
2.66	0.0107	466
2.75	0.0126	549
2.85	0.0178	775
2.95	0.0241	1050
3.06	0.0296	1289
3.15	0.0350	1525
3.26	0.0377	1642
3.35	0.0407	1773
3.46	0.0444	1934
3.56	0.0462	2012
3.66	0.0485	2113
3.76	0.0516	2248
3.86	0.0549	2391
3.95	0.0603	2627
4.06	0.0657	2862
4.15	0.0694	3023
4.25	0.0758	3302
4.35	0.0826	3598
4.45	0.0947	4125
4.55	0.1067	4648
4.65	0.1251	5449
4.75	0.1463	6373
4.85	0.1791	7802
4.95	0.2158	9400
5.05	0.2749	11975
5.15	0.3908	17023
5.25	0.5269	22952
5.35	0.8259	35976
5.45	0.8294	36129
5.55	0.8294	36129

Comment:

Node: EX-BASIN-13

Scenario: Post-Development
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 3.81 ft
 Warning Stage: 3.81 ft

Stage [ft]	Area [ac]	Area [ft2]
3.81	0.0003	13
3.82	0.0006	26
3.93	0.0068	296
4.02	0.0201	876
4.12	0.0436	1899
4.22	0.0792	3450
4.32	0.1102	4800
4.42	0.1808	7876
4.52	0.2072	9026
4.62	0.2376	10350
4.72	0.2657	11574
4.82	0.2910	12676
4.92	0.3162	13774
5.02	0.3512	15298
5.12	0.4590	19994
5.22	0.4590	19994

Comment:

Node: EX-BASIN-15

Scenario: Post-Development
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 3.81 ft
 Warning Stage: 3.81 ft

Stage [ft]	Area [ac]	Area [ft2]
3.81	0.0006	26
3.97	0.0080	348
4.07	0.0264	1150
4.17	0.0551	2400
4.27	0.0924	4025
4.37	0.2525	10999
4.47	0.2761	12027
4.57	0.2916	12702
4.67	0.3070	13373
4.77	0.3231	14074
4.87	0.3380	14723
4.97	0.3524	15351

Stage [ft]	Area [ac]	Area [ft2]
5.07	0.4484	19532
5.17	0.4484	19532

Comment:

Node: EX-INLET-04A

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 1.91 ft
Warning Stage: 5.31 ft

Comment:

Node: EX-INLET-05

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 1.98 ft
Warning Stage: 5.31 ft

Comment:

Node: EX-INLET-06

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 2.57 ft
Warning Stage: 5.50 ft

Comment:

Node: EX-INLET-08

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs

Initial Stage: 0.50 ft
Warning Stage: 3.29 ft

Comment:

Node: EX-INLET-13

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 0.74 ft
Warning Stage: 3.81 ft

Comment:

Node: EX-INLET-15

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 1.95 ft
Warning Stage: 3.81 ft

Comment:

Node: GROUNDWATER

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

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	0.00
0	0	0	9999.0000	0.00

Comment:

Node: PR-BASIN-02

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 5.02 ft
Warning Stage: 6.00 ft

Comment:

Node: PR-BASIN-11

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 1.25 ft
Warning Stage: 4.00 ft

Stage [ft]	Area [ac]	Area [ft2]
1.25	0.2475	10781
1.50	0.2644	11517
2.00	0.3002	13077
2.50	0.3754	16352
4.00	0.4528	19724

Comment: SWMF-01

Node: PR-BASIN-30

Scenario: Post-Development
Type: Stage/Area
Base Flow: 2.68 cfs
Initial Stage: 4.53 ft
Warning Stage: 6.00 ft

Comment:

Node: PR-BASIN-31

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 3.88 ft
Warning Stage: 4.50 ft

Comment:

Node: PR-INLET-02

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 0.50 ft
Warning Stage: 6.00 ft

Stage [ft]	Area [ac]	Area [ft2]
0.30	0.0003	12
5.02	0.0003	12

Comment:

Node: PR-INLET-04B

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 0.50 ft
Warning Stage: 5.31 ft

Stage [ft]	Area [ac]	Area [ft2]
-0.27	0.0003	12
4.45	0.0003	12

Comment:

Node: PR-INLET-30

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 0.50 ft
Warning Stage: 6.00 ft

Stage [ft]	Area [ac]	Area [ft2]
-0.44	0.0003	12
4.53	0.0003	12

Comment:

Node: PR-INLET-31

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 0.50 ft
Warning Stage: 4.50 ft

Stage [ft]	Area [ac]	Area [ft2]
-0.88	0.0003	12
3.88	0.0003	12

Comment:

Node: ST-02

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 3.00 ft
Warning Stage: 5.98 ft

Stage [ft]	Area [ac]	Area [ft2]
3.00	0.0003	12
5.98	0.0003	12

Comment:

Node: ST0-03A

Scenario: Post-Development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 0.50 ft
Warning Stage: 6.00 ft

Stage [ft]	Area [ac]	Area [ft2]
-0.39	0.0004	16
5.43	0.0004	16

Comment:

Node: SWMF-1

Scenario: Post-Development
Type: Stage/Area

Base Flow: 0.00 cfs
Initial Stage: 3.00 ft
Warning Stage: 5.00 ft

Stage [ft]	Area [ac]	Area [ft2]
3.00	0.0377	1644
3.50	0.0457	1989
4.00	0.0542	2360
4.50	0.0633	2756
5.00	0.0729	3176

Comment:

ICPR BASIN INPUT REPORT
(POST-DEVELOPMENT)

Manual Basin: EX-BASIN-01

Scenario: Post-Development
Node: EX-BASIN-01
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0
Area: 1.1692 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0444	8110: Airports	B/D			
1.1248	1400: Commercial and services	B/D			

Comment: No change from Pre-Dev

Manual Basin: EX-BASIN-04

Scenario: Post-Development
Node: EX-BASIN-04
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0
Area: 3.5829 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
3.2516	8110: Airports	B/D			
0.3313	8110: Airports	Pavement			

Comment: No change from Pre-Dev

Manual Basin: EX-BASIN-05

Scenario: Post-Development
Node: EX-BASIN-05
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 1.7218 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.6870	8110: Airports	B/D			
1.0348	8110: Airports	Pavement			

Comment: No change from Pre-Dev

Manual Basin: EX-BASIN-06

Scenario: Post-Development

Node: EX-BASIN-06

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 10.0000 min

Max Allowable Q: 0.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 0.2886 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.1073	8110: Airports	B/D			
0.1813	8110: Airports	Pavement			

Comment: No change from Pre-Dev

Manual Basin: EX-BASIN-07

Scenario: Post-Development

Node: EX-BASIN-07

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 10.0000 min

Max Allowable Q: 0.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 0.9777 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.3497	8110: Airports	B/D			
0.6280	8110: Airports	Pavement			

Comment: No change from Pre-Dev

Manual Basin: EX-BASIN-08

Scenario: Post-Development
 Node: EX-BASIN-08
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 0.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 0.8117 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.3463	8110: Airports	B/D			
0.4654	8110: Airports	Pavement			

Comment: No change from Pre-Dev

Manual Basin: EX-BASIN-09

Scenario: Post-Development
 Node: EX-BASIN-09
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 0.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 0.8291 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.6915	8110: Airports	Pavement			
0.1376	8110: Airports	B/D			

Comment: No change from Pre-Dev

Manual Basin: EX-BASIN-13

Scenario: Post-Development
 Node: EX-BASIN-13
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 0.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 0.4588 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.4588	8110: Airports	Pavement			

Comment: No change from Pre-Dev

Manual Basin: EX-BASIN-15

Scenario: Post-Development

Node: EX-BASIN-15

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 10.0000 min

Max Allowable Q: 0.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 0.4485 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.4485	8110: Airports	Pavement			

Comment: No change from Pre-Dev

Manual Basin: PR-BASIN-02

Scenario: Post-Development

Node: PR-BASIN-02

Hydrograph Method: NRCS Unit Hydrograph

Infiltration Method: Curve Number

Time of Concentration: 10.0000 min

Max Allowable Q: 0.00 cfs

Time Shift: 0.0000 hr

Unit Hydrograph: UH484

Peaking Factor: 484.0

Area: 1.3291 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
1.1000	8110: Airports	B/D			
0.2291	8110: Airports	Pavement			

Comment:

Manual Basin: PR-BASIN-11

Scenario: Post-Development
 Node: PR-BASIN-11
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 0.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 1.6300 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.2705	8110: Airports	A/D			
0.2338	8110: Airports	B/D			
0.8781	8110: Airports	Pavement			
0.2475	Dry Pond	Water			

Comment:

Manual Basin: PR-BASIN-30

Scenario: Post-Development
 Node: PR-BASIN-30
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 0.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 0.1776 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.1037	8110: Airports	B/D			
0.0739	8110: Airports	Pavement			

Comment:

Manual Basin: PR-BASIN-31

Scenario: Post-Development
 Node: PR-BASIN-31
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 0.00 cfs

Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 0.2373 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.1753	8110: Airports	B/D			
0.0620	8110: Airports	Pavement			

Comment:

Manual Basin: PR-BASIN-C1

Scenario: Post-Development
 Node: SWMF-1
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 0.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 0.4841 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.1699	8110: Airports	Pavement			
0.2765	8110: Airports	B/D			
0.0377	Dry Pond	Water			

Comment:

Manual Basin: PR-BASIN-C2

Scenario: Post-Development
 Node: ST-02
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 0.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 0.0826 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0826	8110: Airports	Pavement			

ICPR LINK INPUT REPORT
(POST-DEVELOPMENT)

Drop Structure Link: L-01DS		Upstream Pipe	Downstream Pipe
Scenario:	Post-Development	Invert: 0.20 ft	Invert: 0.14 ft
From Node:	SWMF-1	Manning's N: 0.0110	Manning's N: 0.0110
To Node:	ST0-03A	Geometry: Circular	Geometry: Circular
Link Count:	1	Max Depth: 1.25 ft	Max Depth: 1.25 ft
Flow Direction:	Both	Bottom Clip	
Solution:	Combine	Default: 0.00 ft	Default: 0.00 ft
Increments:	0	Op Table:	Op Table:
Pipe Count:	1	Ref Node:	Ref Node:
Damping:	0.0000 ft	Manning's N: 0.0000	Manning's N: 0.0000
Length:	20 ft	Top Clip	
FHWA Code:	0	Default: 0.00 ft	Default: 0.00 ft
Entr Loss Coef:	0.00	Op Table:	Op Table:
Exit Loss Coef:	0.00	Ref Node:	Ref Node:
Bend Loss Coef:	0.00	Manning's N: 0.0000	Manning's N: 0.0000
Bend Location:	0 dec		
Energy Switch:	Energy		

Pipe Comment:

Weir Component			
Weir:	1	Bottom Clip	
Weir Count:	1	Default:	0.00 ft
Weir Flow Direction:	Both	Op Table:	
Damping:	0.0000 ft	Ref Node:	
Weir Type:	Horizontal	Top Clip	
Geometry Type:	Rectangular	Default:	0.00 ft
Invert:	4.62 ft	Op Table:	
Control Elevation:	4.62 ft	Ref Node:	
Max Depth:	2.00 ft	Discharge Coefficients	
Max Width:	3.00 ft	Weir Default:	3.200
Fillet:	0.00 ft	Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Drop Structure Comment:

French Drain Link: L-01FD		Pipe Data
Scenario:	Post-Development	Damping: 0.0000 ft
From Node:	SWMF-1	FHWA Code: 0
To Node:	ST0-03A	Entr Loss Coef: 0.00
Link Count:	2	Exit Loss Coef: 0.00
Flow Direction:	Both	Bend Loss Coef: 0.00
OF Region:		Bend Location: 0 dec
GW Region:		Energy Switch: Energy
Mesh Scaling Factor:	1.0	Pipe Length: 60 ft
Trench Length:	60 ft	Pipe Invert: 0.48 ft

Trench Width: 0.83 ft
 Trench Height: 0.83 ft
 Trench Depth Below Invert: 0.25 ft
 Trench Gravel Porosity: 0.250

Pipe Data

Pipe Invert: 0.42 ft
 Manning's N: 0.0110
 Geometry Type: Circular
 Pipe Max Depth: 0.33 ft

Comment:

Pipe Link: L-01P	Upstream	Downstream
Scenario: Post-Development	Invert: 2.34 ft	Invert: 2.34 ft
From Node: EX-BASIN-01	Manning's N: 0.0110	Manning's N: 0.0110
To Node: PR-INLET-02	Geometry: Circular	Geometry: Circular
Link Count: 1	Max Depth: 1.25 ft	Max Depth: 1.25 ft
Flow Direction: Both	Bottom Clip	
Damping: 0.0000 ft	Default: 0.00 ft	Default: 0.00 ft
Length: 58 ft	Op Table:	Op Table:
FHWA Code: 0	Ref Node:	Ref Node:
Entr Loss Coef: 0.00	Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef: 0.00	Top Clip	
Bend Loss Coef: 0.20	Default: 0.00 ft	Default: 0.00 ft
Bend Location: 0 dec	Op Table:	Op Table:
Energy Switch: Energy	Ref Node:	Ref Node:
	Manning's N: 0.0000	Manning's N: 0.0000

Comment:

Percolation Link: L-01PERC	
Scenario: Post-Development	Surface Area Option: Vary Based on Stage/Area Table
From Node: PR-BASIN-11	Vertical Flow Termination: Horizontal Flow Algorithm
To Node: GROUNDWATER	Perimeter 1: 1135 ft
Link Count: 1	Perimeter 2: 1514 ft
Flow Direction: Both	Perimeter 3: 5489 ft
Aquifer Base Elevation: -9.00 ft	Distance P1 to P2: 50 ft
Water Table Elevation: 0.00 ft	Distance P2 to P3: 500 ft
Annual Recharge Rate: 0 ipy	# of Cells P1 to P2: 10
Horizontal Conductivity: 17.160 fpd	# of Cells P2 to P3: 50
Vertical Conductivity: 7.625 fpd	
Fillable Porosity: 0.250	
Layer Thickness: 0.00 ft	

Comment:

Weir Link: L-01W	Bottom Clip
Scenario: Post-Development	Default: 0.00 ft
From Node: EX-BASIN-04	

To Node: PR-INLET-04B
 Link Count: 1
 Flow Direction: Both
 Damping: 0.0000 ft
 Weir Type: Horizontal
 Geometry Type: Rectangular
 Invert: 4.44 ft
 Control Elevation: 4.44 ft
 Max Depth: 2.00 ft
 Max Width: 3.00 ft
 Fillet: 0.00 ft

Op Table:
 Ref Node:
 Top Clip
 Default: 0.00 ft
 Op Table:
 Ref Node:
 Discharge Coefficients
 Weir Default: 2.800
 Weir Table:
 Orifice Default: 0.600
 Orifice Table:

Comment:

Drop Structure Link: L-02DS		Upstream Pipe	Downstream Pipe
Scenario:	Post-Development	Invert: -1.25 ft	Invert: -1.27 ft
From Node:	PR-BASIN-11	Manning's N: 0.0090	Manning's N: 0.0090
To Node:	BNDY-01	Geometry: Circular	Geometry: Circular
Link Count:	1	Max Depth: 1.25 ft	Max Depth: 1.25 ft
Flow Direction:	Both	Bottom Clip	
Solution:	Combine	Default: 0.00 ft	Default: 0.00 ft
Increments:	10	Op Table:	Op Table:
Pipe Count:	1	Ref Node:	Ref Node:
Damping:	0.0000 ft	Manning's N: 0.0000	Manning's N: 0.0000
Length:	17 ft	Top Clip	
FHWA Code:	0	Default: 0.00 ft	Default: 0.00 ft
Entr Loss Coef:	0.00	Op Table:	Op Table:
Exit Loss Coef:	1.00	Ref Node:	Ref Node:
Bend Loss Coef:	0.00	Manning's N: 0.0000	Manning's N: 0.0000
Bend Location:	0 dec		
Energy Switch:	Energy		
Pipe Comment:			

Weir Component		Bottom Clip
Weir:	1	Default: 0.00 ft
Weir Count:	1	Op Table:
Weir Flow Direction:	Both	Ref Node:
Damping:	0.0000 ft	Top Clip
Weir Type:	Sharp Crested Vertical	Default: 0.00 ft
Geometry Type:	Rectangular	Op Table:
Invert:	2.69 ft	Ref Node:
Control Elevation:	2.69 ft	Discharge Coefficients
Max Depth:	0.81 ft	Weir Default: 3.200
Max Width:	3.08 ft	Weir Table:
Fillet:	0.00 ft	Orifice Default: 0.600
		Orifice Table:

Weir Comment:

Weir Component	
Weir: 2	Bottom Clip
Weir Count: 1	Default: 0.00 ft
Weir Flow Direction: Both	Op Table:
Damping: 0.0000 ft	Ref Node:
Weir Type: Horizontal	Top Clip
Geometry Type: Rectangular	Default: 0.00 ft
Invert: 3.50 ft	Op Table:
Control Elevation: 3.50 ft	Ref Node:
Max Depth: 2.00 ft	Discharge Coefficients
Max Width: 3.08 ft	Weir Default: 3.200
Fillet: 0.00 ft	Weir Table:
	Orifice Default: 0.600
	Orifice Table:

Weir Comment:

Drop Structure Comment:

Weir Link: L-02W	
Scenario: Post-Development	Bottom Clip
From Node: EX-BASIN-05	Default: 0.00 ft
To Node: EX-INLET-05	Op Table:
Link Count: 1	Ref Node:
Flow Direction: Both	Top Clip
Damping: 0.0000 ft	Default: 0.00 ft
Weir Type: Horizontal	Op Table:
Geometry Type: Rectangular	Ref Node:
Invert: 4.53 ft	Discharge Coefficients
Control Elevation: 4.53 ft	Weir Default: 2.800
Max Depth: 2.00 ft	Weir Table:
Max Width: 3.00 ft	Orifice Default: 0.600
Fillet: 0.00 ft	Orifice Table:

Comment:

Pipe Link: L-03P	Upstream	Downstream
Scenario: Post-Development	Invert: 1.98 ft	Invert: 1.91 ft
From Node: EX-INLET-05	Manning's N: 0.0110	Manning's N: 0.0110
To Node: EX-INLET-04A	Geometry: Circular	Geometry: Circular
Link Count: 1	Max Depth: 1.50 ft	Max Depth: 1.50 ft
Flow Direction: Both	Bottom Clip	
Damping: 0.0000 ft	Default: 0.00 ft	Default: 0.00 ft
Length: 62 ft	Op Table:	Op Table:
FHWA Code: 0	Ref Node:	Ref Node:

Entr Loss Coef: 0.00	Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef: 0.00	Top Clip	
Bend Loss Coef: 0.00	Default: 0.00 ft	Default: 0.00 ft
Bend Location: 0 dec	Op Table:	Op Table:
Energy Switch: Energy	Ref Node:	Ref Node:
	Manning's N: 0.0000	Manning's N: 0.0000
Comment:		

Weir Link: L-03W		
Scenario: Post-Development	Bottom Clip	
From Node: EX-BASIN-06	Default: 0.00 ft	
To Node: EX-INLET-06	Op Table:	
Link Count: 1	Ref Node:	
Flow Direction: Both	Top Clip	
Damping: 0.0000 ft	Default: 0.00 ft	
Weir Type: Horizontal	Op Table:	
Geometry Type: Rectangular	Ref Node:	
Invert: 4.84 ft	Discharge Coefficients	
Control Elevation: 4.84 ft	Weir Default: 2.800	
Max Depth: 2.00 ft	Weir Table:	
Max Width: 3.00 ft	Orifice Default: 0.600	
Fillet: 0.00 ft	Orifice Table:	
Comment:		

Pipe Link: L-04P		
Scenario: Post-Development	Upstream	Downstream
From Node: EX-INLET-06	Invert: 1.98 ft	Invert: 1.90 ft
To Node: PR-INLET-31	Manning's N: 0.0090	Manning's N: 0.0090
Link Count: 1	Geometry: Circular	Geometry: Circular
Flow Direction: Both	Max Depth: 1.00 ft	Max Depth: 1.00 ft
Damping: 0.0000 ft	Bottom Clip	
Length: 7 ft	Default: 0.00 ft	Default: 0.00 ft
FHWA Code: 0	Op Table:	Op Table:
Entr Loss Coef: 0.00	Ref Node:	Ref Node:
Exit Loss Coef: 1.00	Manning's N: 0.0000	Manning's N: 0.0000
Bend Loss Coef: 0.00	Top Clip	
Bend Location: 0 dec	Default: 0.00 ft	Default: 0.00 ft
Energy Switch: Energy	Op Table:	Op Table:
	Ref Node:	Ref Node:
	Manning's N: 0.0000	Manning's N: 0.0000
Comment:		

Weir Link: L-04W		
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Scenario: Post-Development
 From Node: EX-BASIN-08
 To Node: EX-INLET-08
 Link Count: 1
 Flow Direction: Both
 Damping: 0.0000 ft
 Weir Type: Horizontal
 Geometry Type: Rectangular
 Invert: 3.29 ft
 Control Elevation: 3.29 ft
 Max Depth: 2.00 ft
 Max Width: 3.00 ft
 Fillet: 0.00 ft

Bottom Clip
 Default: 0.00 ft
 Op Table:
 Ref Node:
 Top Clip
 Default: 0.00 ft
 Op Table:
 Ref Node:
 Discharge Coefficients
 Weir Default: 2.800
 Weir Table:
 Orifice Default: 0.600
 Orifice Table:

Comment:

Weir Link: L-05W

Scenario: Post-Development
 From Node: EX-BASIN-09
 To Node: EX-BASIN-08
 Link Count: 1
 Flow Direction: Both
 Damping: 0.0000 ft
 Weir Type: Broad Crested Vertical
 Geometry Type: Irregular
 Invert: 3.00 ft
 Control Elevation: 3.00 ft
 Cross Section: X-05W

Bottom Clip
 Default: 0.00 ft
 Op Table:
 Ref Node:
 Top Clip
 Default: 0.00 ft
 Op Table:
 Ref Node:
 Discharge Coefficients
 Weir Default: 2.800
 Weir Table:
 Orifice Default: 0.600
 Orifice Table:

Comment:

Pipe Link: L-06P

Scenario: Post-Development
 From Node: EX-INLET-08
 To Node: BNDY-01
 Link Count: 1
 Flow Direction: Both
 Damping: 0.0000 ft
 Length: 18 ft
 FHWA Code: 0
 Entr Loss Coef: 0.00
 Exit Loss Coef: 1.00
 Bend Loss Coef: 0.00
 Bend Location: 0 dec

Upstream		Downstream	
Invert:	0.34 ft	Invert:	0.01 ft
Manning's N:	0.0110	Manning's N:	0.0110
Geometry:	Horizontal Ellipse	Geometry:	Horizontal Ellipse
Max Depth:	1.58 ft	Max Depth:	1.58 ft
Bottom Clip			
Default:	0.00 ft	Default:	0.00 ft
Op Table:		Op Table:	
Ref Node:		Ref Node:	
Manning's N:	0.0000	Manning's N:	0.0000
Top Clip			
Default:	0.00 ft	Default:	0.00 ft
Op Table:		Op Table:	

Energy Switch: Energy

Ref Node:
Manning's N: 0.0000Ref Node:
Manning's N: 0.0000

Comment:

Weir Link: L-08W

Scenario: Post-Development
From Node: EX-BASIN-05
To Node: EX-BASIN-07
Link Count: 1
Flow Direction: Both
Damping: 0.0000 ft
Weir Type: Broad Crested Vertical
Geometry Type: Irregular
Invert: 4.47 ft
Control Elevation: 4.47 ft
Cross Section: X-08W

Bottom Clip

Default: 0.00 ft

Op Table:

Ref Node:

Top Clip

Default: 0.00 ft

Op Table:

Ref Node:

Discharge Coefficients

Weir Default: 2.800

Weir Table:

Orifice Default: 0.600

Orifice Table:

Comment:

Weir Link: L-09W

Scenario: Post-Development
From Node: EX-BASIN-13
To Node: EX-INLET-13
Link Count: 1
Flow Direction: Both
Damping: 0.0000 ft
Weir Type: Horizontal
Geometry Type: Rectangular
Invert: 3.81 ft
Control Elevation: 3.81 ft
Max Depth: 2.00 ft
Max Width: 3.00 ft
Fillet: 0.00 ft

Bottom Clip

Default: 0.00 ft

Op Table:

Ref Node:

Top Clip

Default: 0.00 ft

Op Table:

Ref Node:

Discharge Coefficients

Weir Default: 2.800

Weir Table:

Orifice Default: 0.600

Orifice Table:

Comment:

Weir Link: L-10W

Scenario: Post-Development
From Node: EX-BASIN-15
To Node: EX-INLET-15
Link Count: 1
Flow Direction: Both

Bottom Clip

Default: 0.00 ft

Op Table:

Ref Node:

Top Clip

Damping: 0.0000 ft
 Weir Type: Horizontal
 Geometry Type: Rectangular
 Invert: 3.81 ft
 Control Elevation: 3.81 ft
 Max Depth: 2.00 ft
 Max Width: 3.00 ft
 Fillet: 0.00 ft

Default: 0.00 ft
 Op Table:
 Ref Node:
 Discharge Coefficients
 Weir Default: 2.800
 Weir Table:
 Orifice Default: 0.600
 Orifice Table:

Comment:

Pipe Link: L-138P	Upstream	Downstream
Scenario: Post-Development	Invert: -0.39 ft	Invert: -0.44 ft
From Node: ST0-03A	Manning's N: 0.0110	Manning's N: 0.0110
To Node: PR-INLET-30	Geometry: Circular	Geometry: Circular
Link Count: 1	Max Depth: 1.50 ft	Max Depth: 1.50 ft
Flow Direction: Both	Bottom Clip	
Damping: 0.0000 ft	Default: 0.00 ft	Default: 0.00 ft
Length: 48 ft	Op Table:	Op Table:
FHWA Code: 0	Ref Node:	Ref Node:
Entr Loss Coef: 0.00	Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef: 0.00	Top Clip	
Bend Loss Coef: 0.00	Default: 0.00 ft	Default: 0.00 ft
Bend Location: 0 dec	Op Table:	Op Table:
Energy Switch: Energy	Ref Node:	Ref Node:
	Manning's N: 0.0000	Manning's N: 0.0000

Comment:

Pipe Link: L-139P	Upstream	Downstream
Scenario: Post-Development	Invert: -0.27 ft	Invert: -0.39 ft
From Node: PR-INLET-04B	Manning's N: 0.0110	Manning's N: 0.0110
To Node: ST0-03A	Geometry: Circular	Geometry: Circular
Link Count: 1	Max Depth: 1.50 ft	Max Depth: 1.50 ft
Flow Direction: Both	Bottom Clip	
Damping: 0.0000 ft	Default: 0.00 ft	Default: 0.00 ft
Length: 120 ft	Op Table:	Op Table:
FHWA Code: 0	Ref Node:	Ref Node:
Entr Loss Coef: 0.00	Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef: 0.00	Top Clip	
Bend Loss Coef: 0.00	Default: 0.00 ft	Default: 0.00 ft
Bend Location: 0 dec	Op Table:	Op Table:
Energy Switch: Energy	Ref Node:	Ref Node:
	Manning's N: 0.0000	Manning's N: 0.0000

Comment:

Channel Link: L-13C		Upstream	Downstream
Scenario:	Post-Development	Invert: 2.39 ft	Invert: -1.20 ft
From Node:	EX-BASIN-07	Manning's N: 0.0000	Manning's N: 0.0000
To Node:	BNDY-01	Geometry: Irregular	Geometry: Irregular
Link Count:	1	Cross Section: X-13C	Cross Section: X-13C
Flow Direction:	Both		
Damping:	0.0000 ft		
Length:	31 ft		
Contraction Coef:	0.00		
Expansion Coef:	0.00		
Entr Loss Coef:	0.00		
Exit Loss Coef:	0.00		
Bend Loss Coef:	0.00		
Bend Location:	0 dec		
Energy Switch:	Energy		
Comment:			

Pipe Link: L-142P		Upstream	Downstream
Scenario:	Post-Development	Invert: 3.15 ft	Invert: 3.00 ft
From Node:	ST-02	Manning's N: 0.0110	Manning's N: 0.0110
To Node:	SWMF-1	Geometry: Circular	Geometry: Circular
Link Count:	1	Max Depth: 0.83 ft	Max Depth: 0.83 ft
Flow Direction:	Both	Bottom Clip	
Damping:	0.0000 ft	Default: 0.00 ft	Default: 0.00 ft
Length:	150 ft	Op Table:	Op Table:
FWHA Code:	0	Ref Node:	Ref Node:
Entr Loss Coef:	0.00	Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef:	0.00	Top Clip	
Bend Loss Coef:	0.00	Default: 0.00 ft	Default: 0.00 ft
Bend Location:	0 dec	Op Table:	Op Table:
Energy Switch:	Energy	Ref Node:	Ref Node:
		Manning's N: 0.0000	Manning's N: 0.0000
Comment:			

Weir Link: L-16W			
Scenario:	Post-Development	Bottom Clip	
From Node:	EX-INLET-04A	Default:	0.00 ft
To Node:	EX-BASIN-04	Op Table:	
Link Count:	1	Ref Node:	
Flow Direction:	Both	Top Clip	
Damping:	0.0000 ft	Default:	0.00 ft
Weir Type:	Horizontal	Op Table:	
Geometry Type:	Rectangular	Ref Node:	
Invert:	4.49 ft	Discharge Coefficients	
Control Elevation:	4.49 ft	Weir Default:	2.800

Max Depth: 2.00 ft

Max Width: 3.00 ft

Fillet: 0.00 ft

Weir Table:

Orifice Default: 0.600

Orifice Table:

Comment:

Pipe Link: L-22P	Upstream	Downstream
Scenario: Post-Development	Invert: 1.95 ft	Invert: 0.74 ft
From Node: EX-INLET-15	Manning's N: 0.0110	Manning's N: 0.0110
To Node: EX-INLET-13	Geometry: Circular	Geometry: Circular
Link Count: 1	Max Depth: 1.50 ft	Max Depth: 1.50 ft
Flow Direction: Both	Bottom Clip	
Damping: 0.0000 ft	Default: 0.00 ft	Default: 0.00 ft
Length: 177 ft	Op Table:	Op Table:
FWHA Code: 0	Ref Node:	Ref Node:
Entr Loss Coef: 0.00	Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef: 0.00	Top Clip	
Bend Loss Coef: 0.00	Default: 0.00 ft	Default: 0.00 ft
Bend Location: 0 dec	Op Table:	Op Table:
Energy Switch: Energy	Ref Node:	Ref Node:
	Manning's N: 0.0000	Manning's N: 0.0000

Comment:

Pipe Link: L-23P	Upstream	Downstream
Scenario: Post-Development	Invert: 0.74 ft	Invert: 0.03 ft
From Node: EX-INLET-13	Manning's N: 0.0110	Manning's N: 0.0110
To Node: PR-BASIN-11	Geometry: Circular	Geometry: Circular
Link Count: 1	Max Depth: 1.50 ft	Max Depth: 1.50 ft
Flow Direction: Both	Bottom Clip	
Damping: 0.0000 ft	Default: 0.00 ft	Default: 0.00 ft
Length: 106 ft	Op Table:	Op Table:
FWHA Code: 0	Ref Node:	Ref Node:
Entr Loss Coef: 0.00	Manning's N: 0.0000	Manning's N: 0.0000
Exit Loss Coef: 0.00	Top Clip	
Bend Loss Coef: 0.00	Default: 0.00 ft	Default: 0.00 ft
Bend Location: 0 dec	Op Table:	Op Table:
Energy Switch: Energy	Ref Node:	Ref Node:
	Manning's N: 0.0000	Manning's N: 0.0000

Comment:

Pipe Link: L-30P	Upstream	Downstream
Scenario: Post-Development	Invert: 0.30 ft	Invert: 0.00 ft

From Node:	PR-INLET-02	Manning's N:	0.0110	Manning's N:	0.0110
To Node:	PR-INLET-30	Geometry:	Circular	Geometry:	Circular
Link Count:	1	Max Depth:	3.00 ft	Max Depth:	3.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	216 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000
Comment:					

Pipe Link: L-31P		Upstream		Downstream	
Scenario:	Post-Development	Invert:	0.00 ft	Invert:	-0.88 ft
From Node:	PR-INLET-30	Manning's N:	0.0110	Manning's N:	0.0110
To Node:	PR-INLET-31	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	3.00 ft	Max Depth:	3.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	322 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000
Comment:					

Pipe Link: L-32P		Upstream		Downstream	
Scenario:	Post-Development	Invert:	-0.88 ft	Invert:	-1.02 ft
From Node:	PR-INLET-31	Manning's N:	0.0110	Manning's N:	0.0110
To Node:	BNDY-01	Geometry:	Circular	Geometry:	Circular
Link Count:	1	Max Depth:	3.00 ft	Max Depth:	3.00 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	142 ft	Op Table:		Op Table:	
FHWA Code:	0	Ref Node:		Ref Node:	
Entr Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	0.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0 dec	Op Table:		Op Table:	

Energy Switch: Energy

Ref Node:
Manning's N: 0.0000Ref Node:
Manning's N: 0.0000

Comment:

Weir Link: L-35W

Scenario: Post-Development
 From Node: EX-BASIN-04
 To Node: EX-BASIN-05
 Link Count: 1
 Flow Direction: Both
 Damping: 0.0000 ft
 Weir Type: Broad Crested Vertical
 Geometry Type: Irregular
 Invert: 5.31 ft
 Control Elevation: 5.31 ft
 Cross Section: X-35W

Bottom Clip

Default: 0.00 ft

Op Table:

Ref Node:

Top Clip

Default: 0.00 ft

Op Table:

Ref Node:

Discharge Coefficients

Weir Default: 2.800

Weir Table:

Orifice Default: 0.600

Orifice Table:

Comment:

Weir Link: L-36W

Scenario: Post-Development
 From Node: PR-BASIN-02
 To Node: PR-INLET-02
 Link Count: 1
 Flow Direction: Both
 Damping: 0.0000 ft
 Weir Type: Horizontal
 Geometry Type: Rectangular
 Invert: 5.02 ft
 Control Elevation: 5.02 ft
 Max Depth: 3.08 ft
 Max Width: 4.08 ft
 Fillet: 0.00 ft

Bottom Clip

Default: 0.00 ft

Op Table:

Ref Node:

Top Clip

Default: 0.00 ft

Op Table:

Ref Node:

Discharge Coefficients

Weir Default: 2.800

Weir Table:

Orifice Default: 0.600

Orifice Table:

Comment:

Weir Link: L-37W

Scenario: Post-Development
 From Node: PR-BASIN-30
 To Node: PR-INLET-30
 Link Count: 1
 Flow Direction: Both

Bottom Clip

Default: 0.00 ft

Op Table:

Ref Node:

Top Clip

Damping: 0.0000 ft
Weir Type: Horizontal
Geometry Type: Rectangular
Invert: 4.53 ft
Control Elevation: 4.53 ft
Max Depth: 3.08 ft
Max Width: 4.08 ft
Fillet: 0.00 ft

Default: 0.00 ft
Op Table:
Ref Node:
Discharge Coefficients
Weir Default: 2.800
Weir Table:
Orifice Default: 0.600
Orifice Table:

Comment:

Weir Link: L-38W

Scenario: Post-Development
From Node: PR-BASIN-31
To Node: PR-INLET-31
Link Count: 1
Flow Direction: Both
Damping: 0.0000 ft
Weir Type: Horizontal
Geometry Type: Rectangular
Invert: 3.88 ft
Control Elevation: 3.55 ft
Max Depth: 3.08 ft
Max Width: 4.08 ft
Fillet: 0.00 ft

Bottom Clip
Default: 0.00 ft
Op Table:
Ref Node:
Top Clip
Default: 0.00 ft
Op Table:
Ref Node:
Discharge Coefficients
Weir Default: 2.800
Weir Table:
Orifice Default: 0.600
Orifice Table:

Comment:

Weir Link: L-44W

Scenario: Post-Development
From Node: PR-BASIN-02
To Node: PR-BASIN-30
Link Count: 1
Flow Direction: Both
Damping: 0.0000 ft
Weir Type: Broad Crested Vertical
Geometry Type: Irregular
Invert: 4.81 ft
Control Elevation: 4.81 ft
Cross Section: X-44W

Bottom Clip
Default: 0.00 ft
Op Table:
Ref Node:
Top Clip
Default: 0.00 ft
Op Table:
Ref Node:
Discharge Coefficients
Weir Default: 2.800
Weir Table:
Orifice Default: 0.600
Orifice Table:

Comment:

Weir Link: L-45W	
Scenario: Post-Development	Bottom Clip
From Node: PR-BASIN-30	Default: 0.00 ft
To Node: PR-BASIN-31	Op Table:
Link Count: 1	Ref Node:
Flow Direction: Both	Top Clip
Damping: 0.0000 ft	Default: 0.00 ft
Weir Type: Broad Crested Vertical	Op Table:
Geometry Type: Irregular	Ref Node:
Invert: 4.10 ft	Discharge Coefficients
Control Elevation: 4.10 ft	Weir Default: 2.800
Cross Section: X-45W	Weir Table:
	Orifice Default: 0.600
	Orifice Table:
Comment:	

ICPR RUNOFF SUMMARY
(POST-DEVELOPMENT)

Manual Basin Runoff Summary [Post-Development]

Basin Name	Sim Name	Max Flow [cfs]	Time to Max Flow [hrs]	Total Rainfall [in]	Total Runoff [in]	Area [ac]	Equivalent Curve Number	% Imperv	% DCIA
EX-BASIN-01	001Y-024 H	0.51	12.0000	4.50	3.87	1.1692	94.5	0.00	0.00
EX-BASIN-01	010Y-024 H	0.92	12.0000	7.90	7.24	1.1692	94.4	0.00	0.00
EX-BASIN-01	025Y-024 H	1.05	12.0000	9.00	8.34	1.1692	94.4	0.00	0.00
EX-BASIN-01	100Y-024 H	1.28	12.0000	11.00	10.33	1.1692	94.4	0.00	0.00
EX-BASIN-01	SJRWMD 025Y-024 H	11.36	12.0167	9.00	8.35	1.1692	94.4	0.00	0.00

Manual Basin Runoff Summary [Post-Development]

Basin Name	Sim Name	Max Flow [cfs]	Time to Max Flow [hrs]	Total Rainfall [in]	Total Runoff [in]	Area [ac]	Equivalent Curve Number	% Imperv	% DCIA
EX-BASIN-04	001Y-024 H	1.14	12.0000	4.50	2.63	3.5829	81.9	0.00	0.00
EX-BASIN-04	010Y-024 H	2.43	12.0000	7.90	5.73	3.5829	81.7	0.00	0.00
EX-BASIN-04	025Y-024 H	2.85	12.0000	9.00	6.78	3.5829	81.6	0.00	0.00
EX-BASIN-04	100Y-024 H	3.61	12.0000	11.00	8.70	3.5829	81.6	0.00	0.00
EX-BASIN-04	SJRWMD 025Y-024 H	30.96	12.0167	9.00	6.79	3.5829	81.6	0.00	0.00

Manual Basin Runoff Summary [Post-Development]

Basin Name	Sim Name	Max Flow [cfs]	Time to Max Flow [hrs]	Total Rainfall [in]	Total Runoff [in]	Area [ac]	Equivalent Curve Number	% Imperv	% DCIA
EX-BASIN-05	001Y-024 H	0.68	12.0000	4.50	3.55	1.7218	91.4	0.00	0.00
EX-BASIN-05	010Y-024 H	1.28	12.0000	7.90	6.82	1.7218	90.9	0.00	0.00
EX-BASIN-05	025Y-024 H	1.48	12.0000	9.00	7.89	1.7218	90.8	0.00	0.00
EX-BASIN-05	100Y-024 H	1.83	12.0000	11.00	9.86	1.7218	90.6	0.00	0.00
EX-BASIN-05	SJRWMD	16.05	12.0167	9.00	7.90	1.7218	90.8	0.00	0.00

Basin Name	Sim Name	Max Flow [cfs]	Time to Max Flow [hrs]	Total Rainfall [in]	Total Runoff [in]	Area [ac]	Equivalent Curve Number	% Imperv	% DCIA
05	025Y-024 H								

Manual Basin Runoff Summary [Post-Development]

Basin Name	Sim Name	Max Flow [cfs]	Time to Max Flow [hrs]	Total Rainfall [in]	Total Runoff [in]	Area [ac]	Equivalent Curve Number	% Imperv	% DCIA
EX-BASIN-06	001Y-024 H	0.11	12.0000	4.50	3.60	0.2886	91.9	0.00	0.00
EX-BASIN-06	010Y-024 H	0.22	12.0000	7.90	6.88	0.2886	91.4	0.00	0.00
EX-BASIN-06	025Y-024 H	0.25	12.0000	9.00	7.95	0.2886	91.3	0.00	0.00
EX-BASIN-06	100Y-024 H	0.31	12.0000	11.00	9.92	0.2886	91.1	0.00	0.00
EX-BASIN-06	SJRWMD 025Y-024 H	2.70	12.0167	9.00	7.96	0.2886	91.3	0.00	0.00

Manual Basin Runoff Summary [Post-Development]

Basin Name	Sim Name	Max Flow [cfs]	Time to Max Flow [hrs]	Total Rainfall [in]	Total Runoff [in]	Area [ac]	Equivalent Curve Number	% Imperv	% DCIA
EX-BASIN-07	001Y-024 H	0.39	12.0000	4.50	3.62	0.9777	92.2	0.00	0.00
EX-BASIN-07	010Y-024 H	0.73	12.0000	7.90	6.91	0.9777	91.6	0.00	0.00
EX-BASIN-07	025Y-024 H	0.84	12.0000	9.00	7.98	0.9777	91.5	0.00	0.00
EX-BASIN-07	100Y-024 H	1.05	12.0000	11.00	9.96	0.9777	91.4	0.00	0.00
EX-BASIN-07	SJRWMD 025Y-024 H	9.17	12.0167	9.00	8.00	0.9777	91.5	0.00	0.00

Manual Basin Runoff Summary [Post-Development]

Basin Name	Sim Name	Max Flow [cfs]	Time to Max Flow [hrs]	Total Rainfall [in]	Total Runoff [in]	Area [ac]	Equivalent Curve Number	% Imperv	% DCIA
EX-BASIN-08	001Y-024 H	0.32	12.0000	4.50	3.50	0.8117	91.0	0.00	0.00
EX-BASIN-08	010Y-024 H	0.60	12.0000	7.90	6.76	0.8117	90.4	0.00	0.00
EX-BASIN-08	025Y-024 H	0.69	12.0000	9.00	7.83	0.8117	90.3	0.00	0.00
EX-BASIN-08	100Y-024 H	0.86	12.0000	11.00	9.80	0.8117	90.1	0.00	0.00
EX-BASIN-08	SJRWMD 025Y-024 H	7.54	12.0167	9.00	7.84	0.8117	90.3	0.00	0.00

Manual Basin Runoff Summary [Post-Development]

Basin Name	Sim Name	Max Flow [cfs]	Time to Max Flow [hrs]	Total Rainfall [in]	Total Runoff [in]	Area [ac]	Equivalent Curve Number	% Imperv	% DCIA
EX-BASIN-09	001Y-024 H	0.35	12.0000	4.50	3.97	0.8291	95.4	0.00	0.00
EX-BASIN-09	010Y-024 H	0.64	12.0000	7.90	7.32	0.8291	95.0	0.00	0.00
EX-BASIN-09	025Y-024 H	0.74	12.0000	9.00	8.41	0.8291	95.0	0.00	0.00
EX-BASIN-09	100Y-024 H	0.90	12.0000	11.00	10.39	0.8291	94.9	0.00	0.00
EX-BASIN-09	SJRWMD 025Y-024 H	7.99	12.0167	9.00	8.42	0.8291	95.0	0.00	0.00

Manual Basin Runoff Summary [Post-Development]

Basin Name	Sim Name	Max Flow [cfs]	Time to Max Flow [hrs]	Total Rainfall [in]	Total Runoff [in]	Area [ac]	Equivalent Curve Number	% Imperv	% DCIA
EX-BASIN-13	001Y-024 H	0.21	12.0000	4.50	4.27	0.4588	98.0	0.00	0.00
EX-BASIN-13	010Y-024 H	0.37	12.0000	7.90	7.67	0.4588	98.0	0.00	0.00
EX-BASIN-13	025Y-024 H	0.42	12.0000	9.00	8.77	0.4588	98.0	0.00	0.00
EX-BASIN-13	100Y-024 H	0.51	12.0000	11.00	10.77	0.4588	98.0	0.00	0.00
EX-BASIN-13	SJRWMD 025Y-024 H	4.52	12.0167	9.00	8.78	0.4588	98.0	0.00	0.00

Basin Name	Sim Name	Max Flow [cfs]	Time to Max Flow [hrs]	Total Rainfall [in]	Total Runoff [in]	Area [ac]	Equivalent Curve Number	% Imperv	% DCIA
	H								

Manual Basin Runoff Summary [Post-Development]

Basin Name	Sim Name	Max Flow [cfs]	Time to Max Flow [hrs]	Total Rainfall [in]	Total Runoff [in]	Area [ac]	Equivalent Curve Number	% Imperv	% DCIA
EX-BASIN-15	001Y-024 H	0.20	12.0000	4.50	4.27	0.4485	98.0	0.00	0.00
EX-BASIN-15	010Y-024 H	0.36	12.0000	7.90	7.67	0.4485	98.0	0.00	0.00
EX-BASIN-15	025Y-024 H	0.41	12.0000	9.00	8.77	0.4485	98.0	0.00	0.00
EX-BASIN-15	100Y-024 H	0.50	12.0000	11.00	10.77	0.4485	98.0	0.00	0.00
EX-BASIN-15	SJRWMD 025Y-024 H	4.42	12.0167	9.00	8.78	0.4485	98.0	0.00	0.00

Manual Basin Runoff Summary [Post-Development]

Basin Name	Sim Name	Max Flow [cfs]	Time to Max Flow [hrs]	Total Rainfall [in]	Total Runoff [in]	Area [ac]	Equivalent Curve Number	% Imperv	% DCIA
PR-BASIN-02	001Y-024 H	0.44	12.0000	4.50	2.77	1.3291	83.5	0.00	0.00
PR-BASIN-02	010Y-024 H	0.92	12.0000	7.90	5.90	1.3291	83.1	0.00	0.00
PR-BASIN-02	025Y-024 H	1.07	12.0000	9.00	6.95	1.3291	83.1	0.00	0.00
PR-BASIN-02	100Y-024 H	1.35	12.0000	11.00	8.88	1.3291	83.0	0.00	0.00
PR-BASIN-02	SJRWMD 025Y-024 H	11.63	12.0167	9.00	6.96	1.3291	83.1	0.00	0.00

Manual Basin Runoff Summary [Post-Development]

Basin Name	Sim Name	Max Flow [cfs]	Time to Max Flow [hrs]	Total Rainfall [in]	Total Runoff [in]	Area [ac]	Equivalent Curve Number	% Imperv	% DCIA
PR-BASIN-	001Y-024	0.63	12.0000	4.50	3.44	1.6300	90.4	0.00	0.00

Basin Name	Sim Name	Max Flow [cfs]	Time to Max Flow [hrs]	Total Rainfall [in]	Total Runoff [in]	Area [ac]	Equivalent Curve Number	% Imperv	% DCIA
11	H								
PR-BASIN-11	010Y-024 H	1.20	12.0000	7.90	6.69	1.6300	89.8	0.00	0.00
PR-BASIN-11	025Y-024 H	1.39	12.0000	9.00	7.76	1.6300	89.7	0.00	0.00
PR-BASIN-11	100Y-024 H	1.72	12.0000	11.00	9.72	1.6300	89.5	0.00	0.00
PR-BASIN-11	SJRWMD 025Y-024 H	15.06	12.0167	9.00	7.77	1.6300	89.7	0.00	0.00

Manual Basin Runoff Summary [Post-Development]

Basin Name	Sim Name	Max Flow [cfs]	Time to Max Flow [hrs]	Total Rainfall [in]	Total Runoff [in]	Area [ac]	Equivalent Curve Number	% Imperv	% DCIA
PR-BASIN-30	001Y-024 H	0.07	12.0000	4.50	3.21	0.1776	88.2	0.00	0.00
PR-BASIN-30	010Y-024 H	0.13	12.0000	7.90	6.42	0.1776	87.6	0.00	0.00
PR-BASIN-30	025Y-024 H	0.15	12.0000	9.00	7.49	0.1776	87.4	0.00	0.00
PR-BASIN-30	100Y-024 H	0.19	12.0000	11.00	9.44	0.1776	87.3	0.00	0.00
PR-BASIN-30	SJRWMD 025Y-024 H	1.61	12.0167	9.00	7.50	0.1776	87.4	0.00	0.00

Manual Basin Runoff Summary [Post-Development]

Basin Name	Sim Name	Max Flow [cfs]	Time to Max Flow [hrs]	Total Rainfall [in]	Total Runoff [in]	Area [ac]	Equivalent Curve Number	% Imperv	% DCIA
PR-BASIN-31	001Y-024 H	0.08	12.0000	4.50	2.93	0.2373	85.2	0.00	0.00
PR-BASIN-31	010Y-024 H	0.17	12.0000	7.90	6.09	0.2373	84.7	0.00	0.00
PR-BASIN-31	025Y-024 H	0.19	12.0000	9.00	7.15	0.2373	84.7	0.00	0.00
PR-BASIN-31	100Y-024 H	0.24	12.0000	11.00	9.09	0.2373	84.6	0.00	0.00
PR-BASIN-31	SJRWMD 025Y-024 H	2.10	12.0167	9.00	7.16	0.2373	84.7	0.00	0.00

Manual Basin Runoff Summary [Post-Development]

Basin Name	Sim Name	Max Flow [cfs]	Time to Max Flow [hrs]	Total Rainfall [in]	Total Runoff [in]	Area [ac]	Equivalent Curve Number	% Imperv	% DCIA
PR-BASIN-C1	001Y-024 H	0.17	12.0000	4.50	3.10	0.4841	86.9	0.00	0.00
PR-BASIN-C1	010Y-024 H	0.34	12.0000	7.90	6.28	0.4841	86.4	0.00	0.00
PR-BASIN-C1	025Y-024 H	0.40	12.0000	9.00	7.34	0.4841	86.3	0.00	0.00
PR-BASIN-C1	100Y-024 H	0.50	12.0000	11.00	9.29	0.4841	86.1	0.00	0.00
PR-BASIN-C1	SJRWMD 025Y-024 H	4.35	12.0167	9.00	7.36	0.4841	86.3	0.00	0.00

Manual Basin Runoff Summary [Post-Development]

Basin Name	Sim Name	Max Flow [cfs]	Time to Max Flow [hrs]	Total Rainfall [in]	Total Runoff [in]	Area [ac]	Equivalent Curve Number	% Imperv	% DCIA
PR-BASIN-C2	001Y-024 H	0.04	12.0000	4.50	4.27	0.0826	98.0	0.00	0.00
PR-BASIN-C2	010Y-024 H	0.07	12.0000	7.90	7.67	0.0826	98.0	0.00	0.00
PR-BASIN-C2	025Y-024 H	0.07	12.0000	9.00	8.77	0.0826	98.0	0.00	0.00
PR-BASIN-C2	100Y-024 H	0.09	12.0000	11.00	10.77	0.0826	98.0	0.00	0.00
PR-BASIN-C2	SJRWMD 025Y-024 H	0.81	12.0167	9.00	8.78	0.0826	98.0	0.00	0.00

ICPR NODE MAX CONDITION REPORT
(POST-DEVELOPMENT)

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
BNDY-01	001Y-024H	4.00	2.00	0.0000	7.98	50.19	0
BNDY-01	010Y-024H	4.00	2.00	0.0000	11.68	50.19	0
BNDY-01	025Y-024H	4.00	2.00	0.0000	13.76	50.19	0
BNDY-01	100Y-024H	4.00	2.00	0.0000	16.92	50.19	0
BNDY-01	SJRWMD 025Y-024H	4.00	2.00	0.0000	89.89	50.19	0

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-BASIN-01	001Y-024H	6.10	6.10	-0.0015	0.51	14.79	100
EX-BASIN-01	010Y-024H	6.10	6.10	-0.0015	0.92	14.79	100
EX-BASIN-01	025Y-024H	6.10	6.10	-0.0015	1.05	14.79	100
EX-BASIN-01	100Y-024H	6.10	6.10	-0.0015	1.28	14.79	100
EX-BASIN-01	SJRWMD 025Y-024H	6.10	6.10	-0.0015	11.36	14.79	100

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-BASIN-04	001Y-024H	5.31	4.56	0.0003	1.21	1.21	1150
EX-BASIN-04	010Y-024H	5.31	4.63	0.0004	2.43	2.50	1626
EX-BASIN-04	025Y-024H	5.31	4.64	0.0004	2.85	2.91	1781
EX-BASIN-04	100Y-024H	5.31	4.67	0.0004	3.61	3.65	2049
EX-BASIN-04	SJRWMD 025Y-024H	5.31	5.35	-0.0005	30.96	21.34	40116

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-BASIN-05	001Y-024H	5.31	4.57	0.0008	0.68	0.69	10899
EX-BASIN-05	010Y-024H	5.31	4.62	0.0010	1.48	1.42	12688
EX-BASIN-05	025Y-024H	5.31	4.63	0.0010	1.77	1.72	13319
EX-BASIN-05	100Y-024H	5.31	4.66	0.0010	2.30	2.26	14318
EX-BASIN-05	SJRWMD	5.31	4.97	0.0009	22.69	18.93	37868

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
	025Y-024H						

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-BASIN-06	001Y-024H	5.50	4.87	0.0001	0.11	0.11	2557
EX-BASIN-06	010Y-024H	5.50	4.88	0.0002	0.22	0.22	2604
EX-BASIN-06	025Y-024H	5.50	4.88	0.0002	0.25	0.25	2618
EX-BASIN-06	100Y-024H	5.50	4.89	0.0002	0.31	0.31	2641
EX-BASIN-06	SJRWMD 025Y-024H	5.50	5.04	0.0002	2.70	2.58	3151

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-BASIN-07	001Y-024H	4.50	2.66	0.0006	0.99	0.99	520
EX-BASIN-07	010Y-024H	4.50	2.75	0.0009	2.15	2.15	588
EX-BASIN-07	025Y-024H	4.50	2.78	0.0009	2.56	2.56	611
EX-BASIN-07	100Y-024H	4.50	2.82	0.0009	3.31	3.31	645
EX-BASIN-07	SJRWMD 025Y-024H	4.50	3.39	0.0009	26.74	26.73	1273

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-BASIN-08	001Y-024H	4.50	3.37	0.0003	0.67	0.66	8397
EX-BASIN-08	010Y-024H	4.50	3.41	0.0004	1.24	1.24	8558
EX-BASIN-08	025Y-024H	4.50	3.43	0.0004	1.43	1.42	8603
EX-BASIN-08	100Y-024H	4.50	3.45	0.0004	1.76	1.76	8677
EX-BASIN-08	SJRWMD 025Y-024H	4.50	3.89	0.0004	14.87	12.94	10781

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning	Max Stage	Min/Max	Max Total	Max Total	Max Surface
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Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-BASIN-09	001Y-024H	4.50	3.38	0.0010	0.35	0.35	1820
EX-BASIN-09	010Y-024H	4.50	3.43	0.0010	0.64	0.64	1891
EX-BASIN-09	025Y-024H	4.50	3.44	0.0010	0.74	0.73	1912
EX-BASIN-09	100Y-024H	4.50	3.47	0.0010	0.90	0.90	1941
EX-BASIN-09	SJRWMD 025Y-024H	4.50	3.95	0.0010	7.99	7.38	2625

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-BASIN-13	001Y-024H	3.81	3.85	0.0000	0.21	0.21	100
EX-BASIN-13	010Y-024H	3.81	3.87	0.0000	0.37	0.37	138
EX-BASIN-13	025Y-024H	3.81	3.87	0.0000	0.42	0.42	150
EX-BASIN-13	100Y-024H	3.81	3.88	0.0001	0.51	0.51	171
EX-BASIN-13	SJRWMD 025Y-024H	3.81	4.10	-0.0002	4.52	4.47	1740

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-BASIN-15	001Y-024H	3.81	3.85	0.0000	0.20	0.20	101
EX-BASIN-15	010Y-024H	3.81	3.86	0.0000	0.36	0.36	136
EX-BASIN-15	025Y-024H	3.81	3.87	0.0000	0.41	0.41	146
EX-BASIN-15	100Y-024H	3.81	3.88	0.0001	0.50	0.50	163
EX-BASIN-15	SJRWMD 025Y-024H	3.81	4.12	-0.0003	4.42	4.31	1793

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-INLET-04 A	001Y-024H	5.31	4.57	0.0010	0.16	0.13	100
EX-INLET-04 A	010Y-024H	5.31	4.62	0.0010	0.25	0.44	100
EX-INLET-04 A	025Y-024H	5.31	4.64	-0.0010	0.33	0.60	100

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-INLET-04 A	100Y-024H	5.31	4.67	0.0010	0.51	0.90	100
EX-INLET-04 A	SJRWMD 025Y-024H	5.31	5.29	0.0010	7.13	7.13	100

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-INLET-05	001Y-024H	5.31	4.57	0.0010	0.12	0.16	100
EX-INLET-05	010Y-024H	5.31	4.62	0.0010	0.44	0.25	100
EX-INLET-05	025Y-024H	5.31	4.64	-0.0010	0.60	0.31	100
EX-INLET-05	100Y-024H	5.31	4.67	0.0010	0.90	0.49	100
EX-INLET-05	SJRWMD 025Y-024H	5.31	5.08	0.0010	7.13	7.13	100

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-INLET-06	001Y-024H	5.50	2.57	-0.0003	0.11	1.91	100
EX-INLET-06	010Y-024H	5.50	2.57	-0.0003	0.22	1.91	100
EX-INLET-06	025Y-024H	5.50	2.57	-0.0003	0.25	1.91	100
EX-INLET-06	100Y-024H	5.50	2.57	-0.0003	0.31	1.91	100
EX-INLET-06	SJRWMD 025Y-024H	5.50	3.06	-0.0009	2.58	2.57	100

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-INLET-08	001Y-024H	3.29	2.00	0.0012	11.52	1.06	100
EX-INLET-08	010Y-024H	3.29	2.00	0.0012	11.52	1.62	100
EX-INLET-08	025Y-024H	3.29	2.01	0.0012	11.52	1.82	100
EX-INLET-08	100Y-024H	3.29	2.01	0.0012	11.52	1.79	100
EX-INLET-08	SJRWMD 025Y-024H	3.29	2.30	0.0012	12.94	12.94	100

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-INLET-13	001Y-024H	3.81	2.58	0.0006	0.99	0.41	202
EX-INLET-13	010Y-024H	3.81	2.89	0.0010	0.99	0.90	202
EX-INLET-13	025Y-024H	3.81	2.94	0.0010	1.10	0.99	202
EX-INLET-13	100Y-024H	3.81	3.05	0.0010	1.21	1.06	202
EX-INLET-13	SJRWMD 025Y-024H	3.81	3.82	-0.0010	8.57	8.47	202

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
EX-INLET-15	001Y-024H	3.81	2.58	0.0002	0.20	0.20	122
EX-INLET-15	010Y-024H	3.81	2.89	0.0009	0.36	0.59	122
EX-INLET-15	025Y-024H	3.81	2.94	-0.0010	0.41	0.69	122
EX-INLET-15	100Y-024H	3.81	3.05	0.0010	0.50	0.73	122
EX-INLET-15	SJRWMD 025Y-024H	3.81	3.99	0.0010	4.31	4.16	124

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
GROUNDWATER	001Y-024H	0.00	0.00	0.0000	0.36	0.00	0
GROUNDWATER	010Y-024H	0.00	0.00	0.0000	0.44	0.00	0
GROUNDWATER	025Y-024H	0.00	0.00	0.0000	0.44	0.00	0
GROUNDWATER	100Y-024H	0.00	0.00	0.0000	0.44	0.00	0
GROUNDWATER	SJRWMD 025Y-024H	0.00	0.00	0.0000	1.27	0.00	0

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
PR-BASIN-02	001Y-024H	6.00	5.02	-0.0001	0.44	1.47	100

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
PR-BASIN-02	010Y-024H	6.00	5.02	-0.0001	0.92	1.47	100
PR-BASIN-02	025Y-024H	6.00	5.02	-0.0001	1.07	1.47	100
PR-BASIN-02	100Y-024H	6.00	5.02	-0.0001	1.35	1.47	100
PR-BASIN-02	SJRWMD 025Y-024H	6.00	5.21	-0.0001	11.63	11.63	100

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
PR-BASIN-11	001Y-024H	4.00	2.58	0.0006	1.03	0.99	16535
PR-BASIN-11	010Y-024H	4.00	2.89	0.0007	2.10	1.16	17226
PR-BASIN-11	025Y-024H	4.00	2.94	0.0007	2.37	1.61	17335
PR-BASIN-11	100Y-024H	4.00	3.04	0.0008	2.78	2.47	17579
PR-BASIN-11	SJRWMD 025Y-024H	4.00	3.51	0.0007	23.52	8.59	18632

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
PR-BASIN-30	001Y-024H	6.00	4.54	0.0002	4.15	3.51	100
PR-BASIN-30	010Y-024H	6.00	4.55	0.0002	4.15	3.72	100
PR-BASIN-30	025Y-024H	6.00	4.55	0.0002	4.15	3.90	100
PR-BASIN-30	100Y-024H	6.00	4.56	0.0002	4.22	4.22	100
PR-BASIN-30	SJRWMD 025Y-024H	6.00	4.73	0.0002	12.62	12.62	100

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
PR-BASIN-31	001Y-024H	4.50	4.07	0.0003	3.47	3.27	100
PR-BASIN-31	010Y-024H	4.50	4.09	0.0003	3.80	3.80	100
PR-BASIN-31	025Y-024H	4.50	4.09	0.0003	3.95	3.95	100
PR-BASIN-31	100Y-024H	4.50	4.10	0.0003	4.22	4.22	100
PR-BASIN-31	SJRWMD 025Y-024H	4.50	4.30	0.0003	11.02	11.02	100

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
PR-INLET-02	001Y-024H	6.00	2.01	0.0010	14.79	4.94	336
PR-INLET-02	010Y-024H	6.00	2.02	0.0010	14.79	4.94	336
PR-INLET-02	025Y-024H	6.00	2.02	0.0010	14.79	4.94	336
PR-INLET-02	100Y-024H	6.00	2.03	-0.0010	14.79	4.94	336
PR-INLET-02	SJRWMD 025Y-024H	6.00	3.09	0.0010	14.79	14.61	343

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
PR-INLET-04 B	001Y-024H	5.31	2.03	0.0010	2.32	1.22	102
PR-INLET-04 B	010Y-024H	5.31	2.08	0.0010	2.32	2.29	102
PR-INLET-04 B	025Y-024H	5.31	2.10	0.0010	2.60	2.60	102
PR-INLET-04 B	100Y-024H	5.31	2.15	0.0010	3.17	3.17	102
PR-INLET-04 B	SJRWMD 025Y-024H	5.31	5.13	0.0010	14.78	14.84	102

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
PR-INLET-30	001Y-024H	6.00	2.01	-0.0009	21.16	6.14	796
PR-INLET-30	010Y-024H	6.00	2.02	-0.0009	21.16	6.14	796
PR-INLET-30	025Y-024H	6.00	2.02	-0.0010	21.16	6.14	796
PR-INLET-30	100Y-024H	6.00	2.03	0.0009	21.16	6.14	796
PR-INLET-30	SJRWMD 025Y-024H	6.00	3.03	-0.0010	32.40	32.39	796

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
PR-INLET-31	001Y-024H	4.50	2.01	-0.0010	42.93	17.03	746

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
PR-INLET-31	010Y-024H	4.50	2.01	-0.0010	42.93	17.03	746
PR-INLET-31	025Y-024H	4.50	2.02	-0.0010	42.93	17.03	746
PR-INLET-31	100Y-024H	4.50	2.02	-0.0010	42.93	17.03	746
PR-INLET-31	SJRWMD 025Y-024H	4.50	2.48	-0.0010	45.92	45.92	746

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
ST-02	001Y-024H	5.98	3.28	0.0002	0.04	0.04	100
ST-02	010Y-024H	5.98	3.32	0.0002	0.07	0.07	105
ST-02	025Y-024H	5.98	3.33	0.0002	0.07	0.07	108
ST-02	100Y-024H	5.98	3.35	0.0003	0.09	0.09	111
ST-02	SJRWMD 025Y-024H	5.98	4.87	0.0010	0.81	0.65	116

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
ST0-03A	001Y-024H	6.00	2.02	0.0010	4.56	2.32	141
ST0-03A	010Y-024H	6.00	2.04	-0.0010	4.56	2.73	141
ST0-03A	025Y-024H	6.00	2.05	0.0010	4.56	3.10	141
ST0-03A	100Y-024H	6.00	2.07	0.0010	4.56	3.74	141
ST0-03A	SJRWMD 025Y-024H	6.00	3.71	0.0010	17.17	17.28	141

Node Max Conditions [Post-Development]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
SWMF-1	001Y-024H	5.00	3.00	-0.0010	0.21	0.88	100
SWMF-1	010Y-024H	5.00	3.00	-0.0010	0.41	0.88	100
SWMF-1	025Y-024H	5.00	3.00	-0.0010	0.48	0.88	100
SWMF-1	100Y-024H	5.00	3.06	-0.0010	0.59	0.88	1732
SWMF-1	SJRWMD 025Y-024H	5.00	4.80	0.0010	4.99	3.14	3013

ICPR SIMULATION REPORT
(POST-DEVELOPMENT)

Simulation: 001Y-024H

Scenario: Post-Development
 Run Date/Time: 5/13/2022 9:42:30 AM
 Program Version: ICPR4 4.07.04

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	24.0000
	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]	
Min Calculation Time:	60.0000	0.0100	900.0000	
Max Calculation Time:		5.0000		

Output Time Increments

Hydrology

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	360.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
 Reference ET Folder:
 Unit Hydrograph
 Folder:

Lookup Tables

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

 Green-Ampt Set:
 Vertical Layers Set:
 Impervious Set: Impervious Areas
 Roughness Set:
 Crop Coef Set:
 Fillable Porosity Set:

Conductivity Set:

Leakage Set:

Tolerances & Options	
Time Marching: SAOR	IA Recovery Time: 24.0000 hr
Max Iterations: 5	ET for Manual Basins: False
Over-Relax Weight: 0.5 dec	
Fact:	
dZ Tolerance: 0.0010 ft	Smp/Man Basin Rain Opt: Global
	OF Region Rain Opt: Global
Max dZ: 1.0000 ft	Rainfall Name: ~FDOT-24
Link Optimizer Tol: 0.0001 ft	Rainfall Amount: 4.50 in
	Storm Duration: 24.0000 hr
Edge Length Option: Automatic	
Dflt Damping (2D): 0.0000 ft	Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (2D): 100 ft2	Min Node Srf Area (1D): 100 ft2
Energy Switch (2D): Energy	Energy Switch (1D): Energy
Comment:	

Simulation: 010Y-024H

Scenario: Post-Development

Run Date/Time: 5/13/2022 9:42:44 AM

Program Version: ICP4 4.07.04

General				
Run Mode:	Normal			
	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	24.0000
	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]	
Min Calculation Time:	60.0000	0.0100	900.0000	
Max Calculation Time:		5.0000		

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	360.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph
Folder:

Lookup Tables

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

Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Impervious Areas
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching: SAOR	IA Recovery Time: 24.0000 hr
Max Iterations: 5	ET for Manual Basins: False
Over-Relax Weight: 0.5 dec	
Fact:	
dZ Tolerance: 0.0010 ft	Smp/Man Basin Rain: Global
	Opt:
Max dZ: 1.0000 ft	OF Region Rain Opt: Global
Link Optimizer Tol: 0.0001 ft	Rainfall Name: ~FDOT-24
	Rainfall Amount: 7.90 in
Edge Length Option: Automatic	Storm Duration: 24.0000 hr
Dflt Damping (2D): 0.0000 ft	Dflt Damping (1D): 0.0050 ft
Min Node Srf Area: 100 ft2	Min Node Srf Area: 100 ft2
(2D):	(1D):
Energy Switch (2D): Energy	Energy Switch (1D): Energy

Comment:

Simulation: 025Y-024H

Scenario: Post-Development
 Run Date/Time: 5/13/2022 9:42:59 AM
 Program Version: ICPR4 4.07.04

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	24.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.0100	900.0000
Max Calculation Time:		5.0000	

Output Time Increments

Hydrology

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	360.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
 Reference ET Folder:
 Unit Hydrograph
 Folder:

Lookup Tables

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

 Green-Ampt Set:
 Vertical Layers Set:
 Impervious Set: Impervious Areas
 Roughness Set:
 Crop Coef Set:
 Fillable Porosity Set:

Conductivity Set:

Leakage Set:

Tolerances & Options	
Time Marching: SAOR	IA Recovery Time: 24.0000 hr
Max Iterations: 5	ET for Manual Basins: False
Over-Relax Weight: 0.5 dec	
Fact:	
dZ Tolerance: 0.0010 ft	Smp/Man Basin Rain: Global
	Opt:
Max dZ: 1.0000 ft	OF Region Rain Opt: Global
Link Optimizer Tol: 0.0001 ft	Rainfall Name: ~FDOT-24
	Rainfall Amount: 9.00 in
Edge Length Option: Automatic	Storm Duration: 24.0000 hr
Dflt Damping (2D): 0.0000 ft	Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (2D): 100 ft2	Min Node Srf Area (1D): 100 ft2
Energy Switch (2D): Energy	Energy Switch (1D): Energy
Comment:	

Simulation: 100Y-024H

Scenario: Post-Development
 Run Date/Time: 5/13/2022 9:43:14 AM
 Program Version: ICPR4 4.07.04

General				
Run Mode:	Normal			
	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	24.0000
	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]	
Min Calculation Time:	60.0000	0.0100	900.0000	
Max Calculation Time:		5.0000		

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	360.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph
Folder:

Lookup Tables

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

Green-Ampt Set:
Vertical Layers Set:
Impervious Set: Impervious Areas
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 5
Over-Relax Weight: 0.5 dec
Fact:
dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft

Edge Length Option: Automatic

Dflt Damping (2D): 0.0000 ft
Min Node Srf Area: 100 ft2
(2D):
Energy Switch (2D): Energy

IA Recovery Time: 24.0000 hr
ET for Manual Basins: False

Smp/Man Basin Rain: Global
Opt:
OF Region Rain Opt: Global
Rainfall Name: ~FDOT-24
Rainfall Amount: 11.00 in
Storm Duration: 24.0000 hr

Dflt Damping (1D): 0.0050 ft
Min Node Srf Area: 100 ft2
(1D):
Energy Switch (1D): Energy

Comment:

Simulation: SJRWMD 025Y-024H

Scenario: Post-Development
 Run Date/Time: 5/13/2022 9:43:28 AM
 Program Version: ICPR4 4.07.04

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.0100	900.0000
Max Calculation Time:		5.0000	

Output Time Increments

Hydrology

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	360.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
 Reference ET Folder:
 Unit Hydrograph
 Folder:

Lookup Tables

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

 Green-Ampt Set:
 Vertical Layers Set:
 Impervious Set: Impervious Areas
 Roughness Set:
 Crop Coef Set:
 Fillable Porosity Set:

Conductivity Set:

Leakage Set:

Tolerances & Options

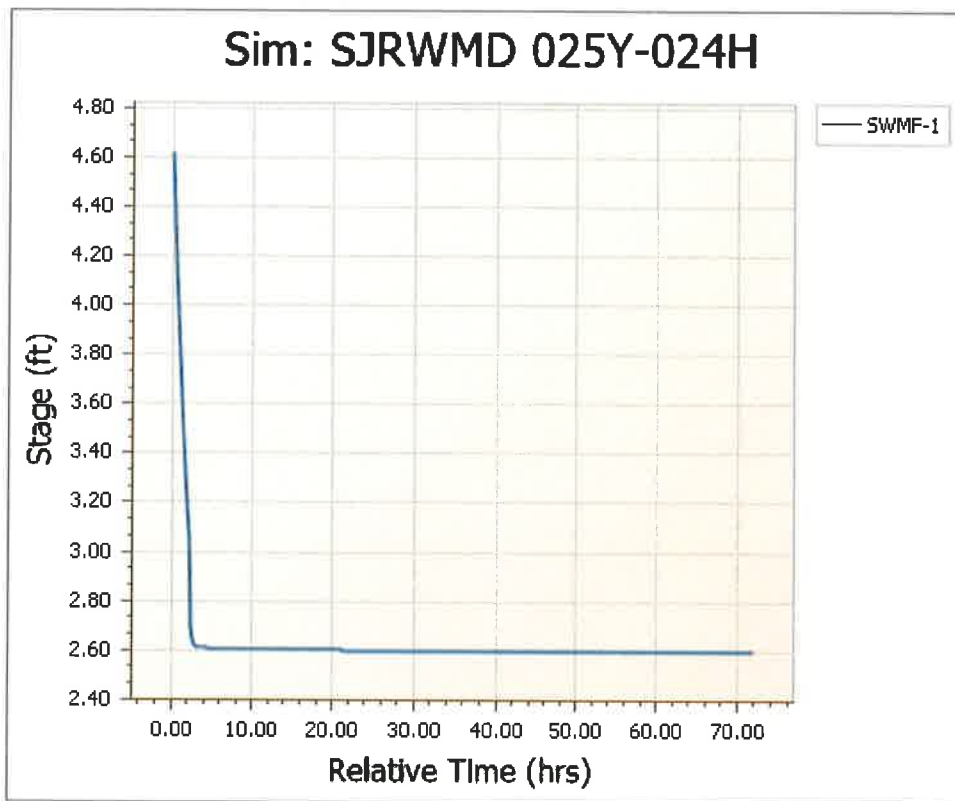
Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	5	ET for Manual Basins:	False
Over-Relax Weight	0.5 dec		
Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain	Global
		Opt:	
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SCSII-24
		Rainfall Amount:	9.00 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0000 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area	100 ft2	Min Node Srf Area	100 ft2
(2D):		(1D):	
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

APPENDIX D
ICPR FACILITY ANALYSIS

SWMF-1 RECOVERY ANALYSIS

SLUG LOAD SCENARIO



Node: SWMF-1

Scenario: Slug Load
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 4.62 ft
 Warning Stage: 5.00 ft

Stage [ft]	Area [ac]	Area [ft2]
3.00	0.0377	1644
3.50	0.0457	1989
4.00	0.0542	2360
4.50	0.0633	2756
5.00	0.0729	3176

Comment:

Simulation: SJRWMD 025Y-024H

Scenario: Slug Load
 Run Date/Time: 5/13/2022 9:43:59 AM
 Program Version: ICPR4 4.07.04

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	72.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.0100	900.0000
Max Calculation Time:		5.0000	

Output Time Increments

Hydrology

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

Surface Hydraulics

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

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	360.0000

Restart File
Save Restart: False

Resources & Lookup Tables

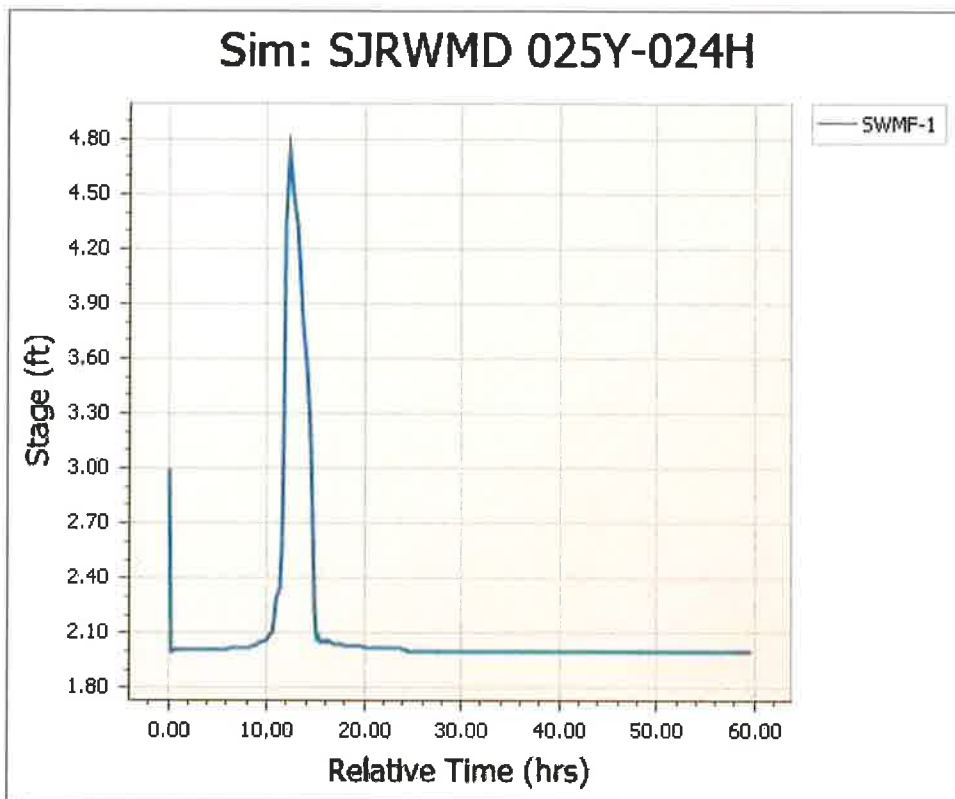
Resources	Lookup Tables
Rainfall Folder:	Boundary Stage Set:
Reference ET Folder:	Extern Hydrograph Set:
Unit Hydrograph Folder:	Curve Number Set: Curve Number Set
	Green-Ampt Set:
	Vertical Layers Set:
	Impervious Set: Impervious Areas
	Roughness Set:
	Crop Coef Set:
	Fillable Porosity Set:
	Conductivity Set:
	Leakage Set:

Tolerances & Options

Time Marching: SAOR	IA Recovery Time: 24.0000 hr
Max Iterations: 5	ET for Manual Basins: False
Over-Relax Weight: 0.5 dec	
Fact:	
dZ Tolerance: 0.0010 ft	Smp/Man Basin Rain: No Rainfall
	Opt:
Max dZ: 1.0000 ft	OF Region Rain Opt: No Rainfall
Link Optimizer Tol: 0.0001 ft	
Edge Length Option: Automatic	
Dflt Damping (2D): 0.0000 ft	Dflt Damping (1D): 0.0050 ft
Min Node Srf Area: 100 ft2	Min Node Srf Area: 100 ft2
(2D):	(1D):
Energy Switch (2D): Energy	Energy Switch (1D): Energy

Comment:

POST DEVELOPMENT SCENARIO



APPENDIX E
SUPPORTING DOCUMENTATION

Table 2-2a Runoff curve numbers for urban areas ^{1/}

Cover description		Curve numbers for hydrologic soil group			
Cover type and hydrologic condition	Average percent impervious area ^{2/}	A	B	C	D
Fully developed urban areas (vegetation established)					
Open space (lawns, parks, golf courses, cemeteries, etc.) ^{3/} :					
Poor condition (grass cover < 50%)		68	79	86	89
Fair condition (grass cover 50% to 75%)		49	69	79	84
Good condition (grass cover > 75%)		39	61	74	80
Impervious areas:					
Paved parking lots, roofs, driveways, etc. (excluding right-of-way)		98	98	98	98
Streets and roads:					
Paved; curbs and storm sewers (excluding right-of-way)		98	98	98	98
Paved; open ditches (including right-of-way)		83	89	92	93
Gravel (including right-of-way)		76	85	89	91
Dirt (including right-of-way)		72	82	87	89
Western desert urban areas:					
Natural desert landscaping (pervious areas only) ^{4/}		63	77	85	88
Artificial desert landscaping (impervious weed barrier, desert shrub with 1- to 2-inch sand or gravel mulch and basin borders)		96	96	96	96
Urban districts:					
Commercial and business	85	89	92	94	95
Industrial	72	81	88	91	93
Residential districts by average lot size:					
1/8 acre or less (town houses)	65	77	85	90	92
1/4 acre	38	61	75	83	87
1/3 acre	30	57	72	81	86
1/2 acre	25	54	70	80	85
1 acre	20	51	68	79	84
2 acres	12	46	65	77	82
Developing urban areas					
Newly graded areas					
(pervious areas only, no vegetation) ^{5/}		77	86	91	94
Idle lands (CN's are determined using cover types similar to those in table 2-2c).					

¹ Average runoff condition, and $I_a = 0.2S$.² The average percent impervious area shown was used to develop the composite CN's. Other assumptions are as follows: impervious areas are directly connected to the drainage system, impervious areas have a CN of 98, and pervious areas are considered equivalent to open space in good hydrologic condition. CN's for other combinations of conditions may be computed using figure 2-3 or 2-4.³ CN's shown are equivalent to those of pasture. Composite CN's may be computed for other combinations of open space cover type.⁴ Composite CN's for natural desert landscaping should be computed using figures 2-3 or 2-4 based on the impervious area percentage (CN = 98) and the pervious area CN. The pervious area CN's are assumed equivalent to desert shrub in poor hydrologic condition.⁵ Composite CN's to use for the design of temporary measures during grading and construction should be computed using figure 2-3 or 2-4 based on the degree of development (impervious area percentage) and the CN's for the newly graded pervious areas.

- (c) The presumption in paragraph (b) shall not apply to any activity which promotes a more endemic state, where the land in the zone has been changed by man. An example of such an activity would be construction undertaken to return lands managed for agriculture or silviculture to a vegetative community that is more compatible with the endemic land cover.

13.3.6 Local Government Notification for Wekiva River Protection Area *Revised* 6/1/18

The District shall not issue a conceptual approval or individual permit for a proposed surface water management system located wholly or partially within the Wekiva River Protection Area, as defined in Section 369.303(9), F.S., until the appropriate local government has provided written notification that the proposed activity is consistent with the local comprehensive plan and is in compliance with land development regulations in effect in the area where development will take place. The applicant proposing such a system must submit to the District form no. 40C-41.063(4), entitled "Local Government Notification", (incorporated by reference in 40C-41.063(4)), after it has been completed and executed by the local government. This form is available upon request from the St. Johns River Water Management District, 4049 Reid Street, Palatka, Florida 32177-2529. Permit applications for systems within the Wekiva River Protection Area shall be processed by the District staff pursuant to the time frames established in Section 120.60, F.S., and any District rule regarding permit processing, except that any agency action to approve or approve with conditions shall not occur until the Local Government Notification has been received by the District.

13.4 Econlockhatchee River Hydrologic Basin

As part of the standards and design criteria described in 62-330.301 and 62-330.302, F.A.C., above, systems in the Econlockhatchee River Hydrologic Basin must meet the following standards and criteria:

13.4.1 Design Storm Criteria

Systems must meet the peak discharge requirement for the following 24-hour duration design storm events:

- (a) Mean annual storm (2.3-year return period) with a total 24-hour rainfall depth of 4.5 inches.
- (b) 25-year return period.

System outlet control structures can be designed to meet the control peak discharge rates for both design storms by use of a two-stage weir, v-notch weir, multiple orifices, or other similar structures.

4.0 Design criteria:**4.1 Design storm (minimum).**

EXPAND

Facility	Design Storm
Retention/detention ponds (w/positive outfall)	25 year, 24 hour
Retention/detention ponds (landlocked w/no positive outfall)	25 year, 96 hour total retention
Roadside swales, swales, channels	10 year, 24 hour
Arterial and collector street pipe systems	10 year, hydraulic gradient line 1.0 feet below gutter line
Local street pipe systems	10 year, hydraulic gradient line 0.5 feet below gutter line
Canals, outfall ditch or outfall channels	25 year, 24 hour
Bridges	100 year, 24 hour

Streets shall be designed so that the lowest crown elevation is at or above the 25-year peak flood stage.

Rainfall amounts shall be as follows:

10-year 24-hour storm = 7.9"

25-year 24-hour storm = 9.0"

100-year 24-hour storm = 11.0"

25-year 96-hour storm = 12.5"

In order to protect upstream or downstream properties, the retention/detention requirements may be increased if site specific drainage problems are known by the county.

GEOTECHNICAL REPORT



April 30, 2022
November 17, 2021

Mr. John Neff, P.E., Project Manager III
Michael Baker International
515 North Flagler Drive, Suite 303
West Palm Beach, FL 33401
Email: john.neff@mbakerintl.com
Phone: 561-812-6403

Re: Geotechnical Engineering Services
Proposed New Hangar-Merritt Island Airport
475 Manor Drive
Merritt Island, Florida 32952
TGS File No. 21-373 Revised

Dear John:

TGS is pleased to transmit our Geotechnical Engineering Services Report for the referenced project. This report includes the results of field testing, geotechnical related recommendations for foundation design, as well as general site development.

EXECUTIVE SUMMARY

An exploration and evaluation of the subsurface conditions have been completed for the Proposed New Hangar to be constructed within the Merritt Island Airport at 475 Manor Drive in Merritt Island, Florida. In general, below about 2 inches of topsoil, the subsurface conditions consisted of very loose to medium dense sandy soils extending to the boring termination depth. The results of this exploration indicate that the subsurface conditions at the site are generally suitable for the use of shallow foundations for support of the proposed metal building. ***However, due to loose upper soils noted at this site, a moderate amount of site preparation (heavy compaction) will be required to increase shear strength and reduce foundation and floor slab settlements to acceptable levels.*** Details related to site development, foundation design, and construction considerations are included in subsequent sections of this report.

The borings were performed in accordance with section 1803 of the 2020 Florida Building Code, 7th Edition. It is our opinion that the foundation soils, plus a minimum of five feet, are suitable to support the planned residence on shallow foundations proportioned for a net bearing pressure of 2,500 pounds per square foot (psf) or less. The floor slab can be grade-supported.

The owner/designer should not rely solely on this Executive Summary and must read and evaluate the entire contents of this report prior to utilizing our engineering recommendations.

PROJECT INFORMATION

Project Authorization

TGS has completed a geotechnical exploration for the Proposed New Hangar to be constructed within the Merritt Island Airport at 475 Manor Drive in Merritt Island, Florida. Mr. John Neff, P.E. of Michael Baker International authorized our services by issuing Subconsultant Agreement dated November 12, 2021. TGS Proposal No. 2111-341 dated November 8, 2021, is incorporated into the agreement. A follow up site visit to determine high groundwater levels at the site, was verbally authorized by Mr. John Neff, on March 7, 2022.

Project Description

Some preliminary information regarding proposed construction was obtained from Mr. John Neff, P.E. We understand that a new metal hangar, and detention area are planned at this site. The building will have shallow foundations, slab-on-grade. Final loading information was not available at the time of this report; however, for this type of structure we have assumed column and wall loads in the order of 75 kips and 1.5 kips per linear foot, respectively. Drainage improvements are also being considered at this site.

The geotechnical recommendations presented in this report are based on the available project information, building location, and the subsurface materials described in this report. If any of the noted information is incorrect, please inform TGS in writing so that we may amend the recommendations presented in this report if appropriate and if desired by the client. TGS will not be responsible for the implementation of its recommendations when it is not notified of changes in the project.

Purpose and Scope of Services

Our scope of services included advancing two (2) Standard Penetration Test (SPT) borings to a depth of 10 feet below existing grade in the proposed building footprint and detention area, one (1) percolation test to 10 feet in the detention area, plus the preparation of this report.

The scope of services did not include an environmental assessment for determining the presence or absence of wetlands or hazardous or toxic materials in the soil, bedrock, surface water, groundwater, or air on or below, or around this site. Any statements in this report or on the boring log regarding odors, colors, and unusual or suspicious items or conditions are strictly for informational purposes. Prior to further development of this site, an environmental assessment is advisable.

SITE AND SUBSURFACE CONDITIONS

Site Location and Description

The site is located within the Merritt Island Airport at 475 Manor Drive in Merritt Island, Florida. At the time of our geotechnical study, the proposed site was vacant, relatively level and covered with short grass. We understand that the site was graded during the original development of the Merritt Island Airport. A utility easement bisects the property in a north to south direction.

Subsurface Conditions

Review of “Soil Survey of Brevard County Area, Florida”, prepared by the United States Department of Agriculture (USDA) Soil Conservation Service (SCS), indicates the site is mapped as follows:

- (36) Myakka sand, 0 to 2 percent slopes.
- (39) Myakka-Urban land complex.

A graphic depiction of the soil mapping is included in the Appendix as **Soil Map—Brevard County Area, Florida**.

Subsurface conditions at the site were explored with engineering borings located as shown on the Boring Location Plan, Sheet 1. The study included the drilling of two (2) Standard Penetration Test (SPT) borings to a depth of about 10 feet, within the planned hangar footprint, detention area, and one percolation test to 10 feet in the detention area. The SPT borings were drilled using a Mobil B-53 drill rig, and mud rotary procedures. Samples of the in-place materials were recovered at frequent intervals using a standard split spoon driven with a 140-pound hammer freely falling 30 inches (the SPT after ASTM D 1586). Samples of the in-place soils were returned to our laboratory for classification by a geotechnical engineer, in general accordance with the Unified Soil Classification System (ASTM D 2487).

Below about 2-inches of topsoil, the soils encountered at this site consist of sandy soils that extend to terminal depths of the borings. Based on visual classifications, these soils are classified as sand (SP) in accordance with Unified Soil Classification System.

We understand that the site was graded during the original development of the Merritt Island Airport. Small roots were noted in some of the samples at 2 feet below grade. During visual classification, it is difficult to differentiate between the on-site fill and natural soils of the site.

N-values indicate the material of very loose to medium dense conditions. The Soil Profiles are also presented on Sheet 1, attached to this report.

Groundwater Information

Groundwater level was measured at the time of the borings. The depth to the free water surface at the time of testing (November 15, 2021) was recorded at 3.0 feet below existing ground surface. Additional auger sampling on March 10, 2022, indicated the water table at 3 feet below grade.

Based on Brevard County Soil Survey, the information contained therein, and historical information, the WSWT was determined at 10 inches below the original soil profile, consistent with Unit 36, Myakka sand. However, the site was raised a few feet in some areas. The new WSWT is about 30 inches below existing grades, at the tested locations. Groundwater levels are expected to fluctuate with seasonal fluctuations.

In general, the seasonal high groundwater level is not intended to define a limit or ensure that future seasonal fluctuations in groundwater levels will not exceed the estimated levels. Post-development groundwater levels could exceed the normal seasonal high groundwater level estimate as a result of a series of rainfall events, changed conditions at the site that alter surface water drainage characteristics, or variations in the duration, intensity, or total volume of rainfall. We recommend that the Contractor determine the actual groundwater levels at the time of the construction to determine groundwater impact on his or her construction procedures.

Exfiltration Test

An exfiltration test was performed using the usual open-hole, constant head methodology. The test location is shown on the boring location plan in Appendix. The test was performed to a depth of 10 feet. The hole was drilled by a hollow stem auger (about 5 inches in diameter) so that soil samples could be retrieved for a visual classification by our engineer. The boring was completed as open well with gravel pack (6-20 silica sand). The well screen diameter is 4 inches and well screen slot widths were 0.020 inches. Water from the drill rig tank was then pumped into the open well, and the amount of water required maintaining constant head was recorded. The result of the exfiltration test is attached in Appendix.

EVALUATION AND RECOMMENDATIONS

General Discussion

The geotechnical study completed for the proposed metal hangar building confirms that the site is suitable for the planned construction when viewed from a soil mechanics and foundation engineering perspective. Subsurface conditions at the site are not expected to impose any major geotechnical constraints or limitations on the constructed structure. *However, due to the presence of loose upper soils, the building pad area will require heavy compaction/densification with smooth drum rollers prior to placing fill.*

Site Preparation

Following removal of topsoil, organic material, debris, if any, from the proposed construction areas, the structural footprint of the proposed building area should be proof rolled with a self-propelled roller (Ingersoll-Rand SD 100D or equivalent) with at least **20 passes (with an operating vibration frequency of 31.5 Hz/1890 VPM and average speed of 1.4 mph)** and until the subsoils achieve 95 percent of maximum dry density per ASTM D 1557 (Modified Proctor) to a depth of at least **24 inches below the existing grade**. The soil densification should encompass the entire footprint of the structures plus a 5-foot-wide perimeter that extends beyond the maximum lines of the superstructures.

Each lift of compacted engineered fill should be tested by a representative of the geotechnical engineer prior to placement of subsequent lifts. The edges of compacted fill should extend 5 feet beyond the edges of buildings prior to sloping.

Existing building structures near the proposed construction need to be protected against vibrations. Near existing buildings (within 50 feet), proof-rolling should be performed in a static mode. Ground vibrations induced by the compaction operations should be closely monitored to assess if there is a potential impact to any existing adjacent structures.

The foundation areas should be excavated, and the footings formed and poured in-the-dry. Soils loosened by excavation should be re-compacted to meet the compaction requirement prescribed above for the fill. Loose or organic soils (if any) found at foundation bottoms should be removed and replaced with structural fill.

Excavating equipment may disturb the granular bearing soil in foundation areas. The upper 12 inches of foundation bottom soils should be compacted to achieve not less than 95 percent of the maximum dry density, as determined by ASTM D 1557, immediately prior to reinforcing and concrete placement.

Foundation-Slab Recommendations

The planned construction can be supported on conventional spread foundations bearing on properly compacted structural fill. The footings should be designed and proportioned for a maximum bearing pressure of 2,500 pounds per square foot (psf). Footings sizes and depths should be, at a minimum, in compliance with latest building codes.

Given site and soil preparation that is completed before footing construction, and using the design criteria discussed above, we estimate that total and differential foundation settlements should be less than 1 inch and ½ inch, respectively. The settlement forecast is based on imposed soil bearing pressure from structural loadings not exceeding 2,500 pounds per square foot.

We recommend the site preparation procedures described above be used to prepare the floor slab subgrade. Slab-on-grade construction may then be employed for the ground floor of the buildings. The floor slab should be suitably reinforced to make it as rigid as practical. Joints should be provided at the junctions of the slab with the walls and columns so that a small amount of independent movement can occur without causing damage. The floor slab design, if based on elastic methods, should employ a modulus of subgrade reaction of 150 pounds per cubic inch (pci). The friction factor between the soil and concrete may be taken as 0.35.

Closing

The recommendations submitted are based on the available subsurface information obtained by TGS and design details furnished by Michael Baker International for the Proposed New Hangar to be constructed within the Merritt Island Airport at 475 Manor Drive in Merritt Island, Florida. If there are any revisions to the plans for this project or if deviations from the subsurface conditions noted in this report are encountered during construction, TGS should be notified immediately to determine if changes in the foundation recommendations are required. If TGS is not retained to perform these functions, TGS will not be responsible for the impact of those conditions on the project.

The geotechnical engineer warrants that the findings, recommendations, specifications, or professional advice contained herein have been made in accordance with generally accepted professional geotechnical engineering practices in the local area. No other warranties are implied or expressed.

We appreciate the opportunity to perform this Geotechnical Study and look forward to continued participation during construction phases of this project. If you have any questions pertaining to this report, or if we may be of further service, please contact our office.

Respectfully submitted,

TGS

Francois Thomas, P.E.
Principal Engineer
FL Registration No. 56381



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SIGNED AND SEALED BY

ON THE DATE ADJACENT TO THE SEAL

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FRANCOIS GEOTECHNICAL SERVICES, LLC
6504 WOODLAKE ROAD
JUPITER, FL 33458
CERTIFICATE OF AUTHORIZATION 34545

FT/21-373

Attachment — NRCS Soil Survey-Soil Map
Boring Location Plan/Soil Profiles-Sheet 1
Summary of Exfiltration

Soil Map—Brevard County, Florida



MAP LEGEND

Area of Interest (AOI)	 Area of Interest (AOI)	 Spoil Area
Soils	 Soil Map Unit Polygons	 Stony Spot
	 Soil Map Unit Lines	 Very Stony Spot
	 Soil Map Unit Points	 Wet Spot
Special Point Features	 Blowout	 Other
	 Borrow Pit	 Special Line Features
	 Clay Spot	
	 Closed Depression	Water Features
	 Gravel Pit	 Streams and Canals
	 Gravelly Spot	Transportation
	 Landfill	 Ralls
	 Lava Flow	 Interstate Highways
	 Marsh or swamp	 US Routes
	 Mine or Quarry	 Major Roads
	 Miscellaneous Water	 Local Roads
	 Perennial Water	Background
	 Rock Outcrop	 Aerial Photography
	 Saline Spot	
	 Sandy Spot	
	 Severely Eroded Spot	
	 Sinkhole	
	 Slide or Slip	
	 Sodic Spot	

MAP INFORMATION

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

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Brevard County, Florida
Survey Area Data: Version 21, Aug 25, 2021

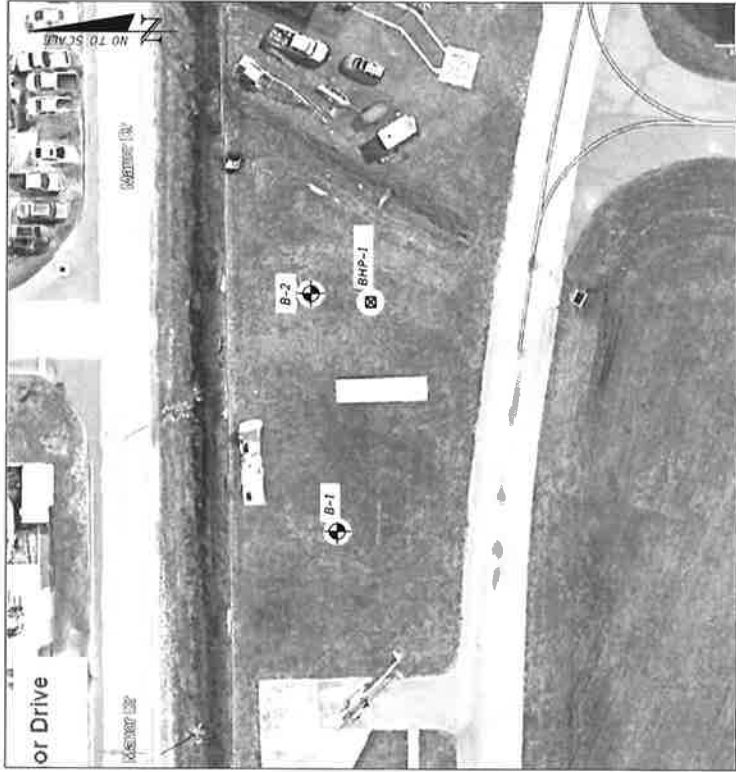
Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 28, 2015—May 18, 2015

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
3	Anclote sand, frequently flooded	0.8	0.4%
9	Canaveral-Anclote complex, gently undulating	0.1	0.1%
10	Canaveral-Urban land complex	0.3	0.2%
16	Copeland-Bradenton-Wabasso complex, limestone substratum	12.5	6.2%
28	Immokalee sand, 0 to 2 percent slopes	25.2	12.5%
36	Myakka sand, 0 to 2 percent slopes	18.5	9.2%
39	Myakka-Urban land complex	132.1	65.5%
49	Pomello sand, 0 to 5 percent slopes	0.7	0.3%
52	Quartzipsamments, smoothed	3.9	1.9%
58	Turnbull and Riomar soils, tidal	0.0	0.0%
69	Urban land, 0 to 2 percent slopes	7.5	3.7%
Totals for Area of Interest		201.6	100.0%

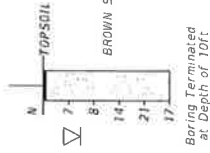


BORINGS LOCATION PLAN

- Approximate Location of SPT Boring
- Approximate Location of BHP Test

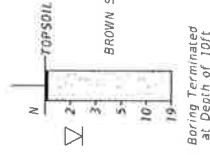
BOR # B-1
DATE 11/15/2021
HAMMER AUTOMATIC
RIG B-53

Depth (feet) from Ground Surface



BOR # B-2
DATE 11/15/2021
HAMMER AUTOMATIC
RIG B-53

Depth (feet) from Ground Surface



Legend

Depth of Groundwater Table
From Ground Surface



NOTES

* SPT N-VALUES SHOWN ABOVE WERE OBTAINED USING AUTOMATIC HAMMERS. MOST DESIGN CALCULATIONS USE SAFETY HAMMER N-VALUES. THE ABOVE N-VALUES NEED TO BE CONVERTED TO SAFETY HAMMER EQUIVALENT VALUES

** GEOGRAPHIC COORDINATES ARE APPROXIMATE, BASED ON HANDHELD GPS.

THOMAS



GEOTECHNICAL • TESTING • INSPECTIONS

ENGINEER OF RECORD

FRANCOIS THOMAS, P.E.

FLORIDA LICENSE NO.:

56381

PROJECT NUMBER

21-373

Sheet:

1

E15

291

BORING LOCATION PLAN / SOIL PROFILES

PROPOSED NEW HANGAR

MERRITT ISLAND AIRPORT

MERRITT ISLAND, FLORIDA

Summary of Exfiltration Test Results
Proposed New Hangar-Merritt Island Airport
Merritt Island, Florida
TGS Project No. 21-373

Test Location	Date Performed	Diameter		Depth of Hole (Feet)	Depth to Groundwater Level Below Ground Surface (Feet)		Hydraulic Head, H ₁ (Feet)	Saturated Hole Depth, D _s (Feet)	Average Flow Rate, Q (gpm)	Horizontal Hydraulic Conductivity (K)	
		Hole (Inches)	Casing (Inches)		Prior to Test	During Test				(ft ³ /sec/ft ² -ft Head)	(K)
BHP-1	11/15/2021	5	4	10.0	3.0	0.0	3.0	7.0	2.50	2.07E-04	

Note:

- (1) The above hydraulic conductivity values represent an ultimate value. The designer should decide on the required factor of safety
- (2) The hydraulic conductivity values were calculated based on the South Florida Water Management District's USUAL OPEN HOLE CONSTANT HEAD percolation test procedure.
- (3) Casing diameter was used for the calculation of hydraulic conductivity values.

APPENDIX F

NUTRIENT REMOVAL ANALYSIS

Complete Report (not including cost) Ver 4.3.2

Project: COI Corporate Hangar

Date: 5/13/2022 1:48:53 PM

Site and Catchment Information

Analysis: Net Improvement

Catchment Name	Catchment 1
Rainfall Zone	Florida Zone 2
Annual Mean Rainfall	52.00

Pre-Condition Landuse Information

Landuse	SJRWMD Apopka Open Space/Recreation/Fallow Crop: TN=1.100 TP=0.050
Area (acres)	0.60
Rational Coefficient (0-1)	0.15
Non DCIA Curve Number	80.00
DCIA Percent (0-100)	5.00
Nitrogen EMC (mg/l)	1.100
Phosphorus EMC (mg/l)	0.050
Runoff Volume (ac-ft/yr)	0.380
Groundwater N (kg/yr)	0.000
Groundwater P (kg/yr)	0.000
Nitrogen Loading (kg/yr)	0.515
Phosphorus Loading (kg/yr)	0.023

Post-Condition Landuse Information

Landuse	Low-Intensity Commercial: TN=1.13 TP=0.188
Area (acres)	0.60
Rational Coefficient (0-1)	0.45
Non DCIA Curve Number	80.00
DCIA Percent (0-100)	48.10
Wet Pond Area (ac)	0.00
Nitrogen EMC (mg/l)	1.130
Phosphorus EMC (mg/l)	0.188
Runoff Volume (ac-ft/yr)	1.161
Groundwater N (kg/yr)	0.000
Groundwater P (kg/yr)	0.000

Nitrogen Loading (kg/yr)	1.618
Phosphorus Loading (kg/yr)	0.269

Catchment Number: 1 Name: Catchment 1

Project: COI Corporate Hangar
Date: 5/13/2022

Retention Design

Retention Depth (in) 2.180
 Retention Volume (ac-ft) 0.109

Watershed Characteristics

Catchment Area (acres) 0.60
 Contributing Area (acres) 0.600
 Non-DCIA Curve Number 80.00
 DCIA Percent 48.10
 Rainfall Zone Florida Zone 2
 Rainfall (in) 52.00

Surface Water Discharge

Required TN Treatment Efficiency (%) 68
 Provided TN Treatment Efficiency (%) 94
 Required TP Treatment Efficiency (%) 91
 Provided TP Treatment Efficiency (%) 94

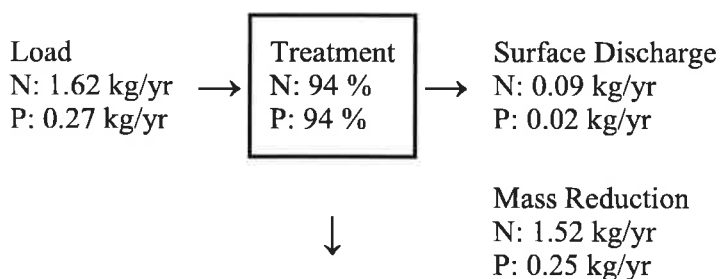
Media Mix Information

Type of Media Mix Not Specified
 Media N Reduction (%)
 Media P Reduction (%)

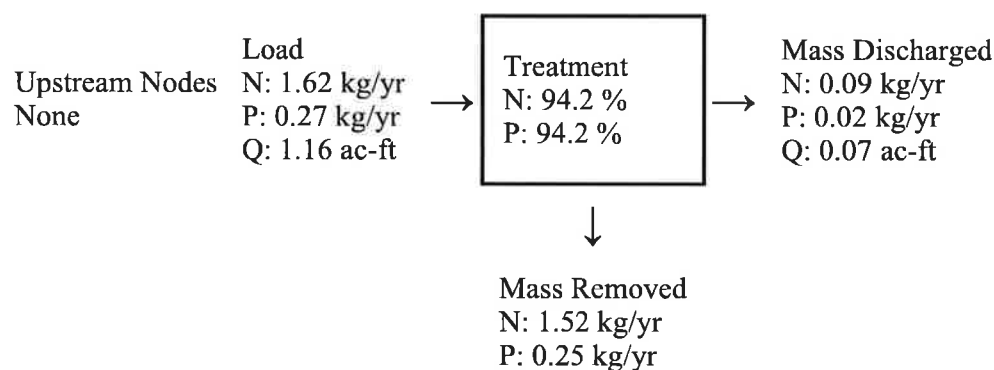
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr) 0.000
 TN Mass Load (kg/yr) 1.525
 TN Concentration (mg/L) 0.000
 TP Mass Load (kg/yr) 0.254
 TP Concentration (mg/L) 0.000

Load Diagram for Retention (stand-alone)



Load Diagram for Retention (As Used In Routing)



Summary Treatment Report Version: 4.3.2

Project: COI Corporate Hangar

Analysis Type: Net Improvement

Date: 5/13/2022

BMP Types:

Catchment 1 - (Catchment 1)
Retention
Based on % removal values to the
nearest percent

Routing Summary

Catchment 1 Routed to Outlet

Total nitrogen target removal met? **Yes**

Total phosphorus target removal met? **Yes**

Summary Report

Nitrogen

Surface Water Discharge

Total N pre load	.51 kg/yr
Total N post load	1.62 kg/yr

Target N load reduction	68 %	
Target N discharge load	.51 kg/yr	
Percent N load reduction	94 %	
Provided N discharge load	.09 kg/yr	.21 lb/yr
Provided N load removed	1.52 kg/yr	3.36 lb/yr

Phosphorus

Surface Water Discharge		
Total P pre load	.023 kg/yr	
Total P post load	.269 kg/yr	
Target P load reduction	91 %	
Target P discharge load	.023 kg/yr	
Percent P load reduction	94 %	
Provided P discharge load	.016 kg/yr	.03 lb/yr
Provided P load removed	.254 kg/yr	.559 lb/yr

The second map is the mean annual rainfall map (Figure 39). This map allows the user to find the annual rainfall amount applicable to the project site location. Appropriate selection of the mean annual rainfall amount is necessary to ensure that calculated annual runoff volumes most accurately represent the existing and proposed conditions.

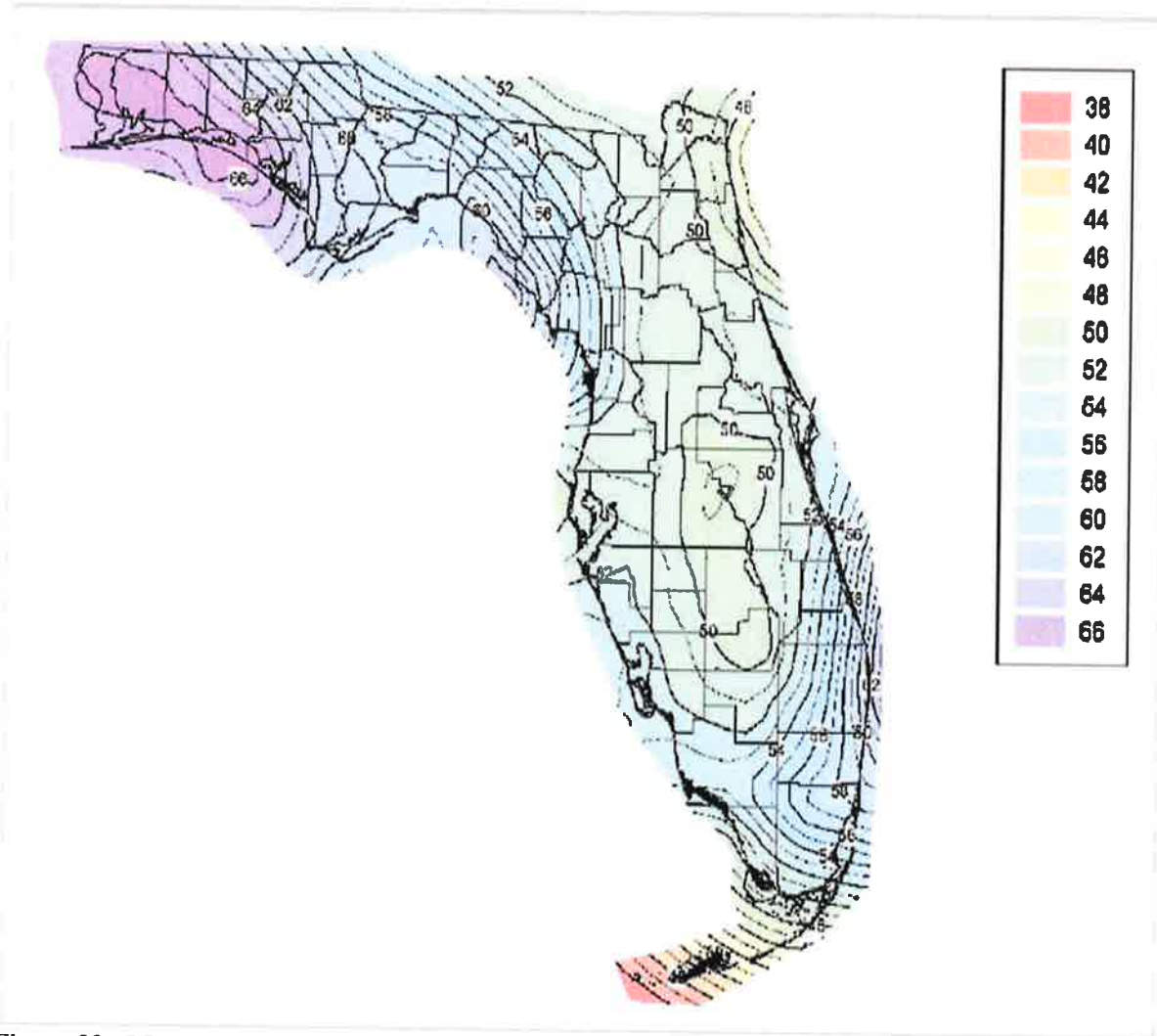


Figure 39 - Mean Annual Rainfall Map worksheet.