



MISSION RISE

Storm Water Report
Howey in the Hills
Job No. 23000180

Prepared for:

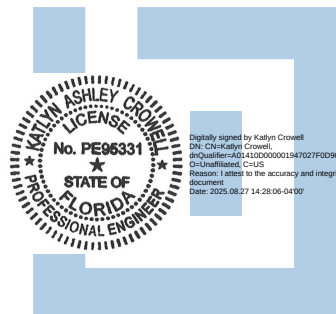
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August 29, 2025

MISSION RISE

Storm Water Report

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1.0 CONSULTANT'S STORMWATER STAFF REPORT

Project Name:	Mission Rise
Permit No.:	
Application No.:	
Application Type:	Environmental Resource Permit
Location:	Howey in the Hills
Permittee:	Turnstone Group
Operating Entity:	Turnstone Group
Permit Area:	240.56 acres
Project Land Use:	Single-Family Residential
Drainage Basin:	N/A
Special Drainage District:	N/A
Conservation Easement to District:	No
Sovereign Submerged Lands:	No

1.1 PROJECT SUMMARY

This application is for the development of Mission Rise, a single-family residential development, located in Howey in the Hills, Lake County, Florida. The project consists of an overall 405 units. Phase 1 include 157 units; Phase 2 include 79 units and Phase 3 include 169 units.

Mission Rise is designed to be compliant with stormwater quantity and quality criteria set forth by the Howey in the Hills as well as SJRWMD Statewide Environmental Resource Permit (SWERP) Manual, Volume II.

Design Criteria				
Pond to be constructed under Phase 1	Pond 1	Wet Pond	SJRWMD	100-year, 24-hour, 25-year, 24 hour & 25-year, 96 hour
	Pond 2	Wet Pond	SJRWMD	100-year, 24-hour, 25-year, 24 hour & 25-year, 96 hour
	Pond 3	Dry Pond	SJRWMD	100-year, 24-hour, 25-year, 24 hour & 25-year, 96 hour
	Pond 4	Dry Pond	SJRWMD	100-year, 24-hour, 25-year, 24 hour & 25-year, 96 hour
	Pond 5	Wet Pond	SJRWMD	100-year, 24-hour, 25-year, 24 hour & 25-year, 96 hour
Pond to be constructed under Phase 2	Pond 6	Wet Pond	SJRWMD	100-year, 24-hour, 25-year, 24 hour & 25-year, 96 hour
	Pond 7	Wet Pond	SJRWMD	100-year, 24-hour, 25-year, 24 hour & 25-year, 96 hour
	Pond 8	Wet Pond	SJRWMD	100-year, 24-hour, 25-year, 24 hour & 25-year, 96 hour
	Pond 9	Wet Pond	SJRWMD	100-year, 24-hour, 25-year, 24 hour & 25-year, 96 hour
Pond to be constructed under Phase 3	Pond 10	Wet Pond	SJRWMD	100-year, 24-hour, 25-year, 24 hour & 25-year, 96 hour
	Pond 11	Wet Pond	SJRWMD	100-year, 24-hour, 25-year, 24 hour & 25-year, 96 hour
	Pond 12	Wet Pond	SJRWMD	100-year, 24-hour, 25-year, 24 hour & 25-year, 96 hour
Roadway Design			TOWN	10-year, 24-hour, hydraulic gradient line 0.5 feet below the gutter profile Spread 4in/hr Collector/Spine Road 12ft maximum gutter spread (2' gutter + 4' bike line + 1/2 of 12' drive lane Spread 4in/hr Local and subdivision street inlets shall be spaced to prevent the spread of stormwater runoff from exceeding one inch above the crown of the road

1.2 PROJECT SITE EXISTING CONDITIONS

The property is located within the Howey in the Hills, Lake County, Florida. The project site consists of four (4) contiguous parcels. All parcels are owned by ASF TAP FL I LLC.

Northern project boundary is contiguous to Number 2 Rd. and southeast border has access onto ST 19.

Per the Geotechnical Engineering Evaluation Report, the soil test generally encountered very loose to dense fine sand (SP) or fine sand with silt, and clay (SP-SM), (SP-SC), and silty, clayey fine sand (SM) and (SC). The encountered groundwater table ranged from approximately 4 feet to 25 feet. The seasonal high groundwater level at the boring locations will generally form at depth of 0 feet to 23 feet bls depending on the boring locations.

The National Resources Conservation Service (NRCS) identifies candler sand, Myakka-myakka, tavares sand and wetland/water areas. These classifications are soils A and A/D. (please see NRCS Soils Map included on section 2 of this report).

The existing undevelopment project discharge points going to the wetlands in the corners of the project. There is 59.64 ac existing wetland within the property area.

According to the Federal Emergency Management Agency (FEMA) flood Insurance Rate Map (FIRM), the property does lie in Zone A and Zone AE, under panel number 12069C0485E, dated 12/18/2012; the rest of the site lies within Zone X (area of minimal flood hazard). The elevation in Zone AE is 83.6 ft. The flood plain elevation of the Zone A is established by Pre-development ICPR model and wetland stages.

1.3 STORMWATER MANAGEMENT DESIGN PARAMETERS

The project falls within the jurisdiction of the St. John River Florida Water Management District (SJRWMD). The design of the proposed stormwater management system for the proposed site is in the accordance with standards and criteria set forth by all jurisdictions.

- Curve Number and Time of Concentration

The Curve Numbers values were obtained from the Urban Hydrology for Small Watersheds, Technical Release 55 (TR-55), using a general hydrologic classification of the soils encountered in accordance with the USDA Soil Conservation Service. Refer to the Post-Development – Stormwater Analysis Basin Calculations in Section 3 of this report for

calculations.

Time of concentration values were developed from the information and methodologies outlined in the TR-55. Given the size of the site a minimum Time of Concentration of 10 minutes was assumed.

- Required storm events:

Storm Event	Entity	Reason
10-years, 24-hours	CITY	Secondary system storm event /Tailwater Elevation
25-years, 24-hours	SJRWMD	Design Storm/Road elevation
25-years, 96-hours	SJRWMD	Design Storm
Mean	SJRWMD	Design Storm
100-years, 24-hours	SJRWMD	Attenuation/ FF elevation

- Rainfall Information

The post development ICPR model considers the SCS Unit Hydrograph method with the 3FLMOD rainfall distributions. The following design storms and rainfall amounts (obtained from the SJRWMD Rainfall charts) were used in the analysis:

Storm Event	Rainfall Amount
10-years, 24-hours	6.04 inches
25-years, 24-hours	7.56 inches
25-years, 96-hours	10.6 inches
Mean	4.18 inches
100-years, 24-hours	14 inches

- Treatment Volume

Treatment volume is required for both type of ponds, dry and wet pond. Referring to SJRWMD Applicants Handbook Vol. II Section 5.2:

Dry Pond: According on SJRWMD, the pollution abatement volume criteria is 1.25 inches times impervious area in addition to 0.5 inches over the total area.

Wet Pond: The pollution abatement volume criteria is 2.5" over the impervious areas or 1" over the entire area, whichever is greater.

- Attenuation & Recovery

Volume will be provided to hold the 100-year, 24-hour storm under the top of bank of the proposed ponds. The post development volume of direct runoff must not exceed the pre-development volume of direct runoff of the 25-year frequency, 96-hour duration storm for systems discharging to landlocked lakes which are adjacent to properties of more than one ownership. The post development maximum rate of discharge cannot exceed the predevelopment maximum rate for the 25 year/24 storm event and Mean/24 hr storm event. BMP trains will be provided to revise the nitrogen and phosphorus target removal.

- Minimum Road and Finish Floor Elevations

Per the Howey in the Hills

Finished floor elevations will be set above the calculated 100-year, 24-hour storm flood elevation for each retention pond basin.

Minimum road elevations have been set above the calculated 25-year, 24-hour design storm flood elevation.

- Secondary Storm System Design parameters

Conveyance systems will be sized to accommodate the 10-year, 24-hour design storm event. Rainfall intensity was obtained from the FDOT Drainage Manual "Zone 7" for a 10-year event. A Manning's "n" Value of 0.013 listed for "Concrete gutter with asphalt pavement" per Table B-2 of the FDOT Drainage Design Guide (January 2019), will be used during calculations.

1.4 PROPOSED POST-DEVELOPMENT DESIGN

Mission Rise project will be divided into twelve (12) major basins (See Post-Development Exhibit in Section 2), each served by a wet pond or dry pond. The project site is designed as an open basin, with off-site discharge. Phase 1 major basins will discharge to five (5) ponds and then to the existing wetlands. The only two ponds connecting are the Pond 2 and Pond 3. Pond 3 is discharging to Pond 2 and then eventually to the wetland 4. There are four (4) wetland associate to Phase 1. Phase 2 major basins will discharge to (5) ponds and then to the existing wetlands. Pond 5 will receive discharge from Phase 1 and Phase 2. Phase 3 major basins will discharge to three (3) ponds and then to the existing wetlands.

Calculations will demonstrate that the ponds will meet all jurisdictions requirements. The Pre and Post models include offsite area discharging to Pond 5. The offsite areas will be not modified.

1.5 HYDROLOGIC ANALYSIS

Hydrologic analyses were performed with Advanced ICPR by Streamline Technologies. Runoff hydrographs were developed using the FLMOD hydrograph methodology for the 10-year, 24-hour, the 25-year, 24-hour. 25 year, 96 hours and the 100-year, 24-hour storm events.

1.6 PROPOSED POST DEVELOPMENT BASIN AREA SUMMARY

Basin	Node	Off Site Area (Ac.)	On Site Area (Ac.)
Post 1	Pond 1	0	12.87
Post 2	Pond 2	0	15.99
Post 3	Pond 3	0	6.74
Post 4	Pond 4	0	23.62
Post 5	Pond 5	0	9.43
Post 6	Pond 6	0	7.25
Post 7	Pond 7	0	7.73
Post 8	Pond 8	1.06	12.63
Post 9	Pond 9	0	11.62
Post 10	Pond 10	0	8.01
Post 11	Pond 11	0	33.76
Post 12	Pond 12	0	26.27
Wetland 1A	Wetland 1A	0	7.66
Wetland 1B	Wetland 1B	0	18.39
Wetland 1C	Wetland 1C	0	6.51
Wetland 2	Wetland 2	0	24.94
Wetland 3	Wet-08-PST	0	3.41
Wetland 4	Wetland 4	0	1.71
Wetland 5	Wetland 5	0	3.54
Total		1.06	242.08

1.7 RESULTS

Pre/Post Volumetric Difference:

Node	25 yr-96 hr Volume	
Outfall - Wetland 1A	Pre (ac-ft)	Post (ac-ft)
Basin		
Pre 12	6.88	
Pre 11A	2.48	
Pre 11B	1.57	
Outfall - Wetland 1B/1C		
Pre-10	4.15	
Pre-9A	4.03	
Pre-9B	9.77	
Pre 7	0.45	
Total=	29.33	
Outfall- Wetland 1A		
Pond 12		9.95
Outfall - Wetland 1B		
Pond 11		7.32
Pond 9		3.19
Pond 8		5.32
Outfall - Wetland 1C		
Pond 10		3.31
Total=		29.09
Outfall - Wetland 2	Pre (ac-ft)	Post (ac-ft)
Basin	Vol (ac-ft)	
Pre 8	7.00	
Offsite 8	0.41	
Total=	7.41	
Pond 7		2.06
Pond 6		1.94
Pond 5		2.98
Offsite 8		0.41
Total=		7.39

Node	25yr-96 hr Volume	
Outfall - WET-08-PST	Pre (ac-ft)	Post (ac-ft)
Basin		
Pre 6	7.49	
Pre 5	7.52	
Offsite 6	1.56	
Total=	16.57	
Post 4		11.82
Offsite 6		1.56
Total=		13.38
Outfall - Wetland 4	Pre (ac-ft)	Post (ac-ft)
Basin		
Pre 3	4.96	
Pre 2	3.12	
Total=	8.08	
Post 2		8.00
Total=		8.00
Outfall - Wetland 5	Pre (ac-ft)	Post (ac-ft)
Basin		
Pre 4	3.90	
Pre 1	0.57	
Total=	4.47	
Post 1		4.35
Total=		4.35

Wet/Dry Retention Systems Peak Stage Summary:

Basin	Pond	Mean Annual Stage (ft)	10YR-24HR Stage (ft)	25YR-24HR Stage (ft)	25YR-96HR Stage (ft)	100YR-24HR Stage (ft)	Top Elevation
Post 1	Pond 1	86.12	87.68	88.28	88.45	88.84	89
Post 2	Pond 2	85.94	86.87	87.04	87.23	87.57	89
Post 3	Pond 3	93.66	93.8	94.01	94.03	94.36	96
Post 4	Pond 4	86.75	87.1	87.34	87	87.85	90
Post 5	Pond 5	86.21	86.92	87.56	87.94	88.84	90
Post 6	Pond 6	86.79	87.61	88.32	88.67	89.11	90
Post 7	Pond 7	86.38	87.14	87.8	88.14	88.35	90
Post 8	Pond 8	86.18	86.7	87.14	87.12	87.83	89
Post 9	Pond 9	85.13	85.8	86.43	86.78	87.16	89
Post 10	Pond 10	85.15	85.52	85.8	85.9	86.26	89
Post 11	Pond 11	89.83	90.83	91.72	92.37	92.74	94
Post 12	Pond 12	85.97	86.81	87.06	87.24	87.85	89

2.0 MAP & EXHIBITS

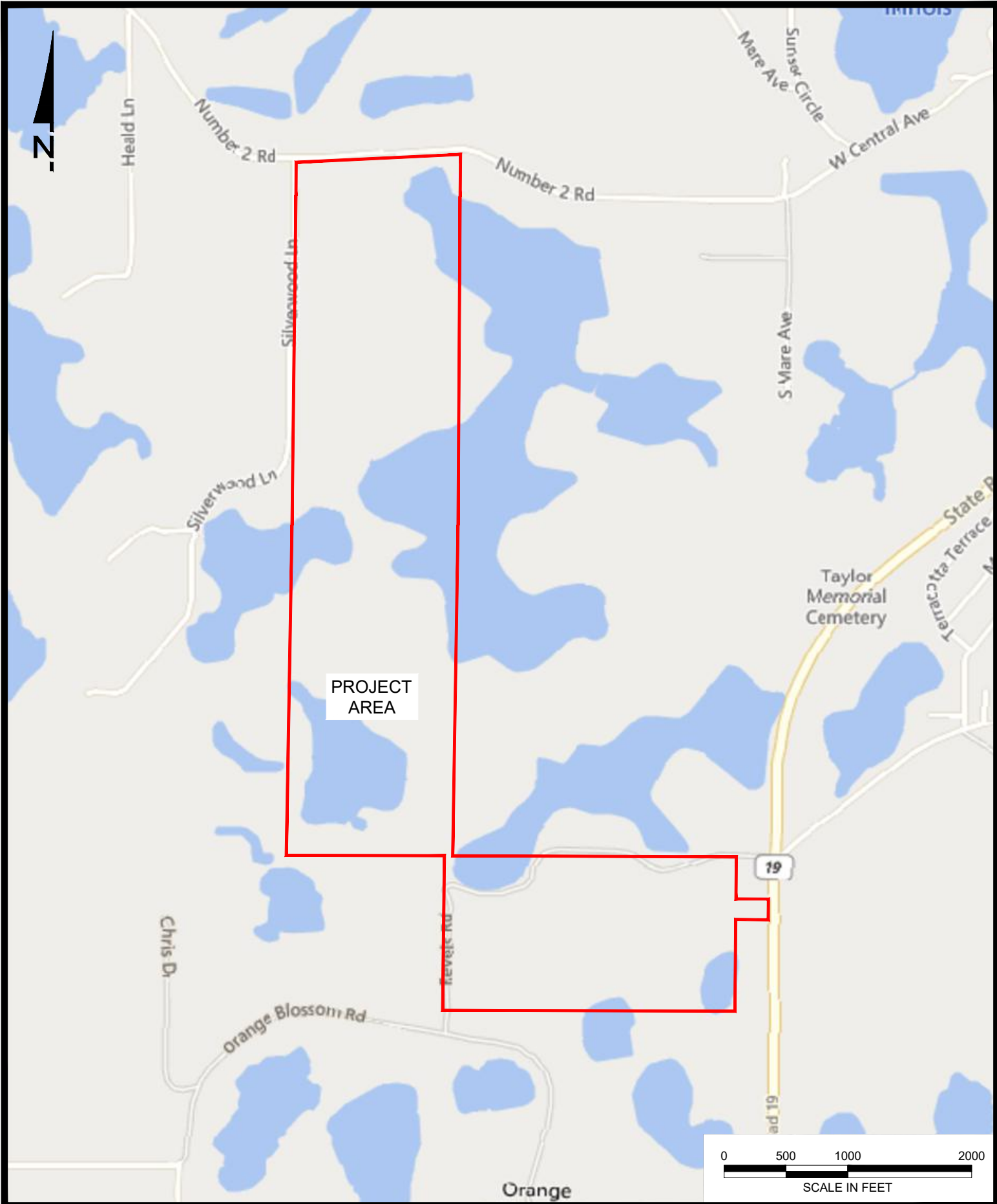
2.1 **LOCATION MAP**

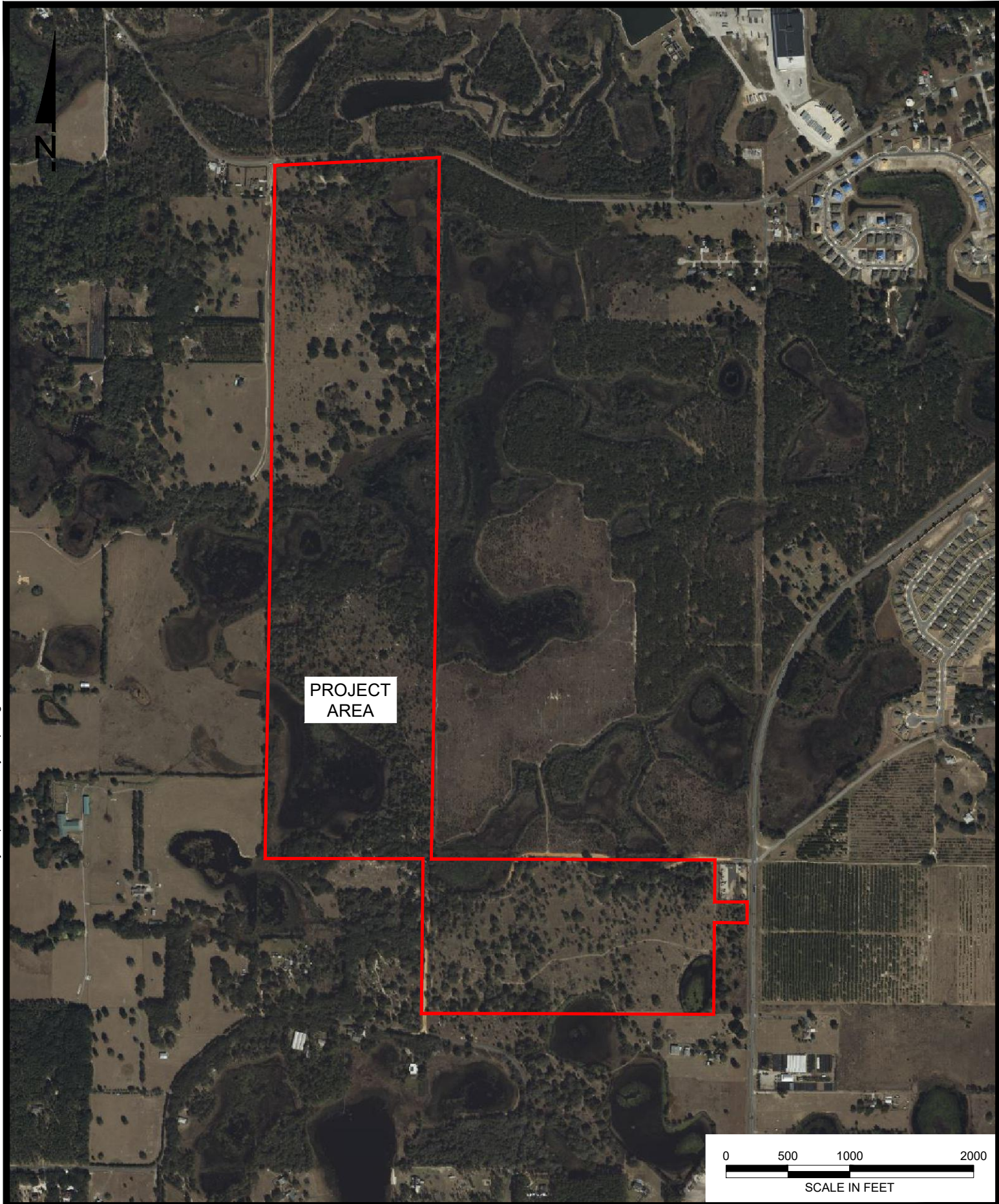
2.2 **AERIAL MAP**

2.3 **NRCS SOILS MAP**

2.4 **FEMA MAP**

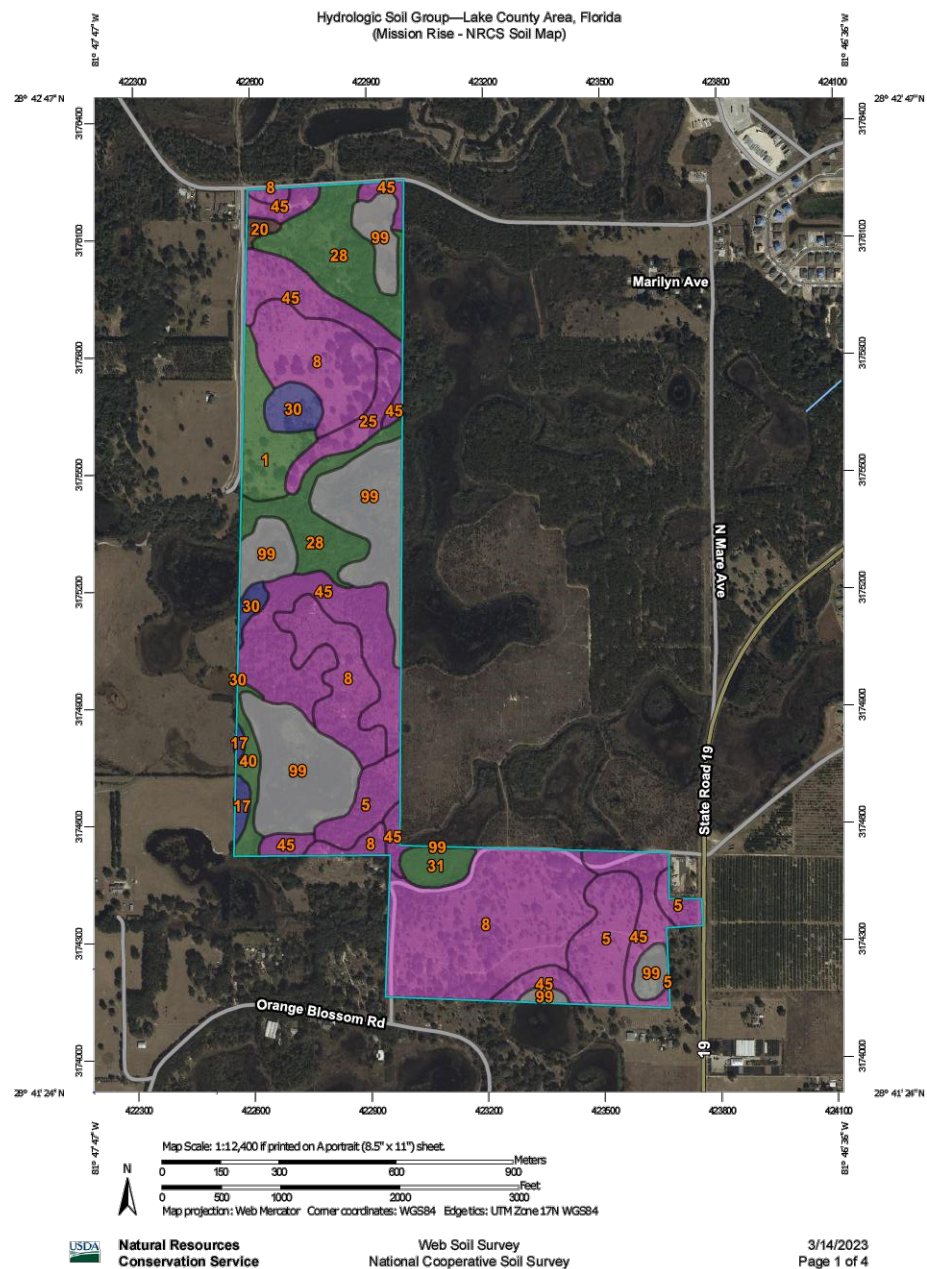
K:\23000180 Mission Rise DD and PSP\DWG\Exhibit\E04-Vicinity Map\E04-Vicinity Map.dwg



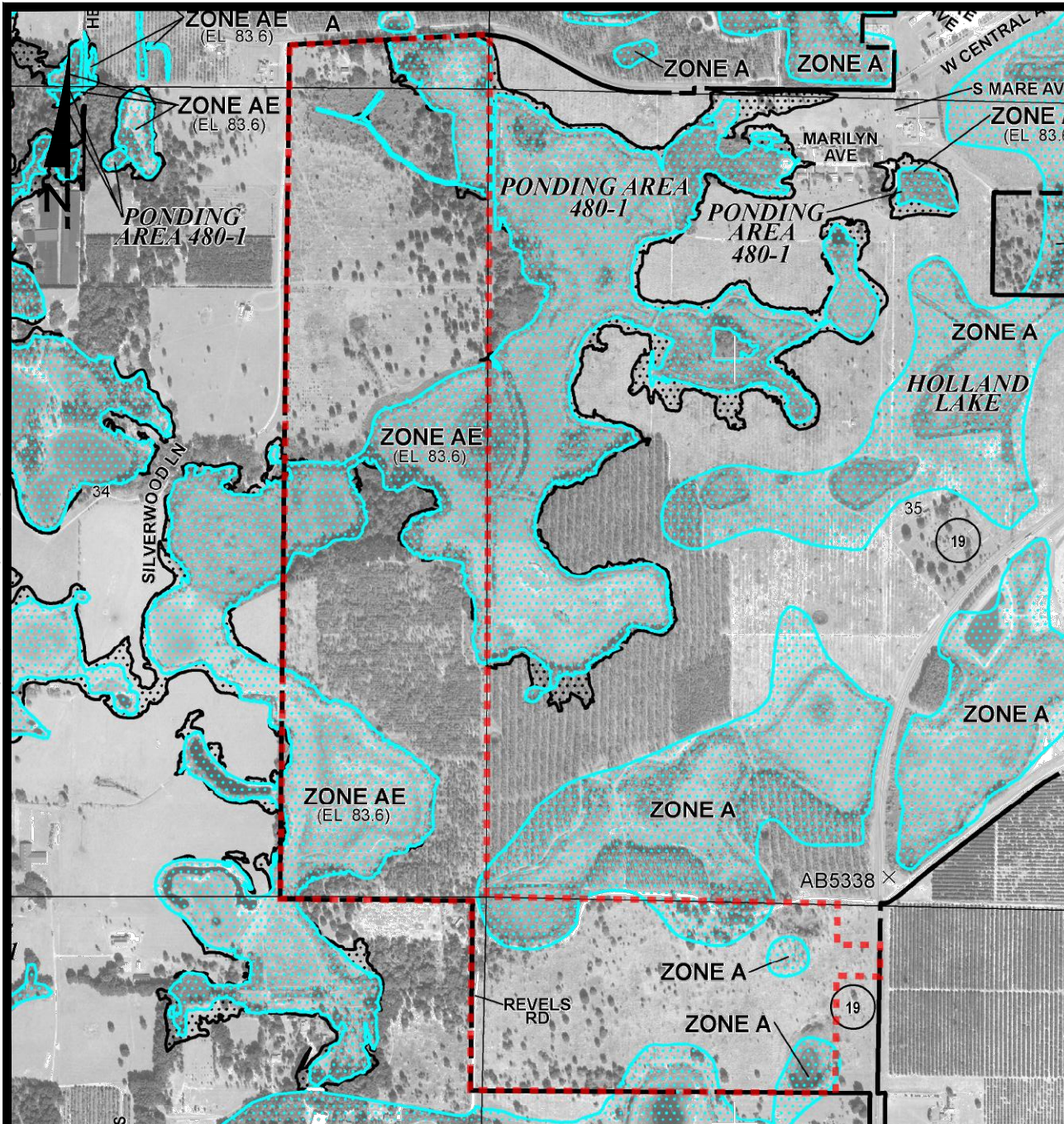


PROJECT
AREA

0 500 1000 2000
SCALE IN FEET



Map unit symbol	Map unit name	Rating	Acres in ACI	Percent of ACI
1	Sparr sand, 0 to 5 percent slopes	A/D	8.4	3.8%
5	Apoka sand, 0 to 5 percent slopes	A	18.6	7.9%
8	Candler sand, 0 to 5 percent slopes	A	72.3	29.1%
17	Arenia	B	1.7	0.7%
20	Immokalee sand	B/D	1.0	0.4%
25	Kendrick sand, 5 to 8 percent slopes	A	6.2	2.5%
29	Myakka-Myakka, wet, sands, 0 to 2 percent slopes	A/D	26.7	10.6%
30	Lochloosa sand	B	5.4	2.2%
31	Ocoee mucky peat	A/D	4.1	1.7%
40	Pleick and Myakka sands, depressional	A/D	3.8	1.5%
48	Terrace sand, 0 to 5 percent slopes	A	80.6	20.4%
99	Water		47.4	19.1%
Totals for Area of Interest			248.2	100.0%



NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0485E

FIRM

FLOOD INSURANCE RATE MAP
LAKE COUNTY,
FLORIDA
AND INCORPORATED AREAS

PANEL 485 OF 750

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

<u>COMMUNITY</u>	<u>NUMBER</u>	<u>PANEL</u>	<u>SUFFIX</u>
ASTATULA, TOWN OF	120581	0485	E
HOWEY IN THE HILLS, TOWN OF	120585	0485	E
LAKE COUNTY	120421	0485	E
TAVARES, CITY OF	120138	0485	E

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.



MAP NUMBER
12069C0485E

MAP REVISED
DECEMBER 18, 2012

Federal Emergency Management Agency

3.0 PRE-DEVELOPMENT ANALYSIS AND CALCULATIONS

3.1 PRE-DEVELOPMENT BASIN MAP

3.2 PRE-DEVELOPMENT BASIN CALCS

3.3 PRE-DEVELOPMENT ICPR



THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

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 COA# 29091



SEC 27,34 TWP 20 S RGE 25 E

HOWEY-IN-THE-HILL S

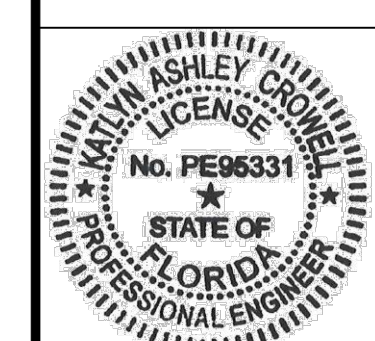
LAKE COUNTY, FLORIDA

MISSION RISE

TURNSTONE GROUP
PRELIMINARY SUBDIVISION

DATE 02/27/2025

REVISIONS



DRAWN BY: AP
CHECKED BY: ZOR
PROJECT MANAGER: KC
JOB #: 23000180
FILE CODE: --
SHEET NO.



NORTH AMERICAN DATUM OF 1983
FLORIDA STATE PLANE, EAST ZONE

0 125 250 500

GRAPHIC SCALE
1" = 250'

PSPXX-XXXX

Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Pre-Development

Basin: Pre Basin 1 Pond: N/A Basin Area: 23.37 acres Pond Area @ Bot: N/A acres Pond Bottom Elev.: N/A ft Time of Concentration: 10 min			
Land Use:	Total Area (ac)	CN	
Impervious	0.09	98	8.82
Pasture, Grassland (Fair)- A/D	6.52	49	319.48
Pasture , Grassland (Fair) - B/D	1.23	69	84.87
Pasture, Grassland (Good) - A	15.53	39	605.67
Totals	23.37		1018.84
Weighted Curve Number (CN) = 44.0			

Time of Concentration:

(ref. SCS TR-55, Second Ed., June 1986)

Sheet flow	n= 0.130	P2= 4.18 in
	L= 100 ft	s = 0.006 ft/ft
	Start Elev= 102.3	T= 0.21 hrs
	End Elev= 101.7	
Shallow concentrated flow (Fig. 3-1):		
Unpaved		Paved
	L= 755 ft	L= 0 ft
	Start Elev= 101.7	s = 0.001 ft/ft
	End Elev= 81	T= 0.000 hrs
	s = 0.027 ft/ft	v= 2.00 ft/sec
	v= 2.600 ft/sec	(assumed)
	T= 0.081 hrs	
Pipe flow:	L= 0.00 ft	
	T= 0.00 hrs	
	T.C. = 0.29 hrs	
	= 17 min	



**Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Pre-Development**

Basin: Pre Basin 2A/AB			
Pond: N/A			
Basin Area:	13.29	acres	
Pond Area @ Bot:	N/A	acres	
Pond Bottom Elev.:	N/A	ft	
Time of Concentration:	10	min	
Land Use:	Total Area (ac)	CN	
Wood-Grass Combination (Fair) - A/D	5.76	49	282.24
Wood-Grass Combination (Fair) - B/D	7.53	69	519.57
Totals	13.29		801.81
Weighted Curve Number (CN) = 60.0			

Time of Concentration:

(ref. SCS TR-55, Second Ed., June 1986)

Sheet flow	n=	0.130	P2=	4.18 in
	L=	100 ft	s =	0.022 ft/ft
	Start Elev=	93	T=	0.12 hrs
	End Elev=	90.8		
Shallow concentrated flow (Fig. 3-1):				
Unpaved	L=	662 ft	Paved	
	Start Elev=	90.8	L=	0 ft
	End Elev=	80	s =	0.001 ft/ft
	s =	0.016 ft/ft	T=	0.000 hrs
	v=	2.000 ft/sec	v=	2.00 ft/sec
	T=	0.092 hrs		(assumed)
Pipe flow:	L=	0.00 ft		
	T=	0.00 hrs		
	T.C. =	0.21 hrs		
	=	13 min		



**Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Pre-Development**

Basin: Pre Basin 2A/AB			
Pond: N/A			
Basin Area:	13.29	acres	
Pond Area @ Bot:	N/A	acres	
Pond Bottom Elev.:	N/A	ft	
Time of Concentration:	10	min	
Land Use:	Total Area (ac)	CN	
Wood-Grass Combination (Fair) - A/D	5.76	49	282.24
Wood-Grass Combination (Fair) - B/D	7.53	69	519.57
Totals	13.29		801.81
Weighted Curve Number (CN) = 60.0			

Time of Concentration:

(ref. SCS TR-55, Second Ed., June 1986)

Sheet flow	n=	0.130	P2=	4.18 in
	L=	100 ft	s =	0.006 ft/ft
	Start Elev=	99	T=	0.21 hrs
	End Elev=	98.4		
Shallow concentrated flow (Fig. 3-1):				
Unpaved			Paved	
	L=	525 ft	L=	0 ft
	Start Elev=	98.4	s =	0.001 ft/ft
	End Elev=	83	T=	0.000 hrs
	s =	0.029 ft/ft	v=	2.00 ft/sec
	v=	2.800 ft/sec		(assumed)
	T=	0.052 hrs		
Pipe flow:	L=	0.00 ft		
	T=	0.00 hrs		
	T.C. =	0.26 hrs		
	=	16 min		



Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Pre-Development

Basin: Pre Basin 3			
Pond: N/A			
Basin Area:	15.19	acres	
Pond Area @ Bot:	N/A	acres	
Pond Bottom Elev.:	N/A	ft	
Time of Concentration:	10	min	
Land Use:	Total	CN	
	Area (ac)		
Pasture, Grassland (Good) - B	3.92	61	239.12
Pasture, Grassland (Good) - A	3.84	39	149.76
Pasture, Grassland (Fair) - A/D	7.43	49	364.07
Total	15.19		752.95
Weighted Curve Number (CN) = 50.0			

Time of Concentration:

(ref. SCS TR-55, Second Ed., June 1986)

Sheet flow	n=	0.130	P2=	4.18 in
	L=	100 ft	s =	0.004 ft/ft
	Start Elev=	102.3	T=	0.24 hrs
	End Elev=	101.9		
Shallow concentrated flow (Fig. 3-1):				
Unpaved			Paved	
	L=	588 ft	L=	0 ft
	Start Elev=	101.9	s =	0.001 ft/ft
	End Elev=	81.7	T=	0.000 hrs
	s =	0.034 ft/ft	v=	2.00 ft/sec
	v=	3.000 ft/sec		(assumed)
	T=	0.054 hrs		
Pipe flow:	L=	0.00 ft		
	T=	0.00 hrs		
	T.C. =	0.30 hrs		
	=	18 min		



**Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Pre-Development**

Basin: Pre Basin 4A/4B			
Pond: N/A			
Basin Area:	41.00	acres	
Pond Area @ Bot:	N/A	acres	
Pond Bottom Elev.:	N/A	ft	
Time of Concentration:	10	min	
Land Use:	Total Area (ac)	CN	
Pasture, Grassland (Good) - A	23.12	39	901.68
Fallow (CR) (Good) - A	7.81	74	577.94
Pasture, Grassland (Fair) - A/D	3.73	49	182.77
Fallow (CR) (Poor) - A/D	5.11	76	388.36
Pasture, Grassland (Good) - B	1.23	61	75.03
Total	41.00		2125.78
Weighted Curve Number (CN) = 52.0			

Time of Concentration:

(ref. SCS TR-55, Second Ed., June 1986)

Sheet flow	n=	0.130	P2=	4.18 in
	L=	100 ft	s =	0.050 ft/ft
	Start Elev=	99	T=	0.09 hrs
	End Elev=	94		
Shallow concentrated flow (Fig. 3-1):				
Unpaved				
	L=	640 ft	Paved L=	0 ft
	Start Elev=	94	s =	0.001 ft/ft
	End Elev=	84	T=	0.000 hrs
	s =	0.016 ft/ft	v=	2.00 ft/sec
	v=	2.000 ft/sec		(assumed)
	T=	0.089 hrs		
Pipe flow:				
	L=	0.00 ft		
	T=	0.00 hrs		
	T.C. =	0.18 hrs		
	=	11 min		



**Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Pre-Development**

Basin: Pre Basin 4A/4B			
Pond: N/A			
Basin Area:	41.00	acres	
Pond Area @ Bot:	N/A	acres	
Pond Bottom Elev.:	N/A	ft	
Time of Concentration:	10	min	
Land Use:	Total Area (ac)	CN	
Pasture, Grassland (Good) - A	23.12	39	901.68
Fallow (CR) (Good) - A	7.81	74	577.94
Pasture, Grassland (Fair) - A/D	3.73	49	182.77
Fallow (CR) (Poor) - A/D	5.11	76	388.36
Pasture, Grassland (Good) - B	1.23	61	75.03
Total	41.00		2125.78
Weighted Curve Number (CN) = 52.0			

Time of Concentration:

(ref. SCS TR-55, Second Ed., June 1986)

Sheet flow	n=	0.130	P2=	4.18 in
	L=	100 ft	s =	0.010 ft/ft
	Start Elev=	99.2	T=	0.17 hrs
	End Elev=	98.2		
Shallow concentrated flow (Fig. 3-1):				
Unpaved				
	L=	640 ft	Paved L=	0 ft
	Start Elev=	98.2	s =	0.001 ft/ft
	End Elev=	80	T=	0.000 hrs
	s =	0.028 ft/ft	v=	2.00 ft/sec
	v=	2.700 ft/sec		(assumed)
	T=	0.066 hrs		
Pipe flow:				
	L=	0.00 ft		
	T=	0.00 hrs		
	T.C. =	0.23 hrs		
	=	14 min		



**Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Pre-Development**

Basin: Pre Basin 5			
Pond: N/A			
Basin Area:	17.40	acres	
Pond Area @ Bot:	N/A	acres	
Pond Bottom Elev.:	N/A	ft	
Time of Concentration:	10	min	
Land Use:	Total Area (ac)	CN	
Pasture, Grassland (Good) - A	17.40	39	678.60
Total	17.40		678.60
Weighted Curve Number (CN) = 39.0			

Time of Concentration:

(ref. SCS TR-55, Second Ed., June 1986)

Sheet flow		n=	0.130	P2=	4.18 in
		L=	100 ft	s =	0.016 ft/ft
		Start Elev=	99.2	T=	0.14 hrs
		End Elev=	97.6		
Shallow concentrated flow (Fig. 3-1):					
Unpaved				Paved	
		L=	626 ft	L=	0 ft
		Start Elev=	97.6	s =	0.001 ft/ft
		End Elev=	85	T=	0.000 hrs
		s =	0.020 ft/ft	v=	2.00 ft/sec
		v=	2.300 ft/sec		(assumed)
		T=	0.076 hrs		
Pipe flow:					
		L=	0.00 ft		
		T=	0.00 hrs		
		T.C. =	0.21 hrs		
		=	13 min		



Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Pre-Development

Basin: Pre Basin 6 Pond: N/A Basin Area: 1.13 acres Pond Area @ Bot: N/A acres Pond Bottom Elev.: N/A ft Time of Concentration: 10 min			
Land Use:	Total Area (ac)	CN	
Pasture, Grassland (Good) - A	1.13	39	44.07
Total	1.13		44.07
Weighted Curve Number (CN) = 39.0			

Time of Concentration:

(ref. SCS TR-55, Second Ed., June 1986)

Sheet flow				P2= 4.18 in			
	n=	0.130			s =	0.027 ft/ft	
	L=	100 ft			T=	0.11 hrs	
	Start Elev=	92.5					
	End Elev=	89.8					
Shallow concentrated flow (Fig. 3-1):							
Unpaved				Paved			
	L=	214 ft			L=	0 ft	
	Start Elev=	89.8			s =	0.001 ft/ft	
	End Elev=	80			T=	0.000 hrs	
	s =	0.046 ft/ft			v=	2.00 ft/sec	
	v=	3.400 ft/sec				(assumed)	
	T=	0.017 hrs					
Pipe flow:							
	L=	0.00 ft					
	T=	0.00 hrs					
	T.C. =	0.13 hrs					
	=	8 min					
				Less of 10 min ---> use 10 min			



Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Pre-Development

Basin: Pre Basin 7 Pond: N/A Basin Area: 16.30 acres Pond Area @ Bot: N/A acres Pond Bottom Elev.: N/A ft Time of Concentration: 10 min			
Land Use:	Total Area (ac)	CN	
Pasture, Grassland (Good) - A	15.77	39	615.03
Impervious Area, Dirt Road - A	0.53	72	38.16
Total	16.30		653.19
Weighted Curve Number (CN) = 40.0			

Time of Concentration:

(ref. SCS TR-55, Second Ed., June 1986)

Sheet flow	n=	0.130	P2=	4.18 in
	L=	100 ft	s =	0.021 ft/ft
	Start Elev=	106.4	T=	0.12 hrs
	End Elev=	104.3		
Shallow concentrated flow (Fig. 3-1):				
Unpaved				
	L=	626 ft	Paved	
	Start Elev=	104.3	L=	0 ft
	End Elev=	80	s =	0.001 ft/ft
	s =	0.039 ft/ft	T=	0.000 hrs
	v=	3.200 ft/sec	v=	2.00 ft/sec
	T=	0.054 hrs		(assumed)
Pipe flow:	L=	0.00 ft		
	T=	0.00 hrs		
	T.C. =	0.18 hrs		
	=	11 min		



Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Pre-Development

Basin: Pre Basin 8 Pond: N/A Basin Area: 17.27 acres Pond Area @ Bot: N/A acres Pond Bottom Elev.: N/A ft Time of Concentration: 10 min			
Land Use:	Total Area (ac)	CN	
Impervious, Dirt Road - A	0.35	72	25.20
Pasture, Grassland (Good) - A	16.92	39	659.88
Total	17.27		685.08
Weighted Curve Number (CN) = 40.0			

Time of Concentration:

(ref. SCS TR-55, Second Ed., June 1986)

Sheet flow		n= 0.130	P2= 4.18 in
		L= 100 ft	s = 0.019 ft/ft
	Start Elev= 106.4		T= 0.13 hrs
	End Elev= 104.5		
Shallow concentrated flow (Fig. 3-1):			
Unpaved			Paved
	L= 1554 ft	L= 0 ft	
	Start Elev= 104.5	s = 0.001 ft/ft	
	End Elev= 80	T= 0.000 hrs	
	s = 0.016 ft/ft	v= 2.00 ft/sec	(assumed)
	v= 2.100 ft/sec		
	T= 0.206 hrs		
Pipe flow:		L= 0.00 ft	
		T= 0.00 hrs	
	T.C. = 0.34 hrs		
	= 20 min		



Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Pre-Development

Basin: Pre Basin 9 Pond: N/A Basin Area: 9.98 acres Pond Area @ Bot: N/A acres Pond Bottom Elev.: N/A ft Time of Concentration: 10 min			
Land Use:	Total Area (ac)	CN	
Pasture, Grassland (Good) - A	9.98	39	389.22
Total	9.98		389.22
Weighted Curve Number (CN) = 39.0			

Time of Concentration:

(ref. SCS TR-55, Second Ed., June 1986)

Sheet flow				P2= 4.18 in			
	n=	0.130			s =	0.011 ft/ft	
	L=	100 ft			T=	0.16 hrs	
	Start Elev=	94.6					
	End Elev=	93.5					
Shallow concentrated flow (Fig. 3-1):							
Unpaved				Paved			
	L=	426 ft			L=	0 ft	
	Start Elev=	93.5			s =	0.001 ft/ft	
	End Elev=	80			T=	0.000 hrs	
	s =	0.032 ft/ft			v=	2.00 ft/sec	
	v=	2.900 ft/sec				(assumed)	
	T=	0.041 hrs					
Pipe flow:							
	L=	0.00 ft					
	T=	0.00 hrs					
	T.C. =	0.20 hrs					
	=	12 min					



Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Pre-Development

Basin: Pre Basin 10			
Pond: N/A			
Basin Area:	11.33	acres	
Pond Area @ Bot:	N/A	acres	
Pond Bottom Elev.:	N/A	ft	
Time of Concentration:	10	min	
Land Use:	Total Area (ac)	CN	
Pasture, Grassland (Good) - A	11.33	39	441.87
Totals	11.33		441.87
Weighted Curve Number (CN) = 39.0			

Time of Concentration:

(ref. SCS TR-55, Second Ed., June 1986)

Sheet flow		n=	0.130	P2=	4.18 in
		L=	100 ft	s =	0.022 ft/ft
		Start Elev=	106.4	T=	0.12 hrs
		End Elev=	104.2		
Shallow concentrated flow (Fig. 3-1):					
Unpaved		L=	427 ft	Paved	
		Start Elev=	104.2	L=	0 ft
		End Elev=	83	s =	0.001 ft/ft
		s =	0.050 ft/ft	T=	0.000 hrs
		v=	3.600 ft/sec	v=	2.00 ft/sec
		T=	0.033 hrs		(assumed)
Pipe flow:		L=	0.00 ft		
		T=	0.00 hrs		
T.C. =			0.16 hrs		
			9 min		Less of 10 min ---> use 10 min



Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Pre-Development

Basin: Pre Basin 11 Pond: N/A Basin Area: 6.75 acres Pond Area @ Bot: N/A acres Pond Bottom Elev.: N/A ft Time of Concentration: 10 min			
Land Use:	Total Area (ac)	CN	
Impervious Area, Dirt Road	0.25	72	18.00
Pasture, Grassland (Good) - A	6.50	39	253.50
Totals	6.75		271.50
Weighted Curve Number (CN) = 40.0			

Time of Concentration:

(ref. SCS TR-55, Second Ed., June 1986)

Sheet flow	n=	0.130	P2=	4.18 in
	L=	100 ft	s =	0.022 ft/ft
	Start Elev=	109.2	T=	0.12 hrs
	End Elev=	107		
Shallow concentrated flow (Fig. 3-1):				
Unpaved			Paved	
	L=	500 ft	L=	0 ft
	Start Elev=	107		
	End Elev=	91		
	s =	0.032 ft/ft	s =	0.001 ft/ft
	v=	2.900 ft/sec		
	T=	0.048 hrs	T=	0.000 hrs
Pipe flow:	L=	0.00 ft	v=	2.00 ft/sec
	T=	0.00 hrs		(assumed)
	T.C. =	0.17 hrs		
	=	10 min		



Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Pre-Development

Basin: Pre Basin 12			
Pond: N/A			
Basin Area:	1.45	acres	
Pond Area @ Bot:	N/A	acres	
Pond Bottom Elev.:	N/A	ft	
Time of Concentration:	10	min	
Land Use:	Total Area (ac)	CN	
Wetlands	0.18	100	18.00
Pasture, Grassland (Good) - A	1.27	39	49.53
Total	1.45		67.53
Weighted Curve Number (CN) = 47.0			

Time of Concentration:

(ref. SCS TR-55, Second Ed., June 1986)

Sheet flow	n=	0.130	P2=	4.18 in
	L=	100 ft	s =	0.035 ft/ft
	Start Elev=	99	T=	0.10 hrs
	End Elev=	95.5		
Shallow concentrated flow (Fig. 3-1):				
Unpaved			Paved	
	L=	384 ft	L=	0 ft
	Start Elev=	95.5	s =	0.001 ft/ft
	End Elev=	80	T=	0.000 hrs
	s =	0.040 ft/ft	v=	2.00 ft/sec
	v=	3.200 ft/sec		(assumed)
	T=	0.033 hrs		
Pipe flow:	L=	0.00 ft		
	T=	0.00 hrs		
	T.C. =	0.14 hrs		
	=	8 min		

Less of 10 min ---> use 10 min



Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Pre-Development

Basin: OFFSITE-5 Pond: N/A Basin Area: 1.06 acres Pond Area @ Bot: N/A acres Pond Bottom Elev.: N/A ft Time of Concentration: 10 min			
Land Use:	Total Area (ac)	CN	
Pasture, Grassland (Good) - A	0.35	39	13.65
Pasture, Grassland (Fair) - A/D	0.15	49	7.20
Pasture, Grassland (Good) - B	0.56	61	34.34
Total	1.06		55.20
Weighted Curve Number (CN) =			52.0

Time of Concentration:

(ref. SCS TR-55, Second Ed., June 1986)

Sheet flow	n=	0.130	P2=	4.5 in
	L=	100 ft	s =	0.012 ft/ft
	Start Elev=	90.8	T=	0.15 hrs
	End Elev=	89.6		
Shallow concentrated flow (Fig. 3-1):				
Unpaved			Paved	
	L=	352 ft	L=	0 ft
	Start Elev=	89.6	s =	0.001 ft/ft
	End Elev=	81.5	T=	0.000 hrs
	s =	0.023 ft/ft	v=	2.00 ft/sec
	v=	2.400 ft/sec		(assumed)
	T=	0.041 hrs		
Pipe flow:	L=	0.00 ft		
	T=	0.00 hrs		
	T.C. =	0.19 hrs		
	=	11 min		



Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Pre-Development

Basin: OFFSITE-7			
Pond: N/A			
Basin Area:	2.78	acres	
Pond Area @ Bot:	N/A	acres	
Pond Bottom Elev.:	N/A	ft	
Time of Concentration:	10	min	
Land Use:	Total Area (ac)	CN	
Pasture, Grassland (Good) - A	0.03	39	1.17
Pasture, Grassland (Good) - B	2.75	61	167.75
Total	2.78		168.92
Weighted Curve Number (CN) = 61.0			

Time of Concentration:

(ref. SCS TR-55, Second Ed., June 1986)

Sheet flow	n=	0.130	P2=	4.5 in
	L=	100 ft	s =	0.002 ft/ft
	Start Elev=	94	T=	0.31 hrs
	End Elev=	93.8		
Shallow concentrated flow (Fig. 3-1):				
Unpaved			Paved	
	L=	330 ft	L=	0 ft
	Start Elev=	93.8	s =	0.001 ft/ft
	End Elev=	85	T=	0.000 hrs
	s =	0.027 ft/ft	v=	2.00 ft/sec
	v=	2.600 ft/sec		(assumed)
	T=	0.035 hrs		
Pipe flow:	L=	0.00 ft		
	T=	0.00 hrs		
	T.C. =	0.34 hrs		
	=	21 min		



Manual Basin: OFFSITE-6

Scenario: Pre-development
 Node: WET-08-PST
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 21.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 2.7808 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
1.5437	1100: Residential, low density - less than 2 dwelling units/acre	B			
1.1557	2120: Unimproved pastures	B			
0.0557	4340: Upland mixed coniferous/hardwood	B			
0.0224	1100: Residential, low density - less than 2 dwelling units/acre	A			
0.0034	2120: Unimproved pastures	A			

Comment:

Manual Basin: OFFSITE-8

Scenario: Pre-development
 Node: Wetland 2
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 11.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 1.0629 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.5314	2120: Unimproved pastures	B			

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0449	4340: Upland mixed coniferous/hardwood	A/D			
0.3486	4340: Upland mixed coniferous/hardwood	A			
0.0454	4340: Upland mixed coniferous/hardwood	B			
0.0481	6460: Mixed scrub-shrub wetland	A/D			
0.0445	6410: Freshwater marshes	A/D			

Comment:

Manual Basin: PRE-1

Scenario: Pre-development
 Node: Wetland 6
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 1.4584 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
1.4584	2120: Unimproved pastures	A			

Comment:

Manual Basin: PRE-10

Scenario: Pre-development
 Node: Pre 10
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number

Time of Concentration: 17.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 15.1998 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
3.7362	2130: Woodland pastures	A/D			
0.1211	2110: Improved pastures (monocult, planted forage crops)	A/D			
11.3425	2130: Woodland pastures	B			

Comment:

Manual Basin: PRE-11A

Scenario: Pre-development
 Node: Wetland 1A
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 13.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 7.1189 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
1.5321	6460: Mixed scrub-shrub wetland	A/D			
1.5710	6300: Wetland forested mixed	A/D			
0.4144	1180: Rural residential	A/D			
1.8075	4340: Upland mixed coniferous/hardwood	A/D			
0.0038	6440: Emergent aquatic vegetation	A/D			
0.4393	1180: Rural residential	A			

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
1.1084	4340: Upland mixed coniferous/hardwood	A			
0.1497	1180: Rural residential	B			
0.0011	6440: Emergent aquatic vegetation	A			
0.0482	4340: Upland mixed coniferous/hardwood	B			
0.0435	4410: Pine plantation	A			

Comment:

Manual Basin: PRE-11B

Scenario: Pre-development
 Node: Wetland 1A
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 15.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 6.1919 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
2.9343	2130: Woodland pastures	A			
1.9822	2130: Woodland pastures	B			
0.7784	2130: Woodland pastures	A/D			
0.4970	6460: Mixed scrub-shrub wetland	A/D			
0.0001	6440: Emergent aquatic vegetation	A/D			

Comment:

Manual Basin: PRE-12

Scenario: Pre-development
 Node: Pre 12
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 17.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 23.3911 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
5.5488	2130: Woodland pastures	B			
1.8003	2130: Woodland pastures	A/D			
0.0323	2110: Improved pastures (monocult, planted forage crops)	A/D			
7.7391	2130: Woodland pastures	A			
0.1956	2110: Improved pastures (monocult, planted forage crops)	A			
3.5759	6460: Mixed scrub-shrub wetland	A/D			
0.8898	6300: Wetland forested mixed	A/D			
0.0316	6460: Mixed scrub-shrub wetland	A			
0.0292	2110: Improved pastures (monocult, planted forage crops)	B/D			
0.7989	2130: Woodland pastures	B/D			
0.1069	6460: Mixed scrub-shrub wetland	B/D			
0.2905	1180: Rural residential	B/D			
0.2054	1180: Rural residential	A/D			
1.4408	1180: Rural residential	A			

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.7059	1180: Rural residential	B			

Comment:

Manual Basin: PRE-2

Scenario: Pre-development
 Node: Wetland 4
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 6.7636 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
6.7636	2120: Unimproved pastures	B			

Comment:

Manual Basin: PRE-3

Scenario: Pre-development
 Node: Wetland 4
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 11.3398 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0523	1180: Rural residential	A			
7.4313	2120: Unimproved pastures	B			
3.8562	2120: Unimproved pastures	A			

Comment:

Manual Basin: PRE-4

Scenario: Pre-development
 Node: Wetland 5
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 12.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 9.9857 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0631	1180: Rural residential	A			
9.9225	2120: Unimproved pastures	A			

Comment:

Manual Basin: PRE-5

Scenario: Pre-development
 Node: WET-08-PST
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 20.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 17.2870 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
11.4958	2120: Unimproved pastures	B			
4.8506	2120: Unimproved pastures	A			
0.8124	6460: Mixed scrub-shrub wetland	A			
0.1193	6460: Mixed scrub-shrub wetland	B			

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0090	4430: Forest regeneration	B			

Comment:

Manual Basin: PRE-6

Scenario: Pre-development
 Node: WET-08-PST
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 16.3073 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
13.8236	2120: Unimproved pastures	B			
0.4497	1100: Residential, low density - less than 2 dwelling units/acre	B			
0.1644	6460: Mixed scrub-shrub wetland	B			
0.1677	6460: Mixed scrub-shrub wetland	A/D			
0.2442	6460: Mixed scrub-shrub wetland	A			
0.0139	2120: Unimproved pastures	A/D			
0.1538	1100: Residential, low density - less than 2 dwelling units/acre	A			
1.2901	2120: Unimproved pastures	A			

Comment:

Manual Basin: PRE-7

Scenario: Pre-development
 Node: N-7
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 1.1360 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
1.0687	2120: Unimproved pastures	A			
0.0673	2120: Unimproved pastures	B			

Comment:

Manual Basin: PRE-8

Scenario: Pre-development
 Node: Wetland 2
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 13.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 17.4043 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
5.3219	2120: Unimproved pastures	B			
1.1420	4340: Upland mixed coniferous/hardwood	A			
0.0774	4340: Upland mixed coniferous/hardwood	B			
0.0138	4340: Upland mixed coniferous/hardwood	A/D			

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
10.8423	2120: Unimproved pastures	A			
0.0000	2120: Unimproved pastures	Water			
0.0067	2110: Improved pastures (monocult, planted forage crops)	A			

Comment:

Manual Basin: PRE-9A

Scenario: Pre-development
 Node: Wetland 1B/1C
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 15.3968 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
1.1844	6460: Mixed scrub-shrub wetland	A/D			
7.3172	2130: Woodland pastures	A/D			
0.0005	6430: Wet prairies	A/D			
5.2421	2130: Woodland pastures	A			
0.0493	2110: Improved pastures (monocult, planted forage crops)	A/D			
1.5255	2130: Woodland pastures	B			
0.0000	6440: Emergent aquatic vegetation	A/D			
0.0444	4340: Upland mixed coniferous/hardwood	A/D			
0.0334	4340: Upland	A			

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
	mixed coniferous/hardwood				

Comment:

Manual Basin: PRE-9B

Scenario: Pre-development
 Node: Wetland 1B/1C
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 14.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 25.6273 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
10.1214	2120: Unimproved pastures	A			
8.5804	2120: Unimproved pastures	B			
0.6815	6460: Mixed scrub-shrub wetland	A			
0.4179	4340: Upland mixed coniferous/hardwood	B			
2.0427	4340: Upland mixed coniferous/hardwood	A			
0.0008	6460: Mixed scrub-shrub wetland	A/D			
3.7573	4340: Upland mixed coniferous/hardwood	A/D			
0.0253	4340: Upland mixed coniferous/hardwood	Water			

Comment:

Manual Basin: WETLAND 1A

Scenario: Pre-development
Node: Wetland 1A
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0
Area: 7.6627 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.4074	6460: Mixed scrub-shrub wetland	A/D			
0.7947	6440: Emergent aquatic vegetation	A/D			
0.0454	2130: Woodland pastures	A/D			
4.7817	6440: Emergent aquatic vegetation	Water			
0.0116	6460: Mixed scrub-shrub wetland	Water			
0.6275	6300: Wetland forested mixed	A/D			
0.0139	6300: Wetland forested mixed	Water			
0.5476	6440: Emergent aquatic vegetation	A			
0.0497	4410: Pine plantation	A			
0.3018	4340: Upland mixed coniferous/hardwood	A/D			
0.0813	4340: Upland mixed coniferous/hardwood	A			

Comment:

Manual Basin: WETLAND 1B/1C

Scenario: Pre-development
 Node: Wetland 1B/1C
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 25.8459 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0772	2120: Unimproved pastures	A			
1.1166	6460: Mixed scrub-shrub wetland	A			
2.9344	6460: Mixed scrub-shrub wetland	Water			
10.9300	6440: Emergent aquatic vegetation	Water			
0.0977	6440: Emergent aquatic vegetation	A			
0.0186	2120: Unimproved pastures	B			
0.0397	6410: Freshwater marshes	B			
0.2489	4340: Upland mixed coniferous/hardwood	B			
4.5685	6410: Freshwater marshes	Water			
0.9278	4340: Upland mixed coniferous/hardwood	Water			
1.9264	6460: Mixed scrub-shrub wetland	A/D			
0.1515	4340: Upland mixed coniferous/hardwood	A			
0.0566	6440: Emergent aquatic vegetation	A/D			
2.0470	4340: Upland mixed	A/D			

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
	coniferous/hardwood				
0.1415	6410: Freshwater marshes	A/D			
0.5611	6300: Wetland forested mixed	Water			
0.0023	2130: Woodland pastures	A/D			

Comment:

Manual Basin: WETLAND 2

Scenario: Pre-development
 Node: Wetland 2
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 24.9397 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
1.9637	6410: Freshwater marshes	A/D			
0.7348	6460: Mixed scrub-shrub wetland	A/D			
0.0526	4340: Upland mixed coniferous/hardwood	A/D			
0.2665	4340: Upland mixed coniferous/hardwood	A			
0.0542	6460: Mixed scrub-shrub wetland	A			
1.5266	2120: Unimproved pastures	A			
0.3085	6410: Freshwater marshes	B			
0.2711	6460: Mixed	Water			

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
	scrub-shrub wetland				
0.5147	6410: Freshwater marshes	Water			
0.0699	5200: Lakes	A			
16.7506	5200: Lakes	Water			
0.4623	2120: Unimproved pastures	Water			
0.5305	5200: Lakes	A/D			
0.8435	6460: Mixed scrub-shrub wetland	B			
0.0364	5200: Lakes	B			
0.4523	2120: Unimproved pastures	B			
0.0081	2110: Improved pastures (monocult, planted forage crops)	A/D			
0.0861	2120: Unimproved pastures	A/D			
0.0073	2110: Improved pastures (monocult, planted forage crops)	A			

Comment:

Manual Basin: WETLAND 3

Scenario: Pre-development
 Node: WET-08-PST
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 3.4211 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0656	2120: Unimproved pastures	B			
0.0582	6460: Mixed scrub-shrub	B			

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
	wetland				
0.0075	2120: Unimproved pastures	A/D			
1.0518	6460: Mixed scrub-shrub wetland	A/D			
2.2267	6410: Freshwater marshes	A/D			
0.0112	6460: Mixed scrub-shrub wetland	A			

Comment:

Manual Basin: WETLAND 4

Scenario: Pre-development
 Node: Wetland 4
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 1.7056 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.8307	5200: Lakes	Water			
0.0070	6410: Freshwater marshes	Water			
0.0222	6410: Freshwater marshes	A			
0.0064	1180: Rural residential	A			
0.5034	2120: Unimproved pastures	A			
0.3359	5200: Lakes	A			

Comment:

Manual Basin: WETLAND 5

Scenario: Pre-development
 Node: Wetland 5

Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 3.5379 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
0.0321	1180: Rural residential	A			
0.9312	2120: Unimproved pastures	A			
0.0347	6440: Emergent aquatic vegetation	A			
2.2436	6440: Emergent aquatic vegetation	Water			
0.2963	2120: Unimproved pastures	Water			

Comment:

Node: N-7

Scenario: Pre-development
 Type: Time/Stage
 Base Flow: 0.00 cfs
 Initial Stage: 85.10 ft
 Warning Stage: 86.80 ft
 Alert Stage: 0.00 ft
 Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	85.10
0	0	0	12.0000	85.10
0	0	0	24.0000	85.10
0	0	0	36.0000	85.10

Comment:

Node: Pre 10

Scenario: Pre-development
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 82.00 ft

Warning Stage: 89.00 ft
Alert Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
82.00	0.1000	4356
83.00	0.1400	6098
84.00	0.1700	7405
85.00	0.1900	8276
86.00	0.2100	9148
87.00	0.2300	10019
88.00	0.2700	11761
89.00	0.4900	21344

Comment:

Node: Pre 12

Scenario: Pre-development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 80.00 ft
Warning Stage: 84.00 ft
Alert Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
80.00	0.0700	3049
81.00	0.4300	18731
82.00	0.5500	23958
83.00	0.6700	29185
84.00	0.8500	37026

Comment:

Node: WET-08-PST

Scenario: Pre-development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 78.70 ft
Warning Stage: 0.00 ft
Alert Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
78.50	3.6000	156816
79.00	3.7000	161172
80.00	4.4000	191664
81.00	5.6000	243936

Stage [ft]	Area [ac]	Area [ft2]
82.00	5.9000	257004
83.00	6.1000	265716
84.00	6.4000	278784

Comment: Data from Hillside Groves input report plus the section of Wetland that is inside of the property line

Node: Wetland 1A

Scenario: Pre-development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 83.60 ft
Warning Stage: 84.60 ft
Alert Stage: 0.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	83.60
0	0	0	12.0000	83.60
0	0	0	24.0000	83.60
0	0	0	36.0000	83.60

Comment: Zone AE

Node: Wetland 1B/1C

Scenario: Pre-development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 83.60 ft
Warning Stage: 84.60 ft
Alert Stage: 0.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	83.60
0	0	0	12.0000	83.60
0	0	0	24.0000	83.60
0	0	0	36.0000	83.60

Comment: Zone AE

Node: Wetland 2

Scenario: Pre-development
 Type: Time/Stage
 Base Flow: 0.00 cfs
 Initial Stage: 83.60 ft
 Warning Stage: 84.60 ft
 Alert Stage: 0.00 ft
 Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	83.60
0	0	0	12.0000	83.60
0	0	0	24.0000	83.60
0	0	0	36.0000	83.60

Comment: Zone A

Node: Wetland 4

Scenario: Pre-development
 Type: Time/Stage
 Base Flow: 0.00 cfs
 Initial Stage: 79.63 ft
 Warning Stage: 80.63 ft
 Alert Stage: 0.00 ft
 Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	79.63
0	0	0	12.0000	79.63
0	0	0	24.0000	79.63
0	0	0	36.0000	79.63

Comment: Zone A

Node: Wetland 5

Scenario: Pre-development
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 80.00 ft
 Warning Stage: 87.00 ft
 Alert Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
80.00	2.4700	107593
81.00	2.5400	110642
82.00	2.6300	114563

Stage [ft]	Area [ac]	Area [ft2]
83.00	2.7700	120661
84.00	3.2600	142006
85.00	4.7100	205168
86.00	5.8900	256568
87.00	7.4900	326264

Comment: Zone A

Node: Wetland 6

Scenario: Pre-development
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 80.00 ft
 Warning Stage: 87.00 ft
 Alert Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
80.00	0.1200	5227
81.00	0.1300	5663
82.00	0.1500	6534
83.00	0.1700	7405
84.00	0.1900	8276
85.00	0.2000	8712
86.00	0.2200	9583
87.00	0.2800	12197

Comment:

Weir Link: BCW-1

Scenario: Pre-development
 From Node: Wetland 6
 To Node: Wetland 5
 Link Count: 1
 Flow Direction: Both
 Damping: 0.0000 ft
 Weir Type: Broad Crested Vertical
 Geometry Type: Trapezoidal
 Invert: 87.00 ft
 Control Elevation: 87.00 ft
 Max Depth: 9999.00 ft
 Extrapolation Method: Normal Projection
 Bottom Width: 10.00 ft
 Left Slope: 10.000 (h:v)
 Right Slope: 10.000 (h:v)

Bottom Clip

Default: 0.00 ft
 Op Table:
 Ref Node:

Top Clip

Default: 0.00 ft
 Op Table:
 Ref Node:

Discharge Coefficients

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

Comment:

Weir Link: BCW-2

Scenario:	Pre-development	Bottom Clip
From Node:	N-7	Default: 0.00 ft
To Node:	Wetland 1B/1C	Op Table:
Link Count:	1	Ref Node:
Flow Direction:	Both	Top Clip
Damping:	0.0000 ft	Default: 0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:
Geometry Type:	Trapezoidal	Ref Node:
Invert:	86.60 ft	Discharge Coefficients
Control Elevation:	86.60 ft	Weir Default: 2.800
Max Depth:	9999.00 ft	Weir Table:
Extrapolation Method:	Normal Projection	Orifice Default: 0.600
Bottom Width:	75.00 ft	Orifice Table:
Left Slope:	64.000 (h:v)	
Right Slope:	25.000 (h:v)	

Comment:

Weir Link: BCW-3

Scenario:	Pre-development	Bottom Clip
From Node:	Pre 12	Default: 0.00 ft
To Node:	Wetland 1A	Op Table:
Link Count:	1	Ref Node:
Flow Direction:	Both	Top Clip
Damping:	0.0000 ft	Default: 0.00 ft
Weir Type:	Broad Crested Vertical	Op Table:
Geometry Type:	Trapezoidal	Ref Node:
Invert:	83.80 ft	Discharge Coefficients
Control Elevation:	83.80 ft	Weir Default: 2.800
Max Depth:	9999.00 ft	Weir Table:
Extrapolation Method:	Normal Projection	Orifice Default: 0.600
Bottom Width:	20.00 ft	Orifice Table:
Left Slope:	10.000 (h:v)	
Right Slope:	10.000 (h:v)	

Comment:

Channel Link: Channel-1

	Upstream	Downstream
Scenario:	Pre-development	Invert: 85.00 ft
From Node:	Pre 10	Manning's N: 0.1300
To Node:	Wetland 1B/1C	Geometry: Trapezoidal
	Geometry: Trapezoidal	

Link Count:	1	Max Depth:	9999.00 ft	Max Depth:	9999.00 ft
Flow Direction:	Both	Extrapolation:	Normal	Extrapolation:	Normal
Damping:	0.0000 ft	Bottom Width:	13.00 ft	Bottom Width:	6.00 ft
Length:	400.00 ft	Left Slope:	4.000 (h:v)	Left Slope:	3.000 (h:v)
Contraction Coef:	0.00	Right Slope:	4.000 (h:v)	Right Slope:	4.000 (h:v)
Expansion Coef:	0.00	Bottom Clip			
Entr Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	0.00	Op Table:		Op Table:	
Bend Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Location:	0.00 dec	Manning's N:	0.0000	Manning's N:	0.0000
Energy Switch:	Energy	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:

Simulation: 100yr-24hr

Scenario: Pre-development
Run Date/Time: 8/14/2025 11:48:50 AM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	30.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000

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	60.0000

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

Green-Ampt Set:
Vertical Layers Set:
Impervious Set: IMPERVIOUS
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: 6	ET for Manual Basins: False
Over-Relax Weight: 0.5 dec	Ia/S: 0.20 dec
Fact:	
dZ Tolerance: 0.0010 ft	
Max dZ: 1.0000 ft	Smp/Man Basin Rain: Global
	Opt:
Link Optimizer Tol: 0.0001 ft	OF Region Rain Opt: Global
	Rainfall Name: ~FLMOD
Edge Length Option: Automatic	Rainfall Amount: 10.40 in
	Storm Duration: 24.0000 hr
Dflt Damping (2D): 0.0050 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: 100yr-72hr

Scenario: Pre-development
Run Date/Time: 8/14/2025 11:52:13 AM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	78.0000
	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]	
Min Calculation Time:	60.0000	0.1000	900.0000	
Max Calculation Time:		30.0000		

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000

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	60.0000

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

Green-Ampt Set:
Vertical Layers Set:
Impervious Set: IMPERVIOUS
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: 6	ET for Manual Basins: False
Over-Relax Weight 0.5 dec	Ia/S: 0.20 dec
Fact:	
dZ Tolerance: 0.0010 ft	
Max dZ: 1.0000 ft	Smp/Man Basin Rain Global
	Opt:
Link Optimizer Tol: 0.0001 ft	OF Region Rain Opt: Global
	Rainfall Name: ~FLMOD
Edge Length Option: Automatic	Rainfall Amount: 14.00 in
	Storm Duration: 72.0000 hr
Dflt Damping (2D): 0.0050 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: 10yr-24hr

Scenario: Pre-development
Run Date/Time: 8/14/2025 12:01:17 PM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	30.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000

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	60.0000

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

Green-Ampt Set:
Vertical Layers Set:
Impervious Set: IMPERVIOUS
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: 6	ET for Manual Basins: False
Over-Relax Weight: 0.5 dec	Ia/S: 0.20 dec
Fact:	
dZ Tolerance: 0.0010 ft	
Max dZ: 1.0000 ft	Smp/Man Basin Rain: Global
	Opt:
Link Optimizer Tol: 0.0001 ft	OF Region Rain Opt: Global
	Rainfall Name: ~FLMOD
Edge Length Option: Automatic	Rainfall Amount: 6.03 in
	Storm Duration: 24.0000 hr
Dflt Damping (2D): 0.0050 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: 25yr-24hr

Scenario: Pre-development

Run Date/Time: 8/14/2025 12:04:59 PM
 Program Version: StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	30.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000

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	60.0000

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

 Green-Ampt Set:
 Vertical Layers Set:
 Impervious Set: IMPERVIOUS
 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: 6	ET for Manual Basins: False
Over-Relax Weight 0.5 dec	Ia/S: 0.20 dec
Fact:	
dZ Tolerance: 0.0010 ft	
Max dZ: 1.0000 ft	
	Smp/Man Basin Rain Global
	Opt:
Link Optimizer Tol: 0.0001 ft	OF Region Rain Opt: Global
	Rainfall Name: ~FLMOD
Edge Length Option: Automatic	Rainfall Amount: 7.54 in
	Storm Duration: 24.0000 hr
Dflt Damping (2D): 0.0050 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: 25yr-96hr

Scenario: Pre-development
Run Date/Time: 8/14/2025 12:08:43 PM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	100.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000

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	60.0000

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

Green-Ampt Set:
Vertical Layers Set:
Impervious Set: IMPERVIOUS
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: 6	ET for Manual Basins: False
Over-Relax Weight: 0.5 dec	Ia/S: 0.20 dec
Fact:	
dZ Tolerance: 0.0010 ft	
Max dZ: 1.0000 ft	Smp/Man Basin Rain: Global
	Opt:
Link Optimizer Tol: 0.0001 ft	OF Region Rain Opt: Global
	Rainfall Name: ~FLMOD
Edge Length Option: Automatic	Rainfall Amount: 10.60 in
	Storm Duration: 96.0000 hr
Dflt Damping (2D): 0.0050 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: Mean

Scenario: Pre-development
 Run Date/Time: 8/14/2025 12:20:54 PM
 Program Version: StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	30.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000

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	60.0000

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

Green-Ampt Set:
 Vertical Layers Set:
 Impervious Set: IMPERVIOUS
 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:	6	ET for Manual Basins:	False
Over-Relax Weight	0.5 dec	Ia/S:	0.20 dec
Fact:			
dZ Tolerance:	0.0010 ft		
Max dZ:	1.0000 ft	Smp/Man Basin Rain	Global
		Opt:	
Link Optimizer Tol:	0.0001 ft	OF Region Rain Opt:	Global
		Rainfall Name:	~FLMOD
Edge Length Option:	Automatic	Rainfall Amount:	4.18 in
		Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 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:

Node Max Conditions : Multi Item | (sim, name) [Pre-development]

Sim Name	Node Name	Warning Stage [ft]	Alert Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
100yr-24hr	N-7	86.80	0.00	85.10	0.0000	4.70	0.00	0
100yr-24hr	Pre 10	89.00	0.00	89.62	0.0010	35.98	5.32	26508
100yr-24hr	Pre 12	84.00	0.00	84.35	0.0010	60.17	27.70	37026
100yr-24hr	WET-08-PS T	0.00	0.00	82.41	0.0009	172.33	0.00	260580
100yr-24hr	Wetland 1A	84.60	0.00	83.60	0.0000	87.60	0.00	0
100yr-24hr	Wetland 1B/1C	84.60	0.00	83.60	0.0000	298.44	0.00	0
100yr-24hr	Wetland 2	84.60	0.00	83.60	0.0000	246.55	0.00	0
100yr-24hr	Wetland 4	80.63	0.00	79.63	0.0000	95.77	0.00	0
100yr-24hr	Wetland 5	87.00	0.00	82.38	0.0006	61.92	0.00	116905
100yr-24hr	Wetland 6	87.00	0.00	83.72	0.0010	5.97	0.00	8030
100yr-72hr	N-7	86.80	0.00	85.10	0.0000	2.76	0.00	0
100yr-72hr	Pre 10	89.00	0.00	90.15	0.0010	27.52	16.11	27721
100yr-72hr	Pre 12	84.00	0.00	84.51	0.0010	44.30	42.79	37026
100yr-72hr	WET-08-PS T	0.00	0.00	84.08	0.0010	105.72	0.00	278784
100yr-72hr	Wetland 1A	84.60	0.00	83.60	0.0000	92.42	0.00	0
100yr-72hr	Wetland 1B/1C	84.60	0.00	83.60	0.0000	176.79	0.00	0
100yr-72hr	Wetland 2	84.60	0.00	83.60	0.0000	127.89	0.00	0
100yr-72hr	Wetland 4	80.63	0.00	79.63	0.0000	53.12	0.00	0
100yr-72hr	Wetland 5	87.00	0.00	83.60	0.0007	35.20	0.00	133432
100yr-72hr	Wetland 6	87.00	0.00	85.52	0.0010	3.52	0.00	9164
10yr-24hr	N-7	86.80	0.00	85.10	0.0000	1.52	0.00	0
10yr-24hr	Pre 10	89.00	0.00	87.66	0.0010	6.59	0.00	11167
10yr-24hr	Pre 12	84.00	0.00	83.72	0.0010	13.22	0.00	34867
10yr-24hr	WET-08-PS T	0.00	0.00	80.44	0.0008	65.03	0.00	214917
10yr-24hr	Wetland 1A	84.60	0.00	83.60	0.0000	34.67	0.00	0
10yr-24hr	Wetland 1B/1C	84.60	0.00	83.60	0.0000	120.75	0.00	0
10yr-24hr	Wetland 2	84.60	0.00	83.60	0.0000	119.25	0.00	0
10yr-24hr	Wetland 4	80.63	0.00	79.63	0.0000	36.46	0.00	0
10yr-24hr	Wetland 5	87.00	0.00	80.98	0.0005	23.84	0.00	110575
10yr-24hr	Wetland 6	87.00	0.00	81.46	0.0005	1.90	0.00	6064
25yr-24hr	N-7	86.80	0.00	85.10	0.0000	2.53	0.00	0
25yr-24hr	Pre 10	89.00	0.00	89.20	0.0010	15.15	0.77	25583
25yr-24hr	Pre 12	84.00	0.00	83.92	0.0010	27.09	2.43	36396
25yr-24hr	WET-08-PS T	0.00	0.00	81.12	0.0006	99.98	0.00	245465
25yr-24hr	Wetland 1A	84.60	0.00	83.60	0.0000	51.50	0.00	0
25yr-24hr	Wetland 1B/1C	84.60	0.00	83.60	0.0000	178.03	0.00	0
25yr-24hr	Wetland 2	84.60	0.00	83.60	0.0000	161.58	0.00	0
25yr-24hr	Wetland 4	80.63	0.00	79.63	0.0000	55.83	0.00	0

Sim Name	Node Name	Warning Stage [ft]	Alert Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
25yr-24hr	Wetland 5	87.00	0.00	81.44	0.0004	36.15	0.00	112357
25yr-24hr	Wetland 6	87.00	0.00	82.24	0.0006	3.19	0.00	6742
25yr-96hr	N-7	86.80	0.00	85.10	0.0000	1.35	0.00	0
25yr-96hr	Pre 10	89.00	0.00	89.41	0.0010	12.21	2.54	26030
25yr-96hr	Pre 12	84.00	0.00	84.09	0.0010	20.10	9.61	37026
25yr-96hr	WET-08-PS T	0.00	0.00	82.50	0.0009	53.80	0.00	261384
25yr-96hr	Wetland 1A	84.60	0.00	83.60	0.0000	25.60	0.00	0
25yr-96hr	Wetland 1B/1C	84.60	0.00	83.60	0.0000	85.66	0.00	0
25yr-96hr	Wetland 2	84.60	0.00	83.60	0.0000	68.27	0.00	0
25yr-96hr	Wetland 4	80.63	0.00	79.63	0.0000	26.89	0.00	0
25yr-96hr	Wetland 5	87.00	0.00	82.45	0.0006	17.78	0.00	117321
25yr-96hr	Wetland 6	87.00	0.00	83.82	0.0010	1.71	0.00	8119
Mean	N-7	86.80	0.00	85.10	0.0000	0.49	0.00	0
Mean	Pre 10	89.00	0.00	84.00	0.0010	0.76	0.00	7407
Mean	Pre 12	84.00	0.00	81.74	0.0010	2.85	0.00	22623
Mean	WET-08-PS T	0.00	0.00	79.60	0.0010	28.00	0.00	179508
Mean	Wetland 1A	84.60	0.00	83.60	0.0000	18.57	0.00	0
Mean	Wetland 1B/1C	84.60	0.00	83.60	0.0000	63.49	0.00	0
Mean	Wetland 2	84.60	0.00	83.60	0.0000	71.89	0.00	0
Mean	Wetland 4	80.63	0.00	79.63	0.0000	15.85	0.00	0
Mean	Wetland 5	87.00	0.00	80.49	0.0009	10.74	0.00	109083
Mean	Wetland 6	87.00	0.00	80.60	0.0003	0.60	0.00	5487

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
OFFSITE-6 [in]	25yr-96hr	10.60	0.00	6.71	0.00	0.00	0.00	3.89
OFFSITE-6 [ft3]	25yr-96hr	107001	0	67772	0	0	0	39229
OFFSITE-6 [ac-ft]	25yr-96hr	2.46	0.00	1.56	0.00	0.00	0.00	0.90

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
OFFSITE-8 [in]	25yr-96hr	10.60	0.00	4.61	0.00	0.00	0.00	5.99
OFFSITE-8 [ft3]	25yr-96hr	40898	0	17774	0	0	0	23124
OFFSITE-8 [ac-ft]	25yr-96hr	0.94	0.00	0.41	0.00	0.00	0.00	0.53

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
PRE-1 [in]	25yr-96hr	10.60	0.00	4.70	0.00	0.00	0.00	5.90
PRE-1 [ft3]	25yr-96hr	56115	0	24868	0	0	0	31246
PRE-1 [ac-ft]	25yr-96hr	1.29	0.00	0.57	0.00	0.00	0.00	0.72

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
PRE-10 [in]	25yr-96hr	10.60	0.00	3.28	0.00	0.00	0.00	7.32
PRE-10 [ft3]	25yr-96hr	584859	0	180756	0	0	0	404103
PRE-10 [ac-ft]	25yr-96hr	13.43	0.00	4.15	0.00	0.00	0.00	9.28

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
PRE-11A [in]	25yr-96hr	10.60	0.00	4.18	0.00	0.00	0.00	6.42
PRE-11A [ft3]	25yr-96hr	273922	0	107906	0	0	0	166015
PRE-11A [ac-ft]	25yr-96hr	6.29	0.00	2.48	0.00	0.00	0.00	3.81

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
PRE-11B [in]	25yr-96hr	10.60	0.00	3.05	0.00	0.00	0.00	7.55
PRE-11B [ft3]	25yr-96hr	238252	0	68521	0	0	0	169731
PRE-11B [ac-ft]	25yr-96hr	5.47	0.00	1.57	0.00	0.00	0.00	3.90

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
PRE-12 [in]	25yr-96hr	10.60	0.00	3.53	0.00	0.00	0.00	7.07
PRE-12 [ft3]	25yr-96hr	900042	0	299599	0	0	0	600443
PRE-12 [ac-ft]	25yr-96hr	20.66	0.00	6.88	0.00	0.00	0.00	13.78

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
PRE-2 [in]	25yr-96hr	10.60	0.00	5.54	0.00	0.00	0.00	5.06
PRE-2 [ft3]	25yr-96hr	260250	0	136078	0	0	0	124172
PRE-2 [ac-ft]	25yr-96hr	5.97	0.00	3.12	0.00	0.00	0.00	2.85

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
PRE-3 [in]	25yr-96hr	10.60	0.00	5.25	0.00	0.00	0.00	5.35

Basin Name	Sim Name	Total Rainfall	Total Irrigation	Total Runoff	Total ET	Total Initial Abst	Total Recharge	Change Soil Storage
PRE-3 [ft3]	25yr-96hr	436333	0	216026	0	0	0	220308
PRE-3 [ac-ft]	25yr-96hr	10.02	0.00	4.96	0.00	0.00	0.00	5.06

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
PRE-4 [in]	25yr-96hr	10.60	0.00	4.69	0.00	0.00	0.00	5.91
PRE-4 [ft3]	25yr-96hr	384228	0	169960	0	0	0	214268
PRE-4 [ac-ft]	25yr-96hr	8.82	0.00	3.90	0.00	0.00	0.00	4.92

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
PRE-5 [in]	25yr-96hr	10.60	0.00	5.22	0.00	0.00	0.00	5.38
PRE-5 [ft3]	25yr-96hr	665169	0	327640	0	0	0	337530
PRE-5 [ac-ft]	25yr-96hr	15.27	0.00	7.52	0.00	0.00	0.00	7.75

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
PRE-6 [in]	25yr-96hr	10.60	0.00	5.51	0.00	0.00	0.00	5.09
PRE-6 [ft3]	25yr-96hr	627473	0	326092	0	0	0	301381
PRE-6 [ac-ft]	25yr-96hr	14.40	0.00	7.49	0.00	0.00	0.00	6.92

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
PRE-7 [in]	25yr-96hr	10.60	0.00	4.75	0.00	0.00	0.00	5.85
PRE-7 [ft3]	25yr-96hr	43710	0	19577	0	0	0	24133
PRE-7 [ac-ft]	25yr-96hr	1.00	0.00	0.45	0.00	0.00	0.00	0.55

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
PRE-8 [in]	25yr-96hr	10.60	0.00	4.83	0.00	0.00	0.00	5.77
PRE-8 [ft3]	25yr-96hr	669681	0	304904	0	0	0	364777
PRE-8 [ac-ft]	25yr-96hr	15.37	0.00	7.00	0.00	0.00	0.00	8.37

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
PRE-9A [in]	25yr-96hr	10.60	0.00	3.14	0.00	0.00	0.00	7.46
PRE-9A [ft3]	25yr-96hr	592437	0	175552	0	0	0	416884
PRE-9A [ac-ft]	25yr-96hr	13.60	0.00	4.03	0.00	0.00	0.00	9.57

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
PRE-9B [in]	25yr-96hr	10.60	0.00	4.58	0.00	0.00	0.00	6.02
PRE-9B [ft3]	25yr-96hr	986088	0	425742	0	0	0	560346
PRE-9B [ac-ft]	25yr-96hr	22.64	0.00	9.77	0.00	0.00	0.00	12.86

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
WETLAND 1A [in]	25yr-96hr	10.60	0.00	8.38	0.00	0.00	0.00	2.22
WETLAND 1A [ft3]	25yr-96hr	294847	0	233007	0	0	0	61840
WETLAND 1A [ac-ft]	25yr-96hr	6.77	0.00	5.35	0.00	0.00	0.00	1.42

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
WETLAND	25yr-96hr	10.60	0.00	8.24	0.00	0.00	0.00	2.36

Basin Name	Sim Name	Total Rainfall	Total Irrigation	Total Runoff	Total ET	Total Initial Abst	Total Recharge	Change Soil Storage
1B/1C [in]								
WETLAND 1B/1C [ft3]	25yr-96hr	994499	0	773299	0	0	0	221201
WETLAND 1B/1C [ac-ft]	25yr-96hr	22.83	0.00	17.75	0.00	0.00	0.00	5.08

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
WETLAND 2 [in]	25yr-96hr	10.60	0.00	9.52	0.00	0.00	0.00	1.08
WETLAND 2 [ft3]	25yr-96hr	959630	0	862002	0	0	0	97628
WETLAND 2 [ac-ft]	25yr-96hr	22.03	0.00	19.79	0.00	0.00	0.00	2.24

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
WETLAND 3 [in]	25yr-96hr	10.60	0.00	8.17	0.00	0.00	0.00	2.43
WETLAND 3 [ft3]	25yr-96hr	131636	0	101439	0	0	0	30198
WETLAND 3 [ac-ft]	25yr-96hr	3.02	0.00	2.33	0.00	0.00	0.00	0.69

Manual Basin Mass Balance Summary [Pre-development]

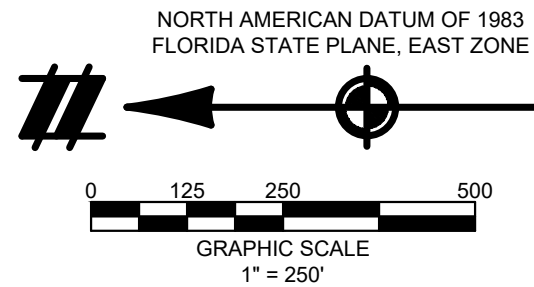
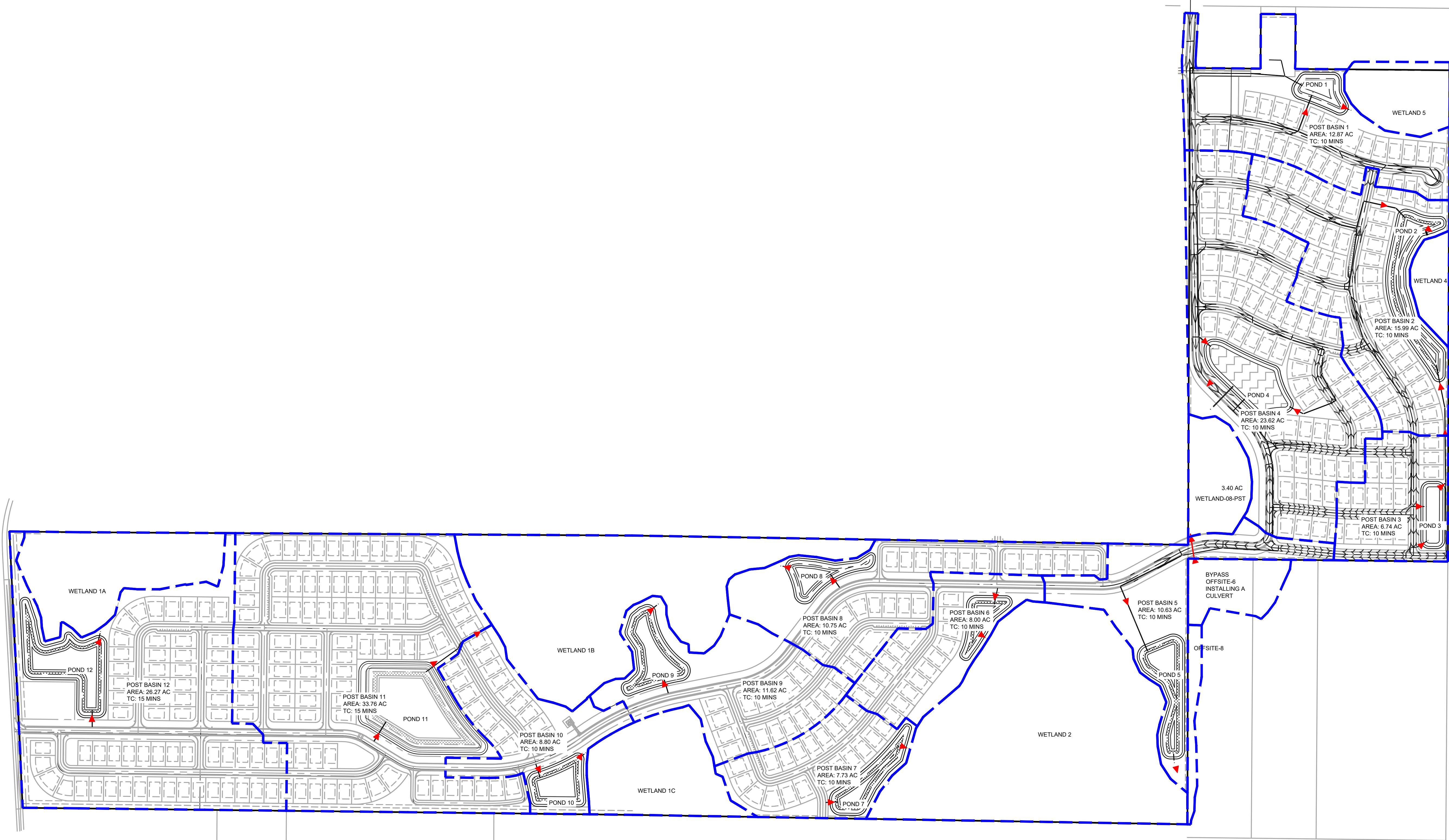
Basin Name	Sim Name	Total Rainfall	Total Irrigation	Total Runoff	Total ET	Total Initial Abst	Total Recharge	Change Soil Storage
WETLAND 4 [in]	25yr-96hr	10.60	0.00	8.80	0.00	0.00	0.00	1.80
WETLAND 4 [ft3]	25yr-96hr	65627	0	54481	0	0	0	11147
WETLAND 4 [ac-ft]	25yr-96hr	1.51	0.00	1.25	0.00	0.00	0.00	0.26

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
WETLAND 5 [in]	25yr-96hr	10.60	0.00	8.11	0.00	0.00	0.00	2.49
WETLAND 5 [ft3]	25yr-96hr	136131	0	104197	0	0	0	31934
WETLAND 5 [ac-ft]	25yr-96hr	3.13	0.00	2.39	0.00	0.00	0.00	0.73

4.0 POST-DEVELOPMENT ANALYSIS AND CALCULATIONS

- 4.1 POST-DEVELOPMENT BASIN MAP**
- 4.2 POST-DEVELOPMENT BASIN CALCS**
- 4.3 POST-DEVELOPMENT ICPR**
- 4.4 BMP TRAINS**



811
Know what's below.
Call before you dig.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE INCURRED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

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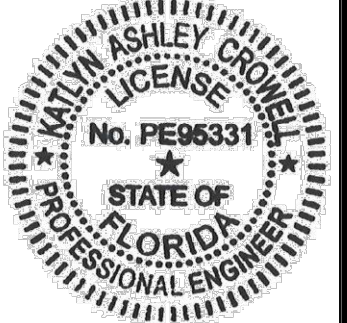
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SEC 27.34 TWP 20 S RGE 25 E
--
HOWEY-IN-THE-HILLS
LAKE COUNTY, FLORIDA

MISSION RISE
TURNSTONE GROUP
PRELIMINARY SUBDIVISION PLAT

DATE 02/27/2025

REVISIONS



DRAWN BY: AP
CHECKED BY: ZOR
PROJECT MANAGER: KC
JOB #: 23000180
FILE CODE: --
SHEET NO.

[PSPXX-XXXX]

CAD FILE

**Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Post-Development**

Basin: Post Basin 1		
Pond:	Pond 1	
Basin Area:	12.87	acres
Pond Area @ Bot:	0.42	acres
Pond Bottom Elev.:	83.00	ft
Time of Concentration:	10.00	min

Curve Number: (Using the SCS TR-55, Second Ed., June 1986, Table 2-2a)								
Cover Description			Curve Numbers for Soil Group					
Cover Type	Condition		A	B	C	D		
Open Space	Good (grass cover > 75%)		39	61	74	80		
Impervious Area	Pavement, Buildings, etc.		98	98	98	98		
Percentage of each soil type within the Basin			100%	0%	0%	0%		
			Composite Pervious Curve Number (CN) =			39		
			Impervious Curve Number (CN) =			98		
Land Use:	Total Area (ac)	% Imperv.	Imperv. Area (ac)	Imperv. CN	Pervious Area (ac)	Pervious CN	% Roof Area	Roof Area (ac)
Building	3.04	100%	3.04		0.00		N/A	N/A
Pavement	1.21	100%	1.21		0.00		N/A	N/A
Sidewalk/Trail	0.49	100%	0.49		0.00		N/A	N/A
Water Surface	0.42	100%	0.42		0.00		N/A	N/A
Future Amenity	2.24	43%	0.96		1.28		N/A	N/A
Open Space	5.47	0%	0.00		5.47		N/A	N/A
Totals	12.87	47.6%	6.12	98	6.75	39		N/A
Weighted Curve Number (CN) = 67.0								

Treatment Volume Required:				
DCIA % = (DCIA Area) / (Total Area) =			9.4%	
Non DCIA CN =			64.0	
1" of runoff = 1 x Total Area x 1/12 =			1.073	acre-feet
2.5" over impervious = Total impervious x 2.5/12 =			1.275	acre-feet
WQ Volume			1.275	acre-feet
				Greater of WQ TV <<=====

Permanent Pool Volume:			
DA:	12.87	Ac.	, where DA = drainage area
C:	0.56		, where C = runoff coefficient
R:	50.00	inches	, where R = wet season rainfall depth
WS:	153.00	days	, where WS = length of wet season
RT:	14.00	days	, where RT = residence time
PPV Calculated =		2.73	Ac-ft
Add 50% PPV for OFW =		0	Ac-ft
Add 50% PPV for Littoral Zone Alternative		0.00	Ac-ft
PPV Required =		2.73	Ac-ft
PPV Provided =		2.79	Ac-ft
			<u>Adequate Storage Provided</u>

Pond: Wet Pond	Stage (ft)	Area (ac)	Treat. Vol. (ac-ft)	
Stage Storage:				
Pond Bottom =	71.00	0.115	0.000	
	81.00	0.313	2.059	
NWL	83.00	0.416	2.786	
1/2 WQ Elevation =	84.44		0.638	
	84.00	0.471	0.443	
	85.00	0.529	0.943	
WQ Elevation =	85.01		1.275	<<===== Water Quality Treatment Volume Required
	86.00	0.588	1.501	
	87.00	0.650	2.120	
	88.00	0.715	2.803	
Top of Bank =	89.00	0.886	3.602	

Treatment Volume Provided:	
Calculated Elevation =	85.01 (ft)
Design Elevation =	85.75 (ft)



**Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Post-Development**

Basin: Post Basin 2		
Pond:	Pond 2	
Basin Area:	15.99	acres
Pond Area @ Bot:	0.31	acres
Pond Bottom Elev.:	84.00	ft
Time of Concentration:	10.00	min

Curve Number: (Using the SCS TR-55, Second Ed., June 1986, Table 2-2a)								
Cover Description			Curve Numbers for Soil Group					
Cover Type	Condition		A	B	C	D		
Open Space	Good (grass cover > 75%)		39	61	74	80		
Impervious Area	Pavement, Buildings, etc.		98	98	98	98		
Percentage of each soil type within the Basin			100%	0%	0%	0%		
			Composite Pervious Curve Number (CN) =			39		
			Impervious Curve Number (CN) =			98		
Land Use:	Total Area (ac)	% Imperv.	Imperv. Area (ac)	Imperv. CN	Pervious Area (ac)	Pervious CN	% Roof Area	Roof Area (ac)
Building	5.25	100%	5.25		0.00		N/A	N/A
Pavement	1.70	100%	1.70		0.00		N/A	N/A
Sidewalk/Trail	0.61	100%	0.61		0.00		N/A	N/A
Water Surface	1.06	100%	1.06		0.00		N/A	N/A
Open Space	7.37	0%	0.00		7.37		N/A	N/A
Totals	15.99	53.9%	8.62	98	7.37	39		N/A
Weighted Curve Number (CN) = 71.0								

Treatment Volume Required:			
DCIA % = (DCIA Area) / (Total Area) =		10.6%	
Non DCIA CN =		68.0	
1" of runoff = 1 x Total Area x 1/12 =		0.666	acre-feet
2.5" over impervious = Total impervious x 2.5/12 =		0.898	acre-feet
WQ Volume		0.898	acre-feet

Greater of
<===== WQ TV

Permanent Pool Volume:			
DA:	15.99	Ac.	, where DA = drainage area
C:	0.60		, where C = runoff coefficient
R:	50.00	inches	, where R = wet season rainfall depth
WS:	153.00	days	, where WS = length of wet season
RT:	14.00	days	, where RT = residence time
PPV Calculated =		3.68	Ac-ft
Add 50% PPV for OFW =		0	Ac-ft
Add 50% PPV for Littoral Zone Alternative		0.00	Ac-ft
PPV Required =		3.68	Ac-ft
PPV Provided =		3.92	Ac-ft

Adequate Storage Provided

Pond: Wet Pond			
Stage Storage:			
Pond Bottom =	Stage (ft)	Area (ac)	Treat. Vol. (ac-ft)
	76.00	0.172	0.000
	82.00	0.626	2.251
NWL	84.00	1.061	3.919
1/2 WQ Elevation =	84.29		0.333
WQ Elevation =	84.58		0.666
	85.00	1.239	1.149
	86.00	1.419	2.477
	87.00	1.602	3.987
	88.00	1.787	5.681
Top of Bank =	89.00	2.259	7.699

<===== Water Quality Treatment Volume Required

Treatment Volume Provided:	
Calculated Elevation =	84.58 (ft)
Design Elevation =	86.45 (ft)



**Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Post-Development**

Basin: Post Basin 3		
Pond:	Pond 3	
Basin Area:	6.74	acres
Pond Area @ Bot:	0.39	acres
Pond Bottom Elev.:	91.00	ft
Time of Concentration:	10.00	min

Curve Number:

(Using the SCS TR-55, Second Ed., June 1986, Table 2-2a)

Cover Description		Curve Numbers for Soil Group			
Cover Type	Condition	A	B	C	D
Open Space	Good (grass cover > 75%)	39	61	74	80
Impervious Area	Pavement, Buildings, etc.	98	98	98	98

Percentage of each soil type within the Basin

100%

0%

0%

0%

Composite Pervious Curve Number (CN) =

39

Impervious Curve Number (CN) =

98

Land Use:	Total Area (ac)	% Imperv.	Imperv. Area (ac)	Imperv. CN	Pervious Area (ac)	Pervious CN	% Roof Area	Roof Area (ac)
Building	1.85	100%	1.85		0.00		N/A	N/A
Pavement	1.11	100%	1.11		0.00		N/A	N/A
Sidewalk/Trail	0.40	100%	0.40		0.00		N/A	N/A
Pond Bottom	0.39	100%	0.39		0.00		N/A	N/A
Open Space	2.99	0%	0.00		2.99		N/A	N/A
Totals	6.74	55.6%	3.75	98	2.99	39		N/A

Weighted Curve Number (CN) =

72.0

Treatment Volume Required:			
DCIA % = (DCIA Area) / (Total Area) =		16.5%	
Non DCIA CN =		67.0	
0.5" of runoff = 1/2 x Total Area x 1/12 =		0.281	acre-feet
1.25" over impervious = Total impervious x 1.25/12 =		0.390	acre-feet
WQ Volume		0.390	acre-feet
			Greater of
			<<===== WQ TV

Pond: Dry Pond	Stage (ft)	Area (ac)	Treat. Vol. (ac-ft)	
Stage Storage:				
Pond Bottom =	91.00	0.387	0.000	
	92.00	0.447	0.417	
WQ Elevation =	91.94		0.390	<<===== Water Quality Treatment Volume Required
	93.00	0.509	0.895	
	94.00	0.574	1.436	
	95.00	0.641	2.043	
Top of Bank =	96.00	0.819	2.772	

Treatment Volume Provided:	
Calculated Elevation =	91.94 (ft)
Design Elevation =	92.20 (ft)



**Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Post-Development**

Basin: Post Basin 4		
Pond:	Pond 4	
Basin Area:	23.62	acres
Pond Area @ Bot:	1.29	acres
Pond Bottom Elev.:	87.00	ft
Time of Concentration:	10.00	min

Curve Number:

(Using the SCS TR-55, Second Ed., June 1986, Table 2-2a)

Cover Description		Curve Numbers for Soil Group			
Cover Type	Condition	A	B	C	D
Open Space	Good (grass cover > 75%)	39	61	74	80
Impervious Area	Pavement, Buildings, etc.	98	98	98	98

Percentage of each soil type within the Basin

100%

0%

0%

0%

Composite Pervious Curve Number (CN) = 39

Impervious Curve Number (CN) = 98

Land Use:	Total Area (ac)	% Imperv.	Imperv. Area (ac)	Imperv. CN	Pervious Area (ac)	Pervious CN	% Roof Area	Roof Area (ac)
Building	7.06	100%	7.06		0.00		N/A	N/A
Pavement	3.44	100%	3.44		0.00		N/A	N/A
Sidewalk/Trail	1.41	100%	1.41		0.00		N/A	N/A
Pond Bottom	1.29	100%	1.29		0.00		N/A	N/A
Future Amenity	0.00	60%	0.00		0.00			
Open Space	10.42	0%	0.00		10.42		N/A	N/A
Totals	23.62	55.9%	13.20	98	10.42	39		N/A

Weighted Curve Number (CN) = 72.0

Treatment Volume Required:			
DCIA % = (DCIA Area) / (Total Area) =		14.5%	
Non DCIA CN =		68.0	
0.5" of runoff = 1/2 x Total Area x 1/12 =		0.984	acre-feet
1.25" over impervious = Total impervious x 1.25/12 =		1.375	acre-feet
WQ Volume		1.375	acre-feet
			Greater of
			<===== WQ TV

Pond: Dry Pond	Stage (ft)	Area (ac)	Treat. Vol. (ac-ft)	
Stage Storage:				
Pond Bottom =	85.00	1.292	0.000	
	86.00	1.391	1.341	
WQ Elevation =	86.02		1.375	<===== Water Quality Treatment Volume Required
	87.00	1.491	2.782	
	88.00	1.594	4.324	
	89.00	1.700	5.971	
Top of Bank =	90.00	1.973	7.806	

Treatment Volume Provided:	
Calculated Elevation =	86.02 (ft)
Design Elevation =	86.25 (ft)



Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Post-Development

Basin: Post Basin 5		
Pond:	Pond 5	
Basin Area:	9.43	acres
Pond Area @ Bot:	0.39	acres
Pond Bottom Elev.:	85.00	ft
Time of Concentration:	10.00	min

Curve Number: (Using the SCS TR-55, Second Ed., June 1986, Table 2-2a)								
Cover Description			Curve Numbers for Soil Group					
Cover Type	Condition		A	B	C	D		
Open Space	Good (grass cover > 75%)		39	61	74	80		
Impervious Area	Pavement, Buildings, etc.		98	98	98	98		
Percentage of each soil type within the Basin			100%	0%	0%	0%		
			Composite Pervious Curve Number (CN) =			39		
			Impervious Curve Number (CN) =			98		
Land Use:	Total Area (ac)	% Imperv.	Imperv. Area (ac)	Imperv. CN	Pervious Area (ac)	Pervious CN	% Roof Area	Roof Area (ac)
Building	0.00	100%	0.00		0.00		N/A	N/A
Pavement	1.20	100%	1.20		0.00		N/A	N/A
Sidewalk/Trail	0.54	100%	0.54		0.00		N/A	N/A
Water Surface	0.95	100%	0.95		0.00		N/A	N/A
Future Amenity	2.62	70%	1.83		0.79		N/A	N/A
Open Space	4.12	0%	0.00		4.12		N/A	N/A
Totals	9.43	48.0%	4.53	98	4.90	39		N/A
Weighted Curve Number (CN) = 67.0								

Treatment Volume Required:			
DCIA % = (DCIA Area) / (Total Area) =		12.7%	
Non DCIA CN =		63.0	
1" of runoff = 1 x Total Area x 1/12 =		0.786	acre-feet
2.5" over impervious = Total impervious x 2.5/12 =		0.943	acre-feet
WQ Volume		0.943	acre-feet
<<==== WQ TV			

Permanent Pool Volume:			
DA:	9.43	Ac.	, where DA = drainage area
C:	0.56		, where C = runoff coefficient
R:	50.00	inches	, where R = wet season rainfall depth
WS:	153.00	days	, where WS = length of wet season
RT:	14.00	days	, where RT = residence time
PPV Calculated =	2.01	Ac-ft	$PPV = \frac{DA \times C \times R \times RT}{WS \times \frac{12in.}{ft}}$
Add 50% PPV for OFW =	0	Ac-ft	
Add 50% PPV for Littoral Zone Alternative =	0.00	Ac-ft	
PPV Required =		2.01	Ac-ft
PPV Provided =		3.92	Ac-ft
			<u>Adequate</u> <u>Storage</u> <u>Provided</u>

Pond: Wet Pond	Stage	Area	Treat. Vol.	
Stage Storage:	(ft)	(ac)	(ac-ft)	
Pond Bottom =	78.00	0.367	0.000	
	83.00	0.598	2.389	
NWL	85.00	0.949	3.923	
1/2 WQ Elevation =	85.47		0.471	
	86.00	1.071	1.010	
WQ Elevation =	85.94		0.943	<<==== Water Quality Treatment Volume Required
	87.00	1.196	2.143	
	88.00	1.322	3.401	
	89.00	1.451	4.788	
Top of Bank =	90.00	1.784	6.402	

Treatment Volume Provided:	
Calculated Elevation =	85.94 (ft)
Design Elevation =	87.00 (ft)



**Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Post-Development**

Basin: Post Basin 6		
Pond:	Pond 6	
Basin Area:	7.25	acres
Pond Area @ Bot:	0.15	acres
Pond Bottom Elev.:	85.00	ft
Time of Concentration:	10.00	min

Curve Number: (Using the SCS TR-55, Second Ed., June 1986, Table 2-2a)								
Cover Description			Curve Numbers for Soil Group					
Cover Type	Condition		A	B	C	D		
Open Space	Good (grass cover > 75%)		39	61	74	80		
Impervious Area	Pavement, Buildings, etc.		98	98	98	98		
Percentage of each soil type within the Basin			100%	0%	0%	0%		
			Composite Pervious Curve Number (CN) =			39		
			Impervious Curve Number (CN) =			98		
Land Use:	Total Area (ac)	% Imperv.	Imperv. Area (ac)	Imperv. CN	Pervious Area (ac)	Pervious CN	% Roof Area	Roof Area (ac)
Future Building	1.74	100%	1.74		0.00		N/A	N/A
Future Pavement	0.91	100%	0.91		0.00		N/A	N/A
Future Sidewalk/Trail	0.38	100%	0.38		0.00		N/A	N/A
Future Water Surface	0.39	100%	0.39		0.00		N/A	N/A
Future Open Space	3.83	0%	0.00		3.83		N/A	N/A
Totals	7.25	47.2%	3.42	98	3.83	39		N/A
Weighted Curve Number (CN) = 67.0								

Treatment Volume Required:			
DCIA % = (DCIA Area) / (Total Area) =		12.6%	
Non DCIA CN =		62.0	
1" of runoff = 1 x Total Area x 1/12 =		0.604	acre-feet
2.5" over impervious = Total impervious x 2.5/12 =		0.713	acre-feet
WQ Volume		0.713	acre-feet

Greater of
<===== WQ TV

Permanent Pool Volume:			
DA:	7.25	Ac.	, where DA = drainage area
C:	0.55		, where C = runoff coefficient
R:	50.00	inches	, where R = wet season rainfall depth
WS:	153.00	days	, where WS = length of wet season
RT:	14.00	days	, where RT = residence time
PPV Calculated =		1.53	Ac-ft
Add 50% PPV for OFW =		0	Ac-ft
Add 50% PPV for Littoral		0.00	Ac-ft
PPV Required =		1.53	Ac-ft
PPV Provided =		1.63	Ac-ft

Adequate
Storage
Provided

Pond: Wet Pond	Stage	Area	Treat. Vol.
Stage Storage:	(ft)	(ac)	(ac-ft)
Pond Bottom =	77.00	0.108	0.000
	83.00	0.236	1.006
NWL	85.00	0.393	1.629
1/2 WQ Elevation =	85.83		0.357
	86.00	0.463	0.428
WQ Elevation =	86.50		0.713
	87.00	0.675	0.993
	88.00	0.769	1.715
	89.00	0.866	2.532
Top of Bank =	90.00	1.122	3.523

<===== Water Quality Treatment Volume Required

Treatment Volume Provided:	
Calculated Elevation =	86.50 (ft)
Design Elevation =	87.35 (ft)



Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Post-Development

Basin: Post Basin 7		
Pond:	Pond 7	
Basin Area:	7.73	acres
Pond Area @ Bot:	0.26	acres
Pond Bottom Elev.:	85.00	ft
Time of Concentration:	10.00	min

Curve Number: (Using the SCS TR-55, Second Ed., June 1986, Table 2-2a)								
Cover Description			Curve Numbers for Soil Group					
Cover Type	Condition		A	B	C	D		
Open Space	Good (grass cover > 75%)		39	61	74	80		
Impervious Area	Pavement, Buildings, etc.		98	98	98	98		
Percentage of each soil type within the Basin			100%	0%	0%	0%		
			Composite Pervious Curve Number (CN) =			39		
			Impervious Curve Number (CN) =			98		
Land Use:	Total Area (ac)	% Imperv.	Imperv. Area (ac)	Imperv. CN	Pervious Area (ac)	Pervious CN	% Roof Area	Roof Area (ac)
Future Building	2.23	100%	2.23		0.00		N/A	N/A
Future Pavement	0.66	100%	0.66		0.00		N/A	N/A
Future Sidewalk/Trail	0.24	100%	0.24		0.00		N/A	N/A
Future Water Surface	0.64	100%	0.64		0.00		N/A	N/A
Future Open Space	3.96	0%	0.00		3.96		N/A	N/A
Totals	7.73	48.7%	3.77	98	3.96	39		N/A
Weighted Curve Number (CN) = 68.0								

Treatment Volume Required:			
DCIA % = (DCIA Area) / (Total Area) =		8.6%	
Non DCIA CN =		65.0	
1" of runoff = 1 x Total Area x 1/12 =		0.644	acre-feet
2.5" over impervious = Total impervious x 2.5/12 =		0.785	acre-feet
WQ Volume		0.785	acre-feet

Greater of
 <===== WQ TV

Permanent Pool Volume:			
DA:	7.73	Ac.	, where DA = drainage area
C:	0.57		, where C = runoff coefficient
R:	50.00	inches	, where R = wet season rainfall depth
WS:	153.00	days	, where WS = length of wet season
RT:	14.00	days	, where RT = residence time
PPV Calculated =		1.67	Ac-ft
Add 50% PPV for OFW =		0	Ac-ft
Add 50% PPV for Littoral Zone Alternative =		0.00	Ac-ft
PPV Required =		1.67	Ac-ft
PPV Provided =		2.37	Ac-ft

Adequate
Storage
Provided

Pond: Wet Pond	Stage (ft)	Area (ac)	Treat. Vol. (ac-ft)	
Stage Storage:				
Pond Bottom =	78.00	0.188	0.000	
	83.00	0.372	1.374	
NWL	85.00	0.638	2.372	
1/2 WQ Elevation =	85.57		0.392	
	86.00	0.737	0.687	
WQ Elevation =	86.12		0.785	<===== Water Quality Treatment Volume Required
	87.00	0.841	1.475	
	88.00	0.947	2.369	
	89.00	1.055	3.369	
Top of Bank =	90.00	1.336	4.562	

Treatment Volume Provided:	
Calculated Elevation =	86.12 (ft)
Design Elevation =	86.40 (ft)



**Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Post-Development**

Basin: Post Basin 8		
Pond:	Pond 8	
Basin Area:	12.63	acres
Pond Area @ Bot:	0.24	acres
Pond Bottom Elev.:	84.00	ft
Time of Concentration:	10.00	min

Curve Number: (Using the SCS TR-55, Second Ed., June 1986, Table 2-2a)								
Cover Description			Curve Numbers for Soil Group					
Cover Type	Condition		A	B	C	D		
Open Space	Good (grass cover > 75%)		39	61	74	80		
Impervious Area	Pavement, Buildings, etc.		98	98	98	98		
Percentage of each soil type within the Basin			100%	0%	0%	0%		
			Composite Pervious Curve Number (CN) =			39		
			Impervious Curve Number (CN) =			98		
Land Use:	Total Area (ac)	% Imperv.	Imperv. Area (ac)	Imperv. CN	Pervious Area (ac)	Pervious CN	% Roof Area	Roof Area (ac)
Future Building	2.80	100%	2.80		0.00		N/A	N/A
Future Pavement	1.88	100%	1.88		0.00		N/A	N/A
Future Sidewalk/Trail	0.49	100%	0.49		0.00		N/A	N/A
Future Water Surface	0.49	100%	0.49		0.00		N/A	N/A
Future Open Space	6.98	0%	0.00		6.98		N/A	N/A
Totals	12.63	44.8%	5.65	98	6.98	39		N/A
Weighted Curve Number (CN) = 65.0								

Treatment Volume Required:			
DCIA % = (DCIA Area) / (Total Area) =		14.8%	
Non DCIA CN =		60.0	
1" of runoff = 1 x Total Area x 1/12 =		1.053	acre-feet
2.5" over impervious = Total impervious x 2.5/12 =		1.178	acre-feet
WQ Volume		1.178	acre-feet

Greater of
<===== WQ TV

Permanent Pool Volume:			
DA:	12.63	Ac.	, where DA = drainage area
C:	0.54		, where C = runoff coefficient
R:	50.00	inches	, where R = wet season rainfall depth
WS:	153.00	days	, where WS = length of wet season
RT:	14.00	days	, where RT = residence time
PPV Calculated =		2.58	Ac-ft
Add 50% PPV for OFW =		0	Ac-ft
Add 50% PPV for Littoral Zone Alternative =		0.00	Ac-ft
PPV Required =		2.58	Ac-ft
PPV Provided =		2.90	Ac-ft

Adequate
Storage
Provided

Pond: Wet Pond			
Stage Storage:			
	Stage (ft)	Area (ac)	Treat. Vol. (ac-ft)
Pond Bottom =	74.00	0.172	0.000
	82.00	0.355	2.062
NWL	84.00	0.486	2.898
1/2 WQ Elevation =	85.11		0.589
	85.00	0.573	0.529
WQ Elevation =	86.05		1.178
	86.00	0.665	1.147
	87.00	0.759	1.858
	88.00	0.855	2.664
Top of Bank =	89.00	1.105	3.642

<===== Water Quality Treatment Volume Required

Treatment Volume Provided:	
Calculated Elevation =	86.05 (ft)
Design Elevation =	86.00 (ft)



**Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Post-Development**

Basin: Post Basin 9		
Pond:	Pond 9	
Basin Area:	11.62	acres
Pond Area @ Bot:	0.65	acres
Pond Bottom Elev.:	84.00	ft
Time of Concentration:	10.00	min

Curve Number: (Using the SCS TR-55, Second Ed., June 1986, Table 2-2a)								
Cover Description			Curve Numbers for Soil Group					
Cover Type	Condition		A	B	C	D		
Open Space	Good (grass cover > 75%)		39	61	74	80		
Impervious Area	Pavement, Buildings, etc.		98	98	98	98		
Percentage of each soil type within the Basin			100%	0%	0%	0%		
			Composite Pervious Curve Number (CN) =			39		
			Impervious Curve Number (CN) =			98		
Land Use:	Total Area (ac)	% Imperv.	Imperv. Area (ac)	Imperv. CN	Pervious Area (ac)	Pervious CN	% Roof Area	Roof Area (ac)
Future Building	1.98	100%	1.98		0.00		N/A	N/A
Future Pavement	1.28	100%	1.28		0.00		N/A	N/A
Future Sidewalk/Trail	0.54	100%	0.54		0.00		N/A	N/A
Future Water Surface	1.04	100%	1.04		0.00		N/A	N/A
Future Open Space	6.77	0%	0.00		6.77		N/A	N/A
Totals	11.62	41.7%	4.85	98	6.77	39		N/A
Weighted Curve Number (CN) = 64.0								

Treatment Volume Required:			
DCIA % = (DCIA Area) / (Total Area) =		11.1%	
Non DCIA CN =		59.0	
1" of runoff = 1 x Total Area x 1/12 =		0.968	acre-feet
2.5" over impervious = Total impervious x 2.5/12 =		1.010	acre-feet
Plus 0.5" x Total Area x 1/12 =		1.010	acre-feet
<===== WQ TV			

Permanent Pool Volume:			
DA:	11.62	Ac.	, where DA = drainage area
C:	0.51		, where C = runoff coefficient
R:	50.00	inches	, where R = wet season rainfall depth
WS:	153.00	days	, where WS = length of wet season
RT:	14.00	days	, where RT = residence time
PPV Calculated =		2.27	Ac-ft
Add 50% PPV for OFW =		0	Ac-ft
Add 50% PPV for Littoral Zone Alternative		0.00	Ac-ft
PPV Required =		2.27	Ac-ft
PPV Provided =		4.92	Ac-ft
			<u>Adequate</u> <u>Storage</u> <u>Provided</u>

Pond: Wet Pond			
Stage Storage:			
Pond Bottom =	Stage (ft)	Area (ac)	Treat. Vol. (ac-ft)
	77.00	0.528	0.000
	82.00	0.739	3.152
NWL	84.00	1.036	4.919
1/2 WQ Elevation =	84.46		0.505
WQ Elevation =	84.93		1.010
	85.00	1.141	1.088
	86.00	1.247	2.281
	87.00	1.357	3.583
	88.00	1.468	4.995
Top of Bank =	89.00	1.757	6.805
<===== Water Quality Treatment Volume Required			

Treatment Volume Provided:	
Calculated Elevation =	84.93 (ft)
Design Elevation =	85.10 (ft)



**Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Post-Development**

Basin: Post Basin 10		
Pond: Pond 10		
Basin Area:	8.01	acres
Pond Area @ Bot:	0.55	acres
Pond Bottom Elev.:	84.00	ft
Time of Concentration:	10.00	min

Curve Number: (Using the SCS TR-55, Second Ed., June 1986, Table 2-2a)

Cover Description		Curve Numbers for Soil Group			
Cover Type	Condition	A	B	C	D
Open Space	Good (grass cover > 75%)	39	61	74	80
Impervious Area	Pavement, Buildings, etc.	98	98	98	98

Percentage of each soil type within the Basin	100%	0%	0%	0%
Composite Pervious Curve Number (CN) =	39			
Impervious Curve Number (CN) =	98			

Land Use:	Total Area (ac)	% Imperv.	Imperv. Area (ac)	Imperv. CN	Pervious Area (ac)	Pervious CN	% Roof Area	Roof Area (ac)
Future Building	1.77	100%	1.77		0.00		N/A	N/A
Future Pavement	1.21	100%	1.21		0.00		N/A	N/A
Future Sidewalk/Trail	0.52	100%	0.52		0.00		N/A	N/A
Future Water Surface	0.77	100%	0.77		0.00		N/A	N/A
Future Open Space	3.74	0%	0.00		3.74		N/A	N/A
Totals	8.01	53.3%	4.27	98	3.74	39		N/A

Weighted Curve Number (CN) = **70.0**

Treatment Volume Required:

DCIA % = (DCIA Area) / (Total Area) =	15.0%
Non DCIA CN =	66.0
1" of runoff = 1 x Total Area x 1/12 =	0.668 acre-feet
2.5" over impervious = Total impervious x 2.5/12 =	0.890 acre-feet
WQ Volume	0.890 acre-feet

Greater of
<<==== WQ TV

Permanent Pool Volume:

DA: 8.01	Ac.	, where DA = drainage area
C: 0.60		, where C = runoff coefficient
R: 50.00	inches	, where R = wet season rainfall depth
WS: 153.00	days	, where WS = length of wet season
RT: 14.00	days	, where RT = residence time
PPV Calculated =	1.83	Ac-ft $PPV = \frac{DA \times C \times R \times RT}{WS \times \frac{12in.}{ft}}$
Add 50% PPV for OFW =	0	Ac-ft
Add 50% PPV for Littoral Zone Alternative =	0.00	Ac-ft
PPV Required =	1.83	Ac-ft
PPV Provided =	3.86	Ac-ft

Adequate
Storage
Provided

Pond: Wet Pond	Stage (ft)	Area (ac)	Treat. Vol. (ac-ft)
Stage Storage:			
Pond Bottom =	77.00	0.432	0.000
	82.00	0.576	2.510
NWL	84.00	0.775	3.855
1/2 WQ Elevation =	84.55		0.445
	85.00	0.846	0.810
WQ Elevation =	85.09	-	0.890
	86.00	0.920	1.692
	87.00	0.996	2.650
	88.00	1.074	3.684
Top of Bank =	89.00	1.280	4.859

<<==== Water Quality Treatment Volume Required

Treatment Volume Provided:

Calculated Elevation =	85.09 (ft)
Design Elevation =	85.30 (ft)



Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Post-Development

Basin: Post Basin 11
Pond: Pond 11
 Basin Area: 33.76 acres
 Pond Area @ Bot: 2.58 acres
 Pond Bottom Elev.: 90.00 ft
 Time of Concentration: 10.00 min

Curve Number: (Using the SCS TR-55, Second Ed., June 1986, Table 2-2a)

Cover Description		Curve Numbers for Soil Group			
Cover Type	Condition	A	B	C	D
Open Space	Good (grass cover > 75%)	39	61	74	80
Impervious Area	Pavement, Buildings, etc.	98	98	98	98

Percentage of each soil type within the Basin: 100% 0% 0% 0%
 Composite Pervious Curve Number (CN) = 39
 Impervious Curve Number (CN) = 98

Land Use:	Total Area (ac)	% Imperv.	Imperv. Area (ac)	Imperv. CN	Pervious Area (ac)	Pervious CN	% Roof Area	Roof Area (ac)
Future Building	9.83	100%	9.83		0.00		N/A	N/A
Future Pavement	3.78	100%	3.78		0.00		N/A	N/A
Future Sidewalk/Trail	1.29	100%	1.29		0.00		N/A	N/A
Future Pond Bottom	2.58	100%	2.58		0.00		N/A	N/A
Future Open Space	16.28	0%	0.00		16.28		N/A	N/A
Totals	33.76	51.8%	17.48	98	16.28	39		N/A
Weighted Curve Number (CN) = 70.0								

Treatment Volume Required:

DCIA % = (DCIA Area) / (Total Area) =	51.8%
Non DCIA CN =	0.0
1" of runoff = 1 x Total Area x 1/12 =	2.813 acre-feet
2.5" over impervious = Total impervious x 2.5/12 =	3.642 acre-feet
WQ Volume	3.642 acre-feet

Greater of
 <===== WQ TV

Permanent Pool Volume:

DA: 33.76	Ac.	, where DA = drainage area
C: 0.59		, where C = runoff coefficient
R: 50.00	inches	, where R = wet season rainfall depth
WS: 153.00	days	, where WS = length of wet season
RT: 14.00	days	, where RT = residence time
PPV Calculated =	7.57	Ac-ft
Add 50% PPV for OFW =	0	Ac-ft
Add 50% PPV for Littoral Zone Alternative =	0.00	Ac-ft
PPV Required =	7.57	Ac-ft
PPV Provided =	13.70	Ac-ft

Adequate
Storage
Provided

Pond: Wet Pond	Stage (ft)	Area (ac)	Treat. Vol. (ac-ft)
Stage Storage:			
Pond Bottom =	81.00	1.697	0.000
	86.00	1.971	9.160
NWL	88.00	2.583	13.700
1/2 WQ Elevation =	88.69		1.821
WQ Elevation =	89.36		3.642
	89.00	2.715	2.649
	90.00	2.850	5.431
	91.00	2.986	8.349
	92.00	3.125	11.404
	93.00	3.267	14.600
Top of Bank =	94.00	3.630	18.047

<===== Water Quality Treatment Volume Required

Treatment Volume Provided:

Calculated Elevation =	89.36 (ft)
Design Elevation =	92.00 (ft)



Mission Rise
Howey-In-The-Hills, FL
Stormwater Treatment Volume Calculations
Post-Development

Basin: Post Basin 12
Pond: Pond 12
 Basin Area: 26.27 acres
 Pond Area @ Bot: 1.58 acres
 Pond Bottom Elev.: 84.00 ft
 Time of Concentration: 10.00 min

Curve Number: (Using the SCS TR-55, Second Ed., June 1986, Table 2-2a)

Cover Description		Curve Numbers for Soil Group			
Cover Type	Condition	A	B	C	D
Open Space	Good (grass cover > 75%)	39	61	74	80
Impervious Area	Pavement, Buildings, etc.	98	98	98	98

Percentage of each soil type within the Basin: 100% 0% 0% 0%
 Composite Pervious Curve Number (CN) = 39
 Impervious Curve Number (CN) = 98

Land Use:	Total Area (ac)	% Imperv.	Imperv. Area (ac)	Imperv. CN	Pervious Area (ac)	Pervious CN	% Roof Area	Roof Area (ac)
Future Building	6.83	100%	6.83		0.00		N/A	N/A
Future Pavement	2.96	100%	2.96		0.00		N/A	N/A
Future Sidewalk/Trail	1.17	100%	1.17		0.00		N/A	N/A
Future Water Surface	1.58	100%	1.58	100	0.00			
Future Amenity	1.06	75%	0.80		0.27			
Future Open Space	12.66	0%	0.00		12.66		N/A	N/A
Totals	26.27	50.8%	13.35	98	12.92	39		N/A
Weighted Curve Number (CN) = 69.0								

Treatment Volume Required:

DCIA % = (DCIA Area) / (Total Area) =	44.8%
Non DCIA CN =	67.0
1" of runoff = 1 x Total Area x 1/12 =	2.189 acre-feet
2.5" over impervious = Total impervious x 2.5/12 =	2.781 acre-feet
Greater of	
WQ Volume	2.781 acre-feet
<<==== WQ TV	

Permanent Pool Volume:

DA: 26.27	Ac.	, where DA = drainage area
C: 0.58		, where C = runoff coefficient
R: 50.00	inches	, where R = wet season rainfall depth
WS: 153.00	days	, where WS = length of wet season
RT: 14.00	days	, where RT = residence time
PPV Calculated =	5.82	Ac-ft
Add 50% PPV for OFW =	0	Ac-ft
Add 50% PPV for Littoral Zone Alternative =	0.00	Ac-ft
PPV Required =	5.82	Ac-ft
PPV Provided =	7.61	Ac-ft
		<u>Adequate Storage Provided</u>

Pond: Wet Pond	Stage (ft)	Area (ac)	Treat. Vol. (ac-ft)
Stage Storage:			
Pond Bottom =	77.00	0.831	0.000
	82.00	1.138	4.903
NWL	84.00	1.585	7.614
1/2 WQ Elevation =	84.82		1.391
	85.00	1.803	1.693
WQ Elevation =	85.58		2.781
	86.00	1.975	3.581
	87.00	2.152	5.644
	88.00	2.247	7.843
Top of Bank =	89.00	2.679	10.303

<<==== Water Quality Treatment Volume Required

Treatment Volume Provided:

Calculated Elevation =	85.58 (ft)
Design Elevation =	85.90 (ft)



Manual Basin: OFFSITE-6

Scenario: Post-development
 Node: WET-08-PST
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 21.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 2.7808 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.5437	1100: Residential, low density - less than 2 dwelling units/acre	B	
1.1557	2120: Unimproved pastures	B	
0.0557	4340: Upland mixed coniferous/hardwood	B	
0.0224	1100: Residential, low density - less than 2 dwelling units/acre	A	
0.0034	2120: Unimproved pastures	A	

Comment:

Manual Basin: OFFSITE-8

Scenario: Post-development
 Node: Pond 5
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 11.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 1.0629 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.5314	2120: Unimproved pastures	B	
0.0449	4340: Upland mixed coniferous/hardwood	A/D	
0.3486	4340: Upland mixed coniferous/hardwood	A	
0.0454	4340: Upland mixed coniferous/hardwood	B	
0.0481	6460: Mixed scrub-shrub wetland	A/D	
0.0445	6410: Freshwater marshes	A/D	

Comment:

Manual Basin: POST 1

Scenario: Post-development
Node: Pond 1
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0
Area: 12.8700 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
6.1200	Impervious	A	
6.7500	Open Space	A	

Comment:

Manual Basin: POST 2

Scenario: Post-development
Node: Pond 2
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 99999.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH484
Peaking Factor: 484.0
Area: 15.9900 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
8.6200	Impervious	A	
7.3700	Open Space	A	

Comment:

Manual Basin: POST 3

Scenario: Post-development
Node: Pond 3
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number

Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 6.7400 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
3.7500	Impervious	A	
2.9900	Open Space	A	

Comment:

Manual Basin: POST 4

Scenario: Post-development
 Node: Pond 4
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 23.6200 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
13.2000	Impervious	A	
10.4200	Open Space	A	

Comment:

Manual Basin: POST-10

Scenario: Post-development
 Node: Pond 10
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 8.0100 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
3.7400	Impervious	A	
4.2700	Open Space	A	

Comment:

Manual Basin: POST-11

Scenario: Post-development
 Node: Pond 11
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 33.7600 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
17.4800	Impervious	A	
16.2800	Open Space	A	

Comment:

Manual Basin: POST-12

Scenario: Post-development
 Node: Pond 12
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 26.2700 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
13.3500	Impervious	A	
12.9200	Open Space	A	

Comment:

Manual Basin: POST-5

Scenario: Post-development
 Node: Pond 5
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 9.4300 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
4.5300	Impervious	A	
4.9000	Open Space	A	

Comment:

Manual Basin: POST-6

Scenario: Post-development
 Node: Pond 6
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 7.2500 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
3.4200	Impervious	A	
3.8300	Open Space	A	

Comment:

Manual Basin: POST-7

Scenario: Post-development
 Node: Pond 7
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 7.7300 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
3.7700	Impervious	A	
3.9600	Open Space	A	

Comment:

Manual Basin: POST-8

Scenario: Post-development

Node: Pond 8
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 12.6300 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
5.6500	Impervious	A	
6.9800	Open Space	A	

Comment:

Manual Basin: POST-9

Scenario: Post-development
 Node: Pond 9
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 11.6200 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
4.8500	Impervious	A	
6.7700	Open Space	A	

Comment:

Manual Basin: WETLAND 1A

Scenario: Post-development
 Node: Wetland 1A
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 7.6627 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.4074	6460: Mixed scrub-shrub	A/D	

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
	wetland		
0.7947	6440: Emergent aquatic vegetation	A/D	
0.0454	2130: Woodland pastures	A/D	
4.7817	6440: Emergent aquatic vegetation	Water	
0.0116	6460: Mixed scrub-shrub wetland	Water	
0.6275	6300: Wetland forested mixed	A/D	
0.0139	6300: Wetland forested mixed	Water	
0.5476	6440: Emergent aquatic vegetation	A	
0.0497	4410: Pine plantation	A	
0.3018	4340: Upland mixed coniferous/hardwood	A/D	
0.0813	4340: Upland mixed coniferous/hardwood	A	

Comment:

Manual Basin: WETLAND 1B

Scenario: Post-development
 Node: Wetland 1B
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 18.3938 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.0772	2120: Unimproved pastures	A	
1.1166	6460: Mixed scrub-shrub wetland	A	
2.8182	6460: Mixed scrub-shrub wetland	Water	
10.9300	6440: Emergent aquatic vegetation	Water	
0.0977	6440: Emergent aquatic vegetation	A	
1.1776	6460: Mixed scrub-shrub wetland	A/D	
0.0566	6440: Emergent aquatic vegetation	A/D	
1.0401	4340: Upland mixed	A/D	

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
	coniferous/hardwood		
0.5165	4340: Upland mixed coniferous/hardwood	Water	
0.5611	6300: Wetland forested mixed	Water	
0.0023	2130: Woodland pastures	A/D	

Comment:

Manual Basin: WETLAND 1C

Scenario: Post-development
 Node: Wetland 1C
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 6.5093 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.0186	2120: Unimproved pastures	B	
0.0397	6410: Freshwater marshes	B	
0.2489	4340: Upland mixed coniferous/hardwood	B	
4.5685	6410: Freshwater marshes	Water	
0.4101	4340: Upland mixed coniferous/hardwood	Water	
0.1515	4340: Upland mixed coniferous/hardwood	A	
0.1719	4340: Upland mixed coniferous/hardwood	A/D	
0.1298	6410: Freshwater marshes	A/D	
0.6540	6460: Mixed scrub-shrub wetland	A/D	
0.1162	6460: Mixed scrub-shrub wetland	Water	

Comment:

Manual Basin: WETLAND 2

Scenario: Post-development
 Node: Wetland 2
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number

Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 24.9397 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
1.9637	6410: Freshwater marshes	A/D	
0.7348	6460: Mixed scrub-shrub wetland	A/D	
0.0526	4340: Upland mixed coniferous/hardwood	A/D	
0.2665	4340: Upland mixed coniferous/hardwood	A	
0.0542	6460: Mixed scrub-shrub wetland	A	
1.5266	2120: Unimproved pastures	A	
0.3085	6410: Freshwater marshes	B	
0.2711	6460: Mixed scrub-shrub wetland	Water	
0.5147	6410: Freshwater marshes	Water	
0.0699	5200: Lakes	A	
16.7506	5200: Lakes	Water	
0.4623	2120: Unimproved pastures	Water	
0.5305	5200: Lakes	A/D	
0.8435	6460: Mixed scrub-shrub wetland	B	
0.0364	5200: Lakes	B	
0.4523	2120: Unimproved pastures	B	
0.0081	2110: Improved pastures (monocult, planted forage crops)	A/D	
0.0861	2120: Unimproved pastures	A/D	
0.0073	2110: Improved pastures (monocult, planted forage crops)	A	

Comment:

Manual Basin: WETLAND 3

Scenario: Post-development
 Node: WET-08-PST
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr

Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 3.4089 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.0590	2120: Unimproved pastures	B	
0.0527	6460: Mixed scrub-shrub wetland	B	
0.0075	2120: Unimproved pastures	A/D	
1.0518	6460: Mixed scrub-shrub wetland	A/D	
2.2267	6410: Freshwater marshes	A/D	
0.0112	6460: Mixed scrub-shrub wetland	A	

Comment:

Manual Basin: WETLAND 4

Scenario: Post-development
 Node: Wetland 4
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr
 Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 1.7056 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.8307	5200: Lakes	Water	
0.0070	6410: Freshwater marshes	Water	
0.0222	6410: Freshwater marshes	A	
0.0064	1180: Rural residential	A	
0.5034	2120: Unimproved pastures	A	
0.3359	5200: Lakes	A	

Comment:

Manual Basin: WETLAND 5

Scenario: Post-development
 Node: Wetland 5
 Hydrograph Method: NRCS Unit Hydrograph
 Infiltration Method: Curve Number
 Time of Concentration: 10.0000 min
 Max Allowable Q: 99999.00 cfs
 Time Shift: 0.0000 hr

Unit Hydrograph: UH484
 Peaking Factor: 484.0
 Area: 3.5379 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name
0.0321	1180: Rural residential	A	
0.9312	2120: Unimproved pastures	A	
0.0347	6440: Emergent aquatic vegetation	A	
2.2436	6440: Emergent aquatic vegetation	Water	
0.2963	2120: Unimproved pastures	Water	

Comment:

Node: Pond 1

Scenario: Post-development
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 83.00 ft
 Warning Stage: 89.00 ft
 Alert Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
76.00	0.2230	9714
81.00	0.3380	14723
83.00	0.4160	18121
84.00	0.4710	20517
85.00	0.5290	23043
86.00	0.5880	25613
87.00	0.6500	28314
88.00	0.7150	31145
89.00	0.8860	38594

Comment:

Node: Pond 10

Scenario: Post-development
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 84.00 ft
 Warning Stage: 89.00 ft
 Alert Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
77.00	0.4880	21257

Stage [ft]	Area [ac]	Area [ft2]
82.00	0.6390	27835
84.00	0.7750	33759
85.00	0.8460	36852
86.00	0.9200	40075
87.00	0.9960	43386
88.00	1.0740	46783
89.00	1.2800	55757

Comment:

Node: Pond 11

Scenario: Post-development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 88.00 ft
Warning Stage: 94.00 ft
Alert Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
88.00	2.5800	112385
89.00	2.7200	118483
90.00	2.8500	124146
91.00	2.9800	129809
92.00	3.1300	136343
93.00	3.2700	142441
94.00	3.6300	158123

Comment:

Node: Pond 12

Scenario: Post-development
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 84.00 ft
Warning Stage: 89.00 ft
Alert Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
84.00	1.5850	69043
85.00	1.8030	78539
86.00	1.9750	86031
87.00	2.1520	93741
88.00	2.2470	97879
89.00	2.6790	116697

Comment:

Node: Pond 2

Scenario: Post-development
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 84.00 ft
 Warning Stage: 89.00 ft
 Alert Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
76.00	0.2390	10411
82.00	0.7140	31102
84.00	1.0610	46217
85.00	1.2390	53971
86.00	1.4190	61812
87.00	1.6020	69783
88.00	1.7870	77842
89.00	2.2590	98402

Comment:

Node: Pond 3

Scenario: Post-development
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 91.00 ft
 Warning Stage: 96.00 ft
 Alert Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
91.00	0.3970	17293
92.00	0.4470	19471
93.00	0.5090	22172
94.00	0.5740	25003
95.00	0.6410	27922
96.00	0.8190	35676

Comment:

Node: Pond 4

Scenario: Post-development
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 85.00 ft
 Warning Stage: 90.00 ft
 Alert Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
85.00	1.2920	56280
86.00	1.3910	60592
87.00	1.4910	64948
88.00	1.5940	69435
89.00	1.7000	74052
90.00	1.9730	85944

Comment:

Node: Pond 5

Scenario: Post-development
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 85.00 ft
 Warning Stage: 90.00 ft
 Alert Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
78.00	0.4510	19646
83.00	0.7120	31015
85.00	0.9490	41338
86.00	1.0710	46653
87.00	1.1960	52098
88.00	1.3220	57586
89.00	1.4510	63206
90.00	1.7840	77711

Comment:

Node: Pond 6

Scenario: Post-development
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 85.00 ft
 Warning Stage: 90.00 ft
 Alert Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
78.00	0.1280	5576
83.00	0.2670	11631
85.00	0.3930	17119
86.00	0.4630	20168
87.00	0.6750	29403
88.00	0.7690	33498
89.00	0.8660	37723
90.00	1.1220	48874

Comment:

Node: Pond 7

Scenario: Post-development
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 85.00 ft
 Warning Stage: 90.00 ft
 Alert Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
78.00	0.2560	11151
83.00	0.4560	19863
85.00	0.6380	27791
86.00	0.7370	32104
87.00	0.8410	36634
88.00	0.9510	41426
89.00	1.0550	45956
90.00	1.3360	58196

Comment:

Node: Pond 8

Scenario: Post-development
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 84.00 ft
 Warning Stage: 89.00 ft
 Alert Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
77.00	0.2330	10149
82.00	0.3550	15464
84.00	0.4860	21170
85.00	0.5700	24829

Stage [ft]	Area [ac]	Area [ft2]
86.00	0.6650	28967
87.00	0.7590	33062
88.00	0.8550	37244
89.00	1.1050	48134

Comment:

Node: Pond 9

Scenario: Post-development
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 84.00 ft
 Warning Stage: 89.00 ft
 Alert Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
77.00	0.6090	26528
82.00	0.8340	36329
84.00	1.0360	45128
85.00	1.1410	49702
86.00	1.2470	54319
87.00	1.3570	59111
88.00	1.4680	63946
89.00	1.7570	76535

Comment:

Node: WET-08-PST

Scenario: Post-development
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 78.70 ft
 Warning Stage: 0.00 ft
 Alert Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
78.50	3.6000	156816
79.00	3.7000	161172
80.00	4.4000	191664
81.00	5.6000	243936
82.00	5.9000	257004
83.00	6.1000	265716
84.00	6.4000	278784

Comment: Data from Hillside Groves input report plus the section of Wetland that is inside of the property line

Node: Wetland 1A

Scenario: Post-development
 Type: Time/Stage
 Base Flow: 0.00 cfs
 Initial Stage: 83.60 ft
 Warning Stage: 84.60 ft
 Alert Stage: 0.00 ft
 Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	83.60
0	0	0	12.0000	83.60
0	0	0	24.0000	83.60
0	0	0	36.0000	83.60

Comment: Zone AE

Node: Wetland 1B

Scenario: Post-development
 Type: Time/Stage
 Base Flow: 0.00 cfs
 Initial Stage: 83.60 ft
 Warning Stage: 84.60 ft
 Alert Stage: 0.00 ft
 Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	83.60
0	0	0	12.0000	83.60
0	0	0	24.0000	83.60
0	0	0	36.0000	83.60

Comment: Zone AE

Node: Wetland 1C

Scenario: Post-development
 Type: Time/Stage
 Base Flow: 0.00 cfs
 Initial Stage: 83.60 ft
 Warning Stage: 84.60 ft

Alert Stage: 0.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	83.60
0	0	0	12.0000	83.60
0	0	0	24.0000	83.60
0	0	0	36.0000	83.60

Comment: Zone AE

Node: Wetland 2

Scenario: Post-development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 83.60 ft
Warning Stage: 84.60 ft
Alert Stage: 0.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	83.60
0	0	0	12.0000	83.60
0	0	0	24.0000	83.60
0	0	0	36.0000	83.60

Comment: Zone A

Node: Wetland 4

Scenario: Post-development
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 79.63 ft
Warning Stage: 80.63 ft
Alert Stage: 0.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	79.63
0	0	0	12.0000	79.63
0	0	0	24.0000	79.63
0	0	0	36.0000	79.63

Comment: Zone A

Node: Wetland 5

Scenario: Post-development
 Type: Stage/Area
 Base Flow: 0.00 cfs
 Initial Stage: 80.00 ft
 Warning Stage: 87.00 ft
 Alert Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
80.00	2.4700	107593
81.00	2.5400	110642
82.00	2.6300	114563
83.00	2.7700	120661
84.00	3.2600	142006
85.00	4.7100	205168
86.00	5.8900	256568
87.00	7.4900	326264

Comment: Zone A

Drop Structure Link: Pond 10_Wet 1C

Scenario: Post-development
 From Node: Pond 10
 To Node: Wetland 1C
 Link Count: 1
 Pipe Flow Direction: Both
 Solution: Combine
 Increments: 0
 Pipe Count: 1
 Damping: 0.0000 ft
 Length: 46.00 ft
 FHWA Code: 0
 Entr Loss Coef: 0.50
 Exit Loss Coef: 1.00
 Bend Loss Coef: 0.00
 Bend Location: 0.00 dec
 Energy Switch: Energy

Upstream Pipe

Invert: 82.15 ft
 Manning's N: 0.0130
 Geometry: Circular
 Max Depth: 2.00 ft

Downstream Pipe

Invert: 82.00 ft
 Manning's N: 0.0130
 Geometry: Circular
 Max Depth: 2.00 ft

Bottom Clip

Default: 0.00 ft
 Op Table:
 Ref Node:
 Manning's N: 0.0000

Top Clip

Default: 0.00 ft
 Op Table:
 Ref Node:
 Manning's N: 0.0000

Pipe Comment:

Weir Component

Weir: 1
 Weir Count: 1
 Weir Flow Direction: Both
 Damping: 0.0000 ft
 Weir Type: Sharp Crested Vertical
 Geometry Type: Circular
 Invert: 84.00 ft

Bottom Clip

Default: 0.00 ft
 Op Table:
 Ref Node:

Top Clip

Default: 0.00 ft
 Op Table:

Control Elevation: 84.00 ft
Max Depth: 0.29 ft

Ref Node:

Discharge Coefficients

Weir Default: 3.200

Weir Table:

Orifice Default: 0.600

Orifice Table:

Weir Comment: 1-3.5" Orifice

Weir Component

Weir: 2

Weir Count: 1

Weir Flow Direction: Both

Damping: 0.0000 ft

Weir Type: Sharp Crested Vertical

Geometry Type: Rectangular

Invert: 85.30 ft

Control Elevation: 85.30 ft

Max Depth: 999.00 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: 3.200

Weir Table:

Orifice Default: 0.600

Orifice Table:

Weir Comment:

Weir Component

Weir: 3

Weir Count: 1

Weir Flow Direction: Both

Damping: 0.0000 ft

Weir Type: Horizontal

Geometry Type: Rectangular

Invert: 85.95 ft

Control Elevation: 85.95 ft

Max Depth: 2.33 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: 3.200

Weir Table:

Orifice Default: 0.600

Orifice Table:

Weir Comment: FDOT Type C Inlet

Drop Structure Comment:

Drop Structure Link: Pond 11_Wet 1B

Upstream Pipe

Downstream Pipe

Scenario: Post-development

Invert: 88.15 ft

Invert: 87.00 ft

From Node: Pond 11

Manning's N: 0.0130

Manning's N: 0.0130

To Node: Wetland 1B

Geometry: Circular

Geometry: Circular

Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Pipe 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:	405.00 ft	Top Clip			
FHWA Code:	0	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	1.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component	
Weir:	1
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Horizontal
Geometry Type:	Rectangular
Invert:	92.50 ft
Control Elevation:	92.50 ft
Max Depth:	3.01 ft
Max Width:	4.42 ft
Fillet:	0.00 ft
Bottom Clip	
Default: 0.00 ft	
Op Table:	
Ref Node:	
Top Clip	
Default: 0.00 ft	
Op Table:	
Ref Node:	
Discharge Coefficients	
Weir Default: 3.200	
Weir Table:	
Orifice Default: 0.600	
Orifice Table:	

Weir Comment: FDOT Type D Inlet

Weir Component	
Weir:	2
Weir Count:	1
Weir Flow Direction:	Both
Damping:	0.0000 ft
Weir Type:	Sharp Crested Vertical
Geometry Type:	Circular
Invert:	88.00 ft
Control Elevation:	88.00 ft
Max Depth:	0.46 ft
Bottom Clip	
Default: 0.00 ft	
Op Table:	
Ref Node:	
Top Clip	
Default: 0.00 ft	
Op Table:	
Ref Node:	
Discharge Coefficients	
Weir Default: 3.200	
Weir Table:	
Orifice Default: 0.600	
Orifice Table:	

Weir Comment: 5.5" Orifice

Drop Structure Comment:

Drop Structure Link: Pond 12_Wet 1A		Upstream Pipe	Downstream Pipe
Scenario:	Post-development	Invert: 82.20 ft	Invert: 82.00 ft
From Node:	Pond 12	Manning's N: 0.0130	Manning's N: 0.0130
To Node:	Wetland 1A	Geometry: Circular	Geometry: Circular
Link Count:	1	Max Depth: 2.00 ft	Max Depth: 2.00 ft
Pipe 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:	74.00 ft	Top Clip	
FHWA Code:	0	Default: 0.00 ft	Default: 0.00 ft
Entr Loss Coef:	0.50	Op Table:	Op Table:
Exit Loss Coef:	1.00	Ref Node:	Ref Node:
Bend Loss Coef:	0.00	Manning's N: 0.0000	Manning's N: 0.0000
Bend Location:	0.00 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:	Circular	Default:	0.00 ft
Invert:	84.00 ft	Op Table:	
Control Elevation:	84.00 ft	Ref Node:	
Max Depth:	0.42 ft	Discharge Coefficients	
		Weir Default:	3.200
		Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment: 1-5" Orifice

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:	86.70 ft	Op Table:	
Control Elevation:	86.70 ft	Ref Node:	
Max Depth:	2.33 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: FDOT Type C Inlet

Drop Structure Comment:

Drop Structure Link: Pond 1_Wet 5		Upstream Pipe	Downstream Pipe
Scenario:	Post-development	Invert: 83.20 ft	Invert: 83.00 ft
From Node:	Pond 1	Manning's N: 0.0130	Manning's N: 0.0130
To Node:	Wetland 5	Geometry: Circular	Geometry: Circular
Link Count:	1	Max Depth: 2.00 ft	Max Depth: 2.00 ft
Pipe 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:	34.00 ft	Top Clip	
FHWA Code:	0	Default: 0.00 ft	Default: 0.00 ft
Entr Loss Coef:	0.50	Op Table:	Op Table:
Exit Loss Coef:	1.00	Ref Node:	Ref Node:
Bend Loss Coef:	0.00	Manning's N: 0.0000	Manning's N: 0.0000
Bend Location:	0.00 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: Circular	Default: 0.00 ft
Invert: 83.00 ft	Op Table:
Control Elevation: 83.00 ft	Ref Node:
Max Depth: 0.27 ft	Discharge Coefficients
	Weir Default: 3.200
	Weir Table:
	Orifice Default: 0.600
	Orifice Table:

Weir Comment: 1- 3.25" Orifice

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: 88.15 ft	Op Table:
Control Elevation: 88.15 ft	Ref Node:

Max Depth: 2.33 ft
 Max Width: 3.00 ft
 Fillet: 0.00 ft

Discharge Coefficients

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

Weir Comment: FDOT Type C Inlet

Drop Structure Comment:

Drop Structure Link: Pond 2_Wet 4		Upstream Pipe	Downstream Pipe
Scenario:	Post-development	Invert: 82.13 ft	Invert: 82.00 ft
From Node:	Pond 2	Manning's N: 0.0130	Manning's N: 0.0130
To Node:	Wetland 4	Geometry: Circular	Geometry: Circular
Link Count:	1	Max Depth: 2.50 ft	Max Depth: 2.50 ft
Pipe Flow Direction:	Both	Bottom Clip	
Solution:	Combine	Default: 0.00 ft	Default: 0.00 ft
Increments:	0	Op Table:	Op Table:
Pipe Count:	2	Ref Node:	Ref Node:
Damping:	0.0000 ft	Manning's N: 0.0000	Manning's N: 0.0000
Length:	41.00 ft	Top Clip	
FHWA Code:	0	Default: 0.00 ft	Default: 0.00 ft
Entr Loss Coef:	0.50	Op Table:	Op Table:
Exit Loss Coef:	1.00	Ref Node:	Ref Node:
Bend Loss Coef:	0.00	Manning's N: 0.0000	Manning's N: 0.0000
Bend Location:	0.00 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:	Circular	Default: 0.00 ft
Invert:	84.00 ft	Op Table:
Control Elevation:	84.00 ft	Ref Node:
Max Depth:	0.29 ft	Discharge Coefficients
		Weir Default: 3.200
		Weir Table:
		Orifice Default: 0.600
		Orifice Table:

Weir Comment: 1-3.5" Orifice

Weir Component		
Weir:	2	Bottom Clip

Weir Count: 1
 Weir Flow Direction: None
 Damping: 0.0000 ft
 Weir Type: Sharp Crested Vertical
 Geometry Type: Rectangular
 Invert: 84.60 ft
 Control Elevation: 84.60 ft
 Max Depth: 999.00 ft
 Max Width: 13.75 ft
 Fillet: 0.00 ft

Default: 0.00 ft

Op Table:

Ref Node:

Top Clip

Default: 0.00 ft

Op Table:

Ref Node:

Discharge Coefficients

Weir Default: 3.200

Weir Table:

Orifice Default: 0.600

Orifice Table:

Weir Comment:

Weir Component

Weir: 3

Weir Count: 1

Weir Flow Direction: Both

Damping: 0.0000 ft

Weir Type: Horizontal

Geometry Type: Rectangular

Invert: 86.80 ft

Control Elevation: 86.80 ft

Max Depth: 3.38 ft

Max Width: 8.44 ft

Fillet: 0.00 ft

Bottom Clip

Default: 0.00 ft

Op Table:

Ref Node:

Top Clip

Default: 0.00 ft

Op Table:

Ref Node:

Discharge Coefficients

Weir Default: 3.200

Weir Table:

Orifice Default: 0.600

Orifice Table:

Weir Comment: FDOT Type H Inlet (4-grate inlet)

Drop Structure Comment:

Drop Structure Link: Pond 3_Pond 2

Scenario: Post-development
 From Node: Pond 3
 To Node: Pond 2
 Link Count: 1
 Pipe Flow Direction: Both
 Solution: Combine
 Increments: 0
 Pipe Count: 1
 Damping: 0.0000 ft
 Length: 700.00 ft
 FHWA Code: 0
 Entr Loss Coef: 0.50
 Exit Loss Coef: 1.00

Upstream Pipe

Invert: 84.00 ft

Manning's N: 0.0130

Geometry: Circular

Max Depth: 2.50 ft

Downstream Pipe

Invert: 76.00 ft

Manning's N: 0.0130

Geometry: Circular

Max Depth: 2.50 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:

Default: 0.00 ft

Op Table:

Ref Node:

Manning's N: 0.0000

Default: 0.00 ft

Op Table:

Ref Node:

Bend Loss Coef: 0.00 Manning's N: 0.0000 Manning's N: 0.0000
 Bend Location: 0.00 dec
 Energy Switch: Energy

Pipe Comment:

Weir Component	
Weir: 1	Bottom Clip
Weir Count: 1	Default: 0.00 ft
Weir Flow Direction: None	Op Table:
Damping: 0.0000 ft	Ref Node:
Weir Type: Sharp Crested Vertical	Top Clip
Geometry Type: Rectangular	Default: 0.00 ft
Invert: 93.00 ft	Op Table:
Control Elevation: 93.00 ft	Ref Node:
Max Depth: 999.00 ft	Discharge Coefficients
Max Width: 8.00 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: 93.70 ft	Op Table:
Control Elevation: 93.70 ft	Ref Node:
Max Depth: 3.01 ft	Discharge Coefficients
Max Width: 4.42 ft	Weir Default: 3.200
Fillet: 0.00 ft	Weir Table:
	Orifice Default: 0.600
	Orifice Table:

Weir Comment: FDOT Type D Inlet

Drop Structure Comment:

Drop Structure Link: Pond 4_Wet-08-PST		Upstream Pipe	Downstream Pipe
Scenario: Post-development		Invert: 82.44 ft	Invert: 82.00 ft
From Node: Pond 4		Manning's N: 0.0130	Manning's N: 0.0130
To Node: WET-08-PST		Geometry: Circular	Geometry: Circular
Link Count: 1		Max Depth: 4.00 ft	Max Depth: 4.00 ft
Pipe 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: 157.00 ft	Top Clip	
FHWA Code: 0	Default: 0.00 ft	Default: 0.00 ft
Entr Loss Coef: 0.50	Op Table:	Op Table:
Exit Loss Coef: 1.00	Ref Node:	Ref Node:
Bend Loss Coef: 0.00	Manning's N: 0.0000	Manning's N: 0.0000
Bend Location: 0.00 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: 86.25 ft	Op Table:
Control Elevation: 86.25 ft	Ref Node:
Max Depth: 999.00 ft	Discharge Coefficients
Max Width: 15.00 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: 88.00 ft	Op Table:
Control Elevation: 88.00 ft	Ref Node:
Max Depth: 3.38 ft	Discharge Coefficients
Max Width: 8.44 ft	Weir Default: 3.200
Fillet: 0.00 ft	Weir Table:
	Orifice Default: 0.600
	Orifice Table:

Weir Comment: FDOT Type H Inlet (4-grate inlet)

Drop Structure Comment:

Drop Structure Link: Pond 5_Wet 2	Upstream Pipe	Downstream Pipe
Scenario: Post-development	Invert: 84.65 ft	Invert: 84.50 ft

From Node:	Pond 5	Manning's N:	0.0130	Manning's N:	0.0130
To Node:	Wetland 2	Geometry:	Circular	Geometry:	Circular
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Pipe 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:	44.00 ft	Top Clip			
FHWA Code:	0	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.50	Op Table:		Op Table:	
Exit Loss Coef:	1.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component	
Weir: 1	
Weir Count: 1	
Weir Flow Direction: Both	
Damping: 0.0000 ft	
Weir Type: Sharp Crested Vertical	
Geometry Type: Circular	
Invert: 85.00 ft	
Control Elevation: 85.00 ft	
Max Depth: 0.29 ft	
Bottom Clip	
Default: 0.00 ft	
Op Table:	
Ref Node:	
Top Clip	
Default: 0.00 ft	
Op Table:	
Ref Node:	
Discharge Coefficients	
Weir Default: 3.200	
Weir Table:	
Orifice Default: 0.600	
Orifice Table:	

Weir Comment: 1- 3.5" Orifice

Weir Component			
Weir:	2	Bottom Clip	
Weir Count:	1		
Weir Flow Direction:	Both		
Damping:	0.0000 ft		
Weir Type:	Horizontal	Top Clip	
Geometry Type:	Rectangular		
Invert:	89.00 ft		
Control Elevation:	89.00 ft		
Max Depth:	2.33 ft	Discharge Coefficients	
Max Width:	3.00 ft		
Fillet:	0.00 ft		
		Default:	0.00 ft
		Op Table:	
		Ref Node:	
		Default:	0.00 ft
		Op Table:	
		Ref Node:	
		Weir Default:	3.200
		Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment: FDOT Type C Inlet

Drop Structure Comment:

Drop Structure Link: Pond 6_Wet 2		Upstream Pipe	Downstream Pipe
Scenario:	Post-development	Invert: 84.70 ft	Invert: 84.50 ft
From Node:	Pond 6	Manning's N: 0.0130	Manning's N: 0.0130
To Node:	Wetland 2	Geometry: Circular	Geometry: Circular
Link Count:	1	Max Depth: 2.00 ft	Max Depth: 2.00 ft
Pipe 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:	40.00 ft	Top Clip	
FHWA Code:	0	Default: 0.00 ft	Default: 0.00 ft
Entr Loss Coef:	0.50	Op Table:	Op Table:
Exit Loss Coef:	1.00	Ref Node:	Ref Node:
Bend Loss Coef:	0.00	Manning's N: 0.0000	Manning's N: 0.0000
Bend Location:	0.00 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:	Circular	Default:	0.00 ft
Invert:	85.00 ft	Op Table:	
Control Elevation:	85.00 ft	Ref Node:	
Max Depth:	0.23 ft	Discharge Coefficients	
		Weir Default:	3.200
		Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment: 1- 2.75" Orifice

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:	89.00 ft	Op Table:
Control Elevation:	89.00 ft	Ref Node:
Max Depth:	2.33 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: FDOT Type C Inlet

Drop Structure Comment:

Drop Structure Link: Pond 7_Wet 2		Upstream Pipe	Downstream Pipe
Scenario:	Post-development	Invert: 84.66 ft	Invert: 84.50 ft
From Node:	Pond 7	Manning's N: 0.0130	Manning's N: 0.0130
To Node:	Wetland 2	Geometry: Circular	Geometry: Circular
Link Count:	1	Max Depth: 2.00 ft	Max Depth: 2.00 ft
Pipe 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:	52.00 ft	Top Clip	
FHWA Code:	0	Default: 0.00 ft	Default: 0.00 ft
Entr Loss Coef:	0.50	Op Table:	Op Table:
Exit Loss Coef:	1.00	Ref Node:	Ref Node:
Bend Loss Coef:	0.00	Manning's N: 0.0000	Manning's N: 0.0000
Bend Location:	0.00 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: Circular	Default: 0.00 ft
Invert: 85.00 ft	Op Table:
Control Elevation: 85.00 ft	Ref Node:
Max Depth: 0.25 ft	Discharge Coefficients
	Weir Default: 3.200
	Weir Table:
	Orifice Default: 0.600
	Orifice Table:

Weir Comment: 1- 3" Orifice

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: 88.20 ft	Op Table:
Control Elevation: 88.20 ft	Ref Node:

Max Depth: 2.33 ft
 Max Width: 3.00 ft
 Fillet: 0.00 ft

Discharge Coefficients

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

Weir Comment: FDOT Type C Inlet

Drop Structure Comment:

Drop Structure Link: Pond 8_Wet 1B		Upstream Pipe	Downstream Pipe
Scenario:	Post-development	Invert: 83.15 ft	Invert: 83.00 ft
From Node:	Pond 8	Manning's N: 0.0130	Manning's N: 0.0130
To Node:	Wetland 1B	Geometry: Circular	Geometry: Circular
Link Count:	1	Max Depth: 2.00 ft	Max Depth: 2.00 ft
Pipe 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:	50.00 ft	Top Clip	
FHWA Code:	0	Default: 0.00 ft	Default: 0.00 ft
Entr Loss Coef:	0.50	Op Table:	Op Table:
Exit Loss Coef:	1.00	Ref Node:	Ref Node:
Bend Loss Coef:	0.00	Manning's N: 0.0000	Manning's N: 0.0000
Bend Location:	0.00 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:	Circular	Default:	0.00 ft
Invert:	84.00 ft	Op Table:	
Control Elevation:	84.00 ft	Ref Node:	
Max Depth:	0.27 ft	Discharge Coefficients	
		Weir Default:	3.200
		Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment: 1- 3.25" Orifice

Weir Component		Bottom Clip
Weir:	2	

Weir Count: 1
 Weir Flow Direction: Both
 Damping: 0.0000 ft
 Weir Type: Sharp Crested Vertical
 Geometry Type: Rectangular
 Invert: 86.00 ft
 Control Elevation: 86.00 ft
 Max Depth: 999.00 ft
 Max Width: 3.00 ft
 Fillet: 0.00 ft

Default: 0.00 ft

Op Table:

Ref Node:

Top Clip

Default: 0.00 ft

Op Table:

Ref Node:

Discharge Coefficients

Weir Default: 3.200

Weir Table:

Orifice Default: 0.600

Orifice Table:

Weir Comment:

Weir Component

Weir: 3

Weir Count: 1

Weir Flow Direction: Both

Damping: 0.0000 ft

Weir Type: Horizontal

Geometry Type: Rectangular

Invert: 87.10 ft

Control Elevation: 87.10 ft

Max Depth: 2.33 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: 3.200

Weir Table:

Orifice Default: 0.600

Orifice Table:

Weir Comment: FDOT Type C Inlet

Drop Structure Comment:

Drop Structure Link: Pond 9_Wet 1B

Upstream Pipe

Downstream Pipe

Scenario: Post-development

From Node: Pond 9

To Node: Wetland 1B

Link Count: 1

Pipe Flow Direction: Both

Solution: Combine

Increments: 0

Pipe Count: 1

Damping: 0.0000 ft

Length: 54.00 ft

FHWA Code: 0

Entr Loss Coef: 0.50

Exit Loss Coef: 1.00

Invert: 82.16 ft

Manning's N: 0.0130

Geometry: Circular

Max Depth: 2.00 ft

Invert: 82.00 ft

Manning's N: 0.0130

Geometry: Circular

Max Depth: 2.00 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:

Default: 0.00 ft

Op Table:

Ref Node:

Manning's N: 0.0000

Default: 0.00 ft

Op Table:

Ref Node:

Bend Loss Coef: 0.00 Manning's N: 0.0000 Manning's N: 0.0000
 Bend Location: 0.00 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: Circular	Default: 0.00 ft
Invert: 84.00 ft	Op Table:
Control Elevation: 84.00 ft	Ref Node:
Max Depth: 0.33 ft	Discharge Coefficients
	Weir Default: 3.200
	Weir Table:
	Orifice Default: 0.600
	Orifice Table:

Weir Comment: 1- 4" Orifice

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: 87.00 ft	Op Table:
Control Elevation: 87.00 ft	Ref Node:
Max Depth: 2.33 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: FDOT Type C Inlet

Drop Structure Comment:

Simulation: 100yr-24hr

Scenario: Post-development
 Run Date/Time: 8/27/2025 9:27:13 AM
 Program Version: StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	30.0000

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

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000

Surface Hydraulics

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

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph
Folder:

Lookup Tables

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

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

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight: 0.5 dec
Fact:
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

IA Recovery Time: 24.0000 hr

Ia/S: 0.20 dec

Smp/Man Basin Rain: Global
Opt:

Rainfall Name: ~FLMOD
Rainfall Amount: 10.50 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: 100yr-72hr

Scenario: Post-development
Run Date/Time: 8/27/2025 9:31:10 AM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	78.0000

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

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000

Surface Hydraulics

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

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph
Folder:

Lookup Tables

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

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

Tolerances & Options

Time Marching: SAOR	IA Recovery Time: 24.0000 hr
Max Iterations: 6	
Over-Relax Weight 0.5 dec	Ia/S: 0.20 dec
Fact:	
dZ Tolerance: 0.0010 ft	
Max dZ: 1.0000 ft	Smp/Man Basin Rain Global
	Opt:
Link Optimizer Tol: 0.0001 ft	
	Rainfall Name: ~FLMOD
	Rainfall Amount: 14.00 in
	Storm Duration: 72.0000 hr
	Dflt Damping (1D): 0.0050 ft
	Min Node Srf Area 100 ft2
	(1D):
	Energy Switch (1D): Energy

Comment:

Simulation: 10yr-24hr

Scenario: Post-development
Run Date/Time: 8/27/2025 9:35:12 AM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	30.0000

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

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000

Surface Hydraulics

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

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph
Folder:

Lookup Tables

Boundary Stage Set:

Extern Hydrograph Set:

Curve Number Set: CURVE NUMBER

Green-Ampt Set:

Vertical Layers Set:

Impervious Set: IMPERVIOUS

Tolerances & Options

Time Marching: SAOR

Max Iterations: 6

Over-Relax Weight 0.5 dec

Fact:

dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

IA Recovery Time: 24.0000 hr

Ia/S: 0.20 dec

Smp/Man Basin Rain Global

Opt:

Rainfall Name: ~FLMOD

Rainfall Amount: 6.04 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: 25yr-24hr

Scenario: Post-development

Run Date/Time: 8/27/2025 9:36:28 AM

Program Version: StormWise 4.08.03

General

Run Mode: Normal

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

End Time: 0 0 0 30.0000

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

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000

Surface Hydraulics

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

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph
Folder:

Lookup Tables

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

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

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight: 0.5 dec
Fact:
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

IA Recovery Time: 24.0000 hr

Ia/S: 0.20 dec

Smp/Man Basin Rain: Global
Opt:

Rainfall Name: ~FLMOD
Rainfall Amount: 7.56 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: 25yr-96hr

Scenario: Post-development
Run Date/Time: 8/27/2025 9:37:38 AM
Program Version: StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	100.0000

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

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000

Surface Hydraulics

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

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph
Folder:

Lookup Tables

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

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

Tolerances & Options

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

IA Recovery Time: 24.0000 hr

Ia/S: 0.20 dec

Smp/Man Basin Rain: Global
 Opt:

Rainfall Name: ~FLMOD
 Rainfall Amount: 10.60 in
 Storm Duration: 96.0000 hr
 Dflt Damping (1D): 0.0050 ft
 Min Node Srf Area: 100 ft2
 (1D):
 Energy Switch (1D): Energy

Comment:

Simulation: Mean

Scenario: Post-development
 Run Date/Time: 8/27/2025 9:42:11 AM
 Program Version: StormWise 4.08.03

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	30.0000

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

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	5.0000

Surface Hydraulics

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

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:

Unit Hydrograph
Folder:

Lookup Tables

Boundary Stage Set:

Extern Hydrograph Set:

Curve Number Set: CURVE NUMBER

Green-Ampt Set:

Vertical Layers Set:

Impervious Set: IMPERVIOUS

Tolerances & Options

Time Marching: SAOR

Max Iterations: 6

Over-Relax Weight 0.5 dec

Fact:

dZ Tolerance: 0.0010 ft

Max dZ: 1.0000 ft

Link Optimizer Tol: 0.0001 ft

IA Recovery Time: 24.0000 hr

Ia/S: 0.20 dec

Smp/Man Basin Rain Global

Opt:

Rainfall Name: ~FLMOD

Rainfall Amount: 4.18 in

Storm Duration: 24.0000 hr

Dflt Damping (1D): 0.0050 ft

Min Node Srf Area 100 ft2

(1D):

Energy Switch (1D): Energy

Comment:

Node Max Conditions : Multi Item | (sim, name) [Post-development]

Sim Name	Node Name	Warning Stage [ft]	Alert Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
100yr-24hr	Pond 1	89.00	0.00	88.84	0.0010	59.86	19.97	37398
100yr-24hr	Pond 10	89.00	0.00	86.26	-0.0007	36.86	15.29	40934
100yr-24hr	Pond 11	94.00	0.00	92.74	0.0010	165.24	6.91	140837
100yr-24hr	Pond 12	89.00	0.00	87.85	-0.0010	127.11	28.90	97262
100yr-24hr	Pond 2	89.00	0.00	87.57	0.0007	101.57	51.68	74386
100yr-24hr	Pond 3	96.00	0.00	94.36	0.0008	34.51	25.78	26068
100yr-24hr	Pond 4	90.00	0.00	87.85	-0.0010	121.27	75.81	68773
100yr-24hr	Pond 5	90.00	0.00	88.84	0.0008	48.26	0.61	62279
100yr-24hr	Pond 6	90.00	0.00	89.11	0.0008	33.56	1.68	38977
100yr-24hr	Pond 7	90.00	0.00	88.35	0.0007	36.49	2.46	43030
100yr-24hr	Pond 8	89.00	0.00	87.83	-0.0010	56.71	27.76	36517
100yr-24hr	Pond 9	89.00	0.00	87.16	0.0007	50.18	2.80	59863
100yr-24hr	WET-08-PS T	0.00	0.00	81.93	0.0009	106.11	0.00	256108
100yr-24hr	Wetland 1A	84.60	0.00	83.60	0.0000	64.87	0.00	0
100yr-24hr	Wetland 1B	84.60	0.00	83.60	0.0000	146.56	0.00	0
100yr-24hr	Wetland 1C	84.60	0.00	83.60	0.0000	49.60	0.00	0
100yr-24hr	Wetland 2	84.60	0.00	83.60	0.0000	178.10	0.00	0
100yr-24hr	Wetland 4	80.63	0.00	79.63	0.0000	56.30	0.00	0
100yr-24hr	Wetland 5	87.00	0.00	82.45	0.0010	28.84	0.00	117280
100yr-72hr	Pond 1	89.00	0.00	88.98	0.0010	31.60	26.27	38461
100yr-72hr	Pond 10	89.00	0.00	86.29	-0.0008	19.52	16.48	41026
100yr-72hr	Pond 11	94.00	0.00	93.01	0.0010	85.80	17.72	142540
100yr-72hr	Pond 12	89.00	0.00	88.10	-0.0010	66.25	29.84	99758
100yr-72hr	Pond 2	89.00	0.00	87.60	0.0008	58.57	54.53	74616
100yr-72hr	Pond 3	96.00	0.00	94.21	0.0009	17.66	17.31	25616
100yr-72hr	Pond 4	90.00	0.00	87.39	-0.0010	62.02	57.92	66706
100yr-72hr	Pond 5	90.00	0.00	89.09	0.0010	25.69	1.59	64556
100yr-72hr	Pond 6	90.00	0.00	89.25	0.0008	17.74	4.69	40539
100yr-72hr	Pond 7	90.00	0.00	88.53	0.0007	19.17	6.76	43817
100yr-72hr	Pond 8	89.00	0.00	87.63	-0.0010	30.28	25.76	35714
100yr-72hr	Pond 9	89.00	0.00	87.35	0.0007	27.15	7.67	60783
100yr-72hr	WET-08-PS T	0.00	0.00	83.16	0.0009	76.44	0.00	267748
100yr-72hr	Wetland 1A	84.60	0.00	83.60	0.0000	54.05	0.00	0
100yr-72hr	Wetland 1B	84.60	0.00	83.60	0.0000	86.32	0.00	0
100yr-72hr	Wetland 1C	84.60	0.00	83.60	0.0000	36.94	0.00	0
100yr-72hr	Wetland 2	84.60	0.00	83.60	0.0000	84.53	0.00	0
100yr-72hr	Wetland 4	80.63	0.00	79.63	0.0000	59.62	0.00	0
100yr-72hr	Wetland 5	87.00	0.00	83.83	0.0010	36.64	0.00	138333
10yr-24hr	Pond 1	89.00	0.00	87.68	0.0010	27.55	0.56	30239
10yr-24hr	Pond 10	89.00	0.00	85.52	0.0004	16.84	1.38	38537
10yr-24hr	Pond 11	94.00	0.00	90.83	0.0007	78.46	1.18	128872
10yr-24hr	Pond 12	89.00	0.00	86.81	0.0007	59.96	2.26	92252
10yr-24hr	Pond 2	89.00	0.00	86.87	0.0010	38.65	2.03	68774
10yr-24hr	Pond 3	96.00	0.00	93.80	0.0008	16.80	1.62	24451

Sim Name	Node Name	Warning Stage [ft]	Alert Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
10yr-24hr	Pond 4	90.00	0.00	87.10	-0.0010	59.12	37.89	65415
10yr-24hr	Pond 5	90.00	0.00	86.92	0.0005	21.66	0.42	51688
10yr-24hr	Pond 6	90.00	0.00	87.61	0.0006	15.40	0.32	31914
10yr-24hr	Pond 7	90.00	0.00	87.14	0.0005	16.95	0.34	37306
10yr-24hr	Pond 8	89.00	0.00	86.70	-0.0009	25.48	6.00	31827
10yr-24hr	Pond 9	89.00	0.00	85.80	0.0004	21.93	0.53	53390
10yr-24hr	WET-08-PS T	0.00	0.00	80.38	0.0009	51.79	0.00	211634
10yr-24hr	Wetland 1A	84.60	0.00	83.60	0.0000	27.57	0.00	0
10yr-24hr	Wetland 1B	84.60	0.00	83.60	0.0000	64.91	0.00	0
10yr-24hr	Wetland 1C	84.60	0.00	83.60	0.0000	24.19	0.00	0
10yr-24hr	Wetland 2	84.60	0.00	83.60	0.0000	97.79	0.00	0
10yr-24hr	Wetland 4	80.63	0.00	79.63	0.0000	6.34	0.00	0
10yr-24hr	Wetland 5	87.00	0.00	80.84	0.0003	12.19	0.00	110143
25yr-24hr	Pond 1	89.00	0.00	88.28	0.0010	37.59	2.18	33232
25yr-24hr	Pond 10	89.00	0.00	85.80	-0.0006	23.06	3.78	39423
25yr-24hr	Pond 11	94.00	0.00	91.72	0.0010	105.63	1.39	134528
25yr-24hr	Pond 12	89.00	0.00	87.06	0.0007	80.95	8.41	93978
25yr-24hr	Pond 2	89.00	0.00	87.04	0.0009	51.74	9.33	70091
25yr-24hr	Pond 3	96.00	0.00	94.01	0.0008	22.39	8.29	25038
25yr-24hr	Pond 4	90.00	0.00	87.34	-0.0010	78.76	54.72	66479
25yr-24hr	Pond 5	90.00	0.00	87.56	0.0007	29.96	0.49	55186
25yr-24hr	Pond 6	90.00	0.00	88.32	0.0007	21.04	0.36	34866
25yr-24hr	Pond 7	90.00	0.00	87.80	0.0007	23.04	0.39	40453
25yr-24hr	Pond 8	89.00	0.00	87.14	-0.0010	35.14	12.38	33658
25yr-24hr	Pond 9	89.00	0.00	86.43	0.0006	30.61	0.62	56378
25yr-24hr	WET-08-PS T	0.00	0.00	80.92	0.0008	74.33	0.00	239763
25yr-24hr	Wetland 1A	84.60	0.00	83.60	0.0000	36.12	0.00	0
25yr-24hr	Wetland 1B	84.60	0.00	83.60	0.0000	89.70	0.00	0
25yr-24hr	Wetland 1C	84.60	0.00	83.60	0.0000	31.17	0.00	0
25yr-24hr	Wetland 2	84.60	0.00	83.60	0.0000	124.85	0.00	0
25yr-24hr	Wetland 4	80.63	0.00	79.63	0.0000	10.15	0.00	0
25yr-24hr	Wetland 5	87.00	0.00	81.28	0.0008	16.09	0.00	111732
25yr-96hr	Pond 1	89.00	0.00	88.45	0.0010	16.30	6.21	34509
25yr-96hr	Pond 10	89.00	0.00	85.90	-0.0007	10.05	4.85	39743
25yr-96hr	Pond 11	94.00	0.00	92.37	0.0010	44.76	1.52	138576
25yr-96hr	Pond 12	89.00	0.00	87.24	-0.0007	34.47	14.57	94731
25yr-96hr	Pond 2	89.00	0.00	87.23	0.0008	30.75	21.52	71598
25yr-96hr	Pond 3	96.00	0.00	94.03	0.0009	9.30	9.11	25098
25yr-96hr	Pond 4	90.00	0.00	87.00	-0.0009	32.68	31.12	64944
25yr-96hr	Pond 5	90.00	0.00	87.94	0.0007	13.19	0.53	57279
25yr-96hr	Pond 6	90.00	0.00	88.67	0.0008	9.14	0.38	36321
25yr-96hr	Pond 7	90.00	0.00	88.14	0.0007	9.92	0.41	42080
25yr-96hr	Pond 8	89.00	0.00	87.12	-0.0010	15.50	11.93	33581
25yr-96hr	Pond 9	89.00	0.00	86.78	0.0007	13.77	0.67	58066
25yr-96hr	WET-08-PS	0.00	0.00	81.97	0.0009	41.12	0.00	256555

Sim Name	Node Name	Warning Stage [ft]	Alert Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
	T							
25yr-96hr	Wetland 1A	84.60	0.00	83.60	0.0000	24.69	0.00	0
25yr-96hr	Wetland 1B	84.60	0.00	83.60	0.0000	45.35	0.00	0
25yr-96hr	Wetland 1C	84.60	0.00	83.60	0.0000	15.94	0.00	0
25yr-96hr	Wetland 2	84.60	0.00	83.60	0.0000	47.52	0.00	0
25yr-96hr	Wetland 4	80.63	0.00	79.63	0.0000	23.50	0.00	0
25yr-96hr	Wetland 5	87.00	0.00	82.62	0.0008	8.69	0.00	118328
Mean	Pond 1	89.00	0.00	86.12	0.0010	18.66	0.45	25941
Mean	Pond 10	89.00	0.00	85.15	0.0004	11.40	0.32	37338
Mean	Pond 11	94.00	0.00	89.83	0.0006	53.30	0.89	123169
Mean	Pond 12	89.00	0.00	85.97	0.0007	40.70	0.88	85782
Mean	Pond 2	89.00	0.00	85.94	0.0006	26.28	0.43	61369
Mean	Pond 3	96.00	0.00	93.66	0.0010	11.43	0.00	24052
Mean	Pond 4	90.00	0.00	86.75	-0.0010	40.25	16.74	63839
Mean	Pond 5	90.00	0.00	86.21	0.0004	14.32	0.33	47779
Mean	Pond 6	90.00	0.00	86.79	0.0006	10.43	0.26	27507
Mean	Pond 7	90.00	0.00	86.38	0.0005	11.49	0.27	33846
Mean	Pond 8	89.00	0.00	86.18	0.0008	17.23	1.10	29687
Mean	Pond 9	89.00	0.00	85.13	0.0004	14.79	0.40	50284
Mean	WET-08-PS T	0.00	0.00	79.68	0.0009	22.64	0.00	181924
Mean	Wetland 1A	84.60	0.00	83.60	0.0000	17.37	0.00	0
Mean	Wetland 1B	84.60	0.00	83.60	0.0000	40.09	0.00	0
Mean	Wetland 1C	84.60	0.00	83.60	0.0000	16.04	0.00	0
Mean	Wetland 2	84.60	0.00	83.60	0.0000	65.46	0.00	0
Mean	Wetland 4	80.63	0.00	79.63	0.0000	4.17	0.00	0
Mean	Wetland 5	87.00	0.00	80.57	0.0003	7.56	0.00	109339

Node Mass Balance Detailed [Post-development]

Node Name	Sim Name	Total Base [ft3]	Total Basin [ft3]	Total External [ft3]	Total Seepage [ft3]	Total Irrigation [ft3]	Total Link [ft3]	Stored (Flow Based) [ft3]	Stored (Geo Based) [ft3]	% Error Inflow
Pond 1 : In	25yr-96hr	0	290020	0	0	0	0	100618	100608	0.00
Pond 1 : Out		0	0	0	0	0	189402			

Node Mass Balance Detailed [Post-development]

Node Name	Sim Name	Total Base [ft3]	Total Basin [ft3]	Total External [ft3]	Total Seepage [ft3]	Total Irrigation [ft3]	Total Link [ft3]	Stored (Flow Based) [ft3]	Stored (Geo Based) [ft3]	% Error Inflow
Pond 10 : In	25yr-96hr	0	178509	0	0	0	0	34260	34242	0.01
Pond 10 : Out		0	0	0	0	0	144249			

Node Mass Balance Detailed [Post-development]

Node Name	Sim Name	Total Base [ft3]	Total Basin [ft3]	Total External [ft3]	Total Seepage [ft3]	Total Irrigation [ft3]	Total Link [ft3]	Stored (Flow Based) [ft3]	Stored (Geo Based) [ft3]	% Error Inflow
Pond 11 : In	25yr-96hr	0	801996	0	0	0	0	483266	483275	0.00
Pond 11 : Out		0	0	0	0	0	318730			

Node Mass Balance Detailed [Post-development]

Node Name	Sim Name	Total Base [ft3]	Total Basin [ft3]	Total External [ft3]	Total Seepage [ft3]	Total Irrigation [ft3]	Total Link [ft3]	Stored (Flow Based) [ft3]	Stored (Geo Based) [ft3]	% Error Inflow
Pond 12 : In	25yr-96hr	0	616784	0	0	0	0	183356	183306	0.01
Pond 12 : Out		0	0	0	0	0	433428			

Node Mass Balance Detailed [Post-development]

Node Name	Sim Name	Total Base [ft3]	Total Basin [ft3]	Total External [ft3]	Total Seepage [ft3]	Total Irrigation [ft3]	Total Link [ft3]	Stored (Flow Based) [ft3]	Stored (Geo Based) [ft3]	% Error Inflow
Pond 2 : In	25yr-96hr	0	389707	0	0	0	112145	153365	153331	0.01
Pond 2 : Out		0	0	0	0	0	348486			

Node Mass Balance Detailed [Post-development]

Node Name	Sim Name	Total Base [ft3]	Total Basin [ft3]	Total External [ft3]	Total Seepage [ft3]	Total Irrigation [ft3]	Total Link [ft3]	Stored (Flow Based) [ft3]	Stored (Geo Based) [ft3]	% Error Inflow
Pond 3 : In	25yr-96hr	0	167636	0	0	0	0	55491	55474	0.01
Pond 3 : Out		0	0	0	0	0	112145			

Node Mass Balance Detailed [Post-development]

Node Name	Sim Name	Total Base [ft3]	Total Basin [ft3]	Total External [ft3]	Total Seepage [ft3]	Total Irrigation [ft3]	Total Link [ft3]	Stored (Flow Based) [ft3]	Stored (Geo Based) [ft3]	% Error Inflow
Pond 4 : In	25yr-96hr	0	589156	0	0	0	0	74379	74335	0.01
Pond 4 : Out		0	0	0	0	0	514777			

Node Mass Balance Detailed [Post-development]

Node Name	Sim Name	Total Base [ft3]	Total Basin [ft3]	Total External [ft3]	Total Seepage [ft3]	Total Irrigation [ft3]	Total Link [ft3]	Stored (Flow Based) [ft3]	Stored (Geo Based) [ft3]	% Error Inflow
Pond 5 : In	25yr-96hr	0	231599	0	0	0	0	117672	117675	0.00
Pond 5 : Out		0	0	0	0	0	113928			

Node Mass Balance Detailed [Post-development]

Node Name	Sim Name	Total Base [ft3]	Total Basin [ft3]	Total External [ft3]	Total Seepage [ft3]	Total Irrigation [ft3]	Total Link [ft3]	Stored (Flow Based) [ft3]	Stored (Geo Based) [ft3]	% Error Inflow
Pond 6 : In	25yr-96hr	0	162579	0	0	0	0	77936	77939	0.00
Pond 6 : Out		0	0	0	0	0	84644			

Node Mass Balance Detailed [Post-development]

Node Name	Sim Name	Total Base [ft3]	Total Basin [ft3]	Total External [ft3]	Total Seepage [ft3]	Total Irrigation [ft3]	Total Link [ft3]	Stored (Flow Based) [ft3]	Stored (Geo Based) [ft3]	% Error Inflow
Pond 7 : In	25yr-96hr	0	176915	0	0	0	0	87163	87166	0.00
Pond 7 : Out		0	0	0	0	0	89753			

Node Mass Balance Detailed [Post-development]

Node Name	Sim Name	Total Base [ft3]	Total Basin [ft3]	Total External [ft3]	Total Seepage [ft3]	Total Irrigation [ft3]	Total Link [ft3]	Stored (Flow Based) [ft3]	Stored (Geo Based) [ft3]	% Error Inflow
Pond 8 : In	25yr-96hr	0	274325	0	0	0	0	42629	42600	0.01
Pond 8 : Out		0	0	0	0	0	231697			

Node Mass Balance Detailed [Post-development]

Node Name	Sim Name	Total Base [ft3]	Total Basin [ft3]	Total External [ft3]	Total Seepage [ft3]	Total Irrigation [ft3]	Total Link [ft3]	Stored (Flow Based) [ft3]	Stored (Geo Based) [ft3]	% Error Inflow
Pond 9 : In	25yr-96hr	0	242324	0	0	0	0	103312	103315	0.00
Pond 9 : Out		0	0	0	0	0	139012			

Project: Mission Rise - Post
Date: 8/18/2025 9:30:39 AM

Analysis: Specified Removal Efficiency

Pre-Condition Landuse Information

[illegible]

[illegible]

Post-Condition Landuse Information

[illegible]

Phosphorus EMC (mg/l)	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327	0.327
Runoff Volume (ac-ft/yr)	27.347	32.960	8.480	9.337	12.833	6.798	7.298	9.958	29.978	8.666	16.766	15.039
Groundwater N (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Groundwater P (kg/yr)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Nitrogen Loading (kg/yr)	59.682	71.931	18.507	20.377	28.006	14.835	15.926	21.732	65.424	18.913	36.589	32.822
Phosphorus Loading (kg/yr)	11.026	13.289	3.419	3.765	5.174	2.741	2.942	4.015	12.087	3.494	6.760	6.064

Catchment Number: 1 Name: Post 12

Project: Mission Rise - Post

Date: 8/18/2025

Wet Detention with Littoral Shelf Design

Permanent Pool Volume (ac-ft)	7.610
Permanent Pool Volume (ac-ft) for 31 days residence	2.323
Annual Residence Time (days)	102
Littoral Zone Efficiency Credit	28
Wetland Efficiency Credit	

Watershed Characteristics

Catchment Area (acres)	26.27
Contributing Area (acres)	24.690
Non-DCIA Curve Number	56.90
DCIA Percent	30.70
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%) 55
Provided TN Treatment Efficiency (%) 58
Required TP Treatment Efficiency (%) 80
Provided TP Treatment Efficiency (%) 81

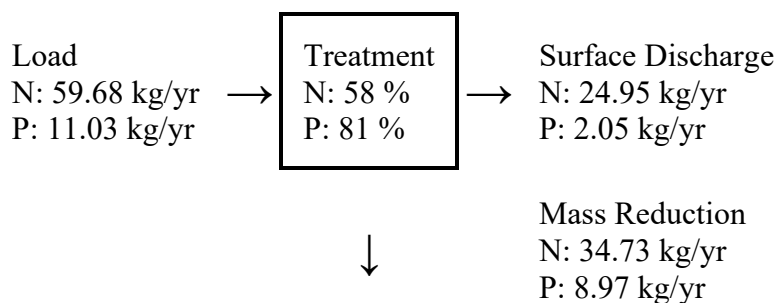
Media Mix Information

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

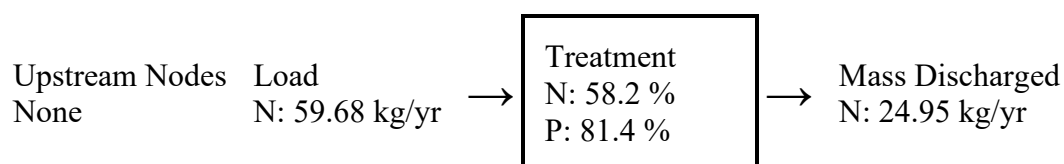
Groundwater Discharge (Stand-Alone)

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

Load Diagram for Wet Detention with Littoral Shelf (stand-alone)



Load Diagram for Wet Detention (As Used In Routing)



P: 11.03 kg/yr
Q: 27.35 ac-ft



P: 2.05 kg/yr
Q: 27.35 ac-ft



Mass Removed
N: 34.73 kg/yr
P: 8.97 kg/yr

Catchment Number: 2 Name: Post 11

Project: Mission Rise - Post

Date: 8/18/2025

Wet Detention with Littoral Shelf Design

Permanent Pool Volume (ac-ft)	13.700
Permanent Pool Volume (ac-ft) for 31 days residence	2.799
Annual Residence Time (days)	152
Littoral Zone Efficiency Credit	24
Wetland Efficiency Credit	

Watershed Characteristics

Catchment Area (acres)	33.76
Contributing Area (acres)	30.660
Non-DCIA Curve Number	57.60
DCIA Percent	29.60
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	55
Provided TN Treatment Efficiency (%)	56
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	83

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

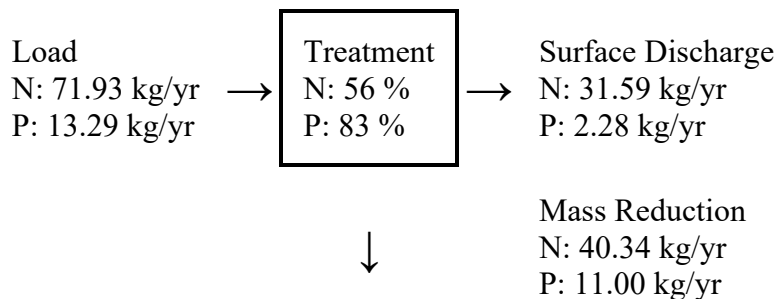
TN Mass Load (kg/yr) 0.000

TN Concentration (mg/L) 0.000

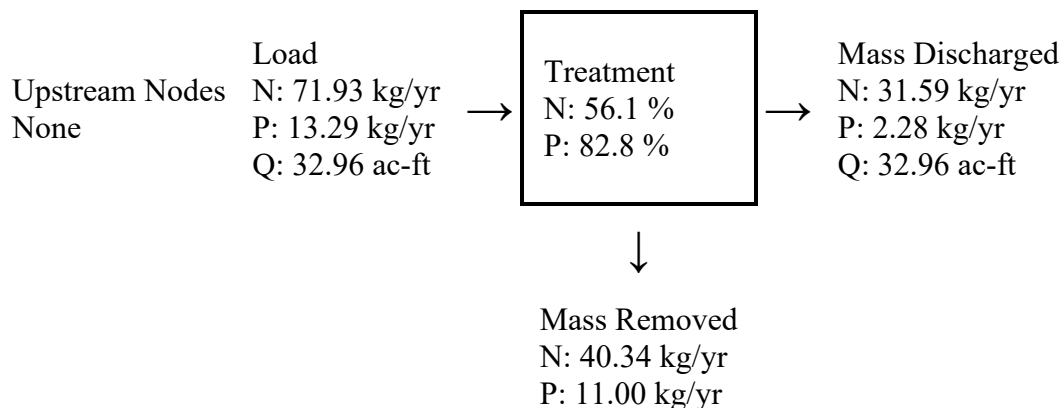
TP Mass Load (kg/yr) 0.000

TP Concentration (mg/L) 0.000

Load Diagram for Wet Detention with Littoral Shelf (stand-alone)



Load Diagram for Wet Detention (As Used In Routing)



Catchment Number: 3 Name: Post 10

Project: Mission Rise - Post

Date: 8/18/2025

Wet Detention with Littoral Shelf Design

Permanent Pool Volume (ac-ft)	3.860
Permanent Pool Volume (ac-ft) for 31 days residence	0.720
Annual Residence Time (days)	166
Littoral Zone Efficiency Credit	26
Wetland Efficiency Credit	

Watershed Characteristics

Catchment Area (acres)	8.01
Contributing Area (acres)	7.240
Non-DCIA Curve Number	57.10
DCIA Percent	32.60
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	55
Provided TN Treatment Efficiency (%)	58
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	84

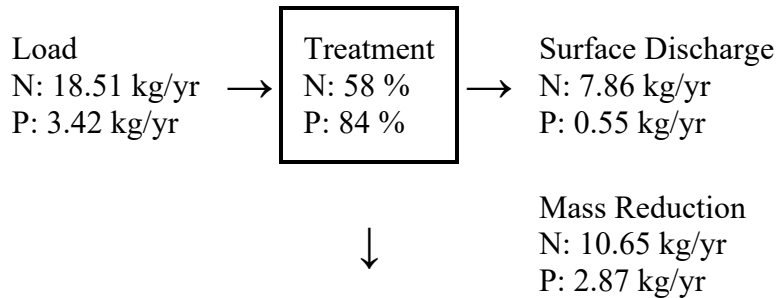
Media Mix Information

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

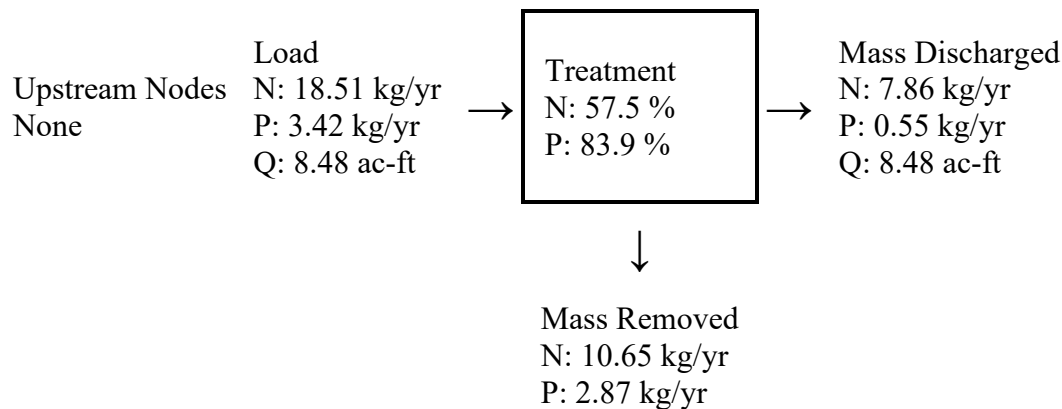
Groundwater Discharge (Stand-Alone)

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

Load Diagram for Wet Detention with Littoral Shelf (stand-alone)



Load Diagram for Wet Detention (As Used In Routing)



Catchment Number: 4 Name: Post 9

Project: Mission Rise - Post

Date: 8/18/2025

Wet Detention with Littoral Shelf Design

Permanent Pool Volume (ac-ft)	4.920
Permanent Pool Volume (ac-ft) for 31 days residence	0.793
Annual Residence Time (days)	192
Littoral Zone Efficiency Credit	29
Wetland Efficiency Credit	

Watershed Characteristics

Catchment Area (acres) 11.62
Contributing Area (acres) 10.580
Non-DCIA Curve Number 52.60
DCIA Percent 24.40
Rainfall Zone Florida Zone 2
Rainfall (in) 50.00

Surface Water Discharge

Required TN Treatment Efficiency (%) 55
Provided TN Treatment Efficiency (%) 59
Required TP Treatment Efficiency (%) 80
Provided TP Treatment Efficiency (%) 85

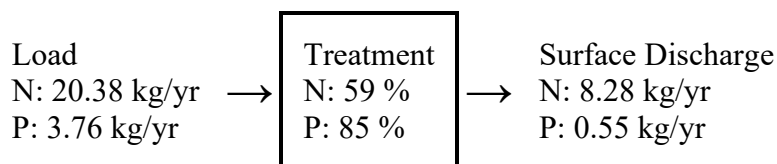
Media Mix Information

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

Groundwater Discharge (Stand-Alone)

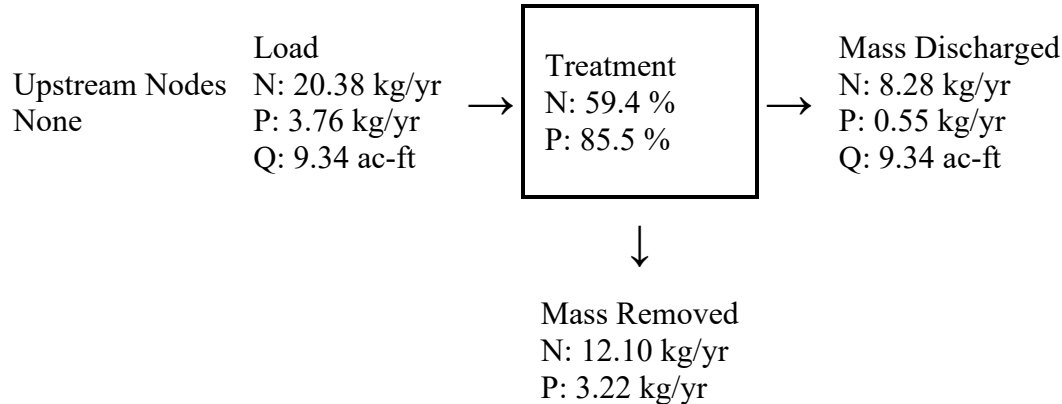
Treatment Rate (MG/yr) 0.000
TN Mass Load (kg/yr) 0.000
TN Concentration (mg/L) 0.000
TP Mass Load (kg/yr) 0.000
TP Concentration (mg/L) 0.000

Load Diagram for Wet Detention with Littoral Shelf (stand-alone)



↓
Mass Reduction
N: 12.10 kg/yr
P: 3.22 kg/yr

Load Diagram for Wet Detention (As Used In Routing)



Catchment Number: 5 Name: Post 8

Project: Mission Rise - Post

Date: 8/18/2025

Wet Detention Design

Permanent Pool Volume (ac-ft)	2.900
Permanent Pool Volume (ac-ft) for 31 days residence	1.090
Annual Residence Time (days)	82
Littoral Zone Efficiency Credit	
Wetland Efficiency Credit	

Watershed Characteristics

Catchment Area (acres)	12.63
Contributing Area (acres)	12.140
Non-DCIA Curve Number	51.60
DCIA Percent	29.80
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%) 55

Provided TN Treatment Efficiency (%) 42

Required TP Treatment Efficiency (%) 80

Provided TP Treatment Efficiency (%) 72

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

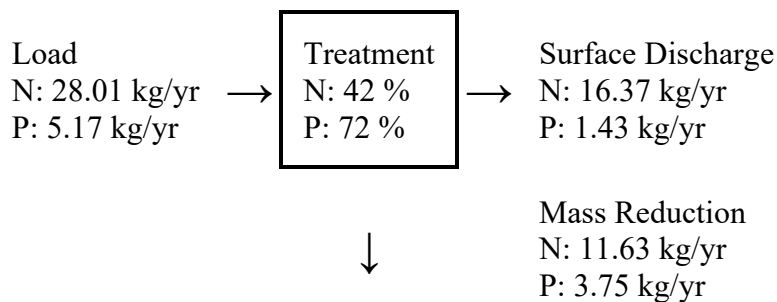
TN Mass Load (kg/yr) 0.000

TN Concentration (mg/L) 0.000

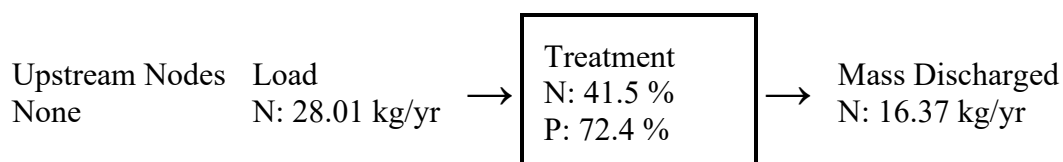
TP Mass Load (kg/yr) 0.000

TP Concentration (mg/L) 0.000

Load Diagram for Wet Detention (stand-alone)



Load Diagram for Wet Detention (As Used In Routing)



P: 5.17 kg/yr
Q: 12.83 ac-ft



P: 1.43 kg/yr
Q: 12.83 ac-ft



Mass Removed
N: 11.63 kg/yr
P: 3.75 kg/yr

Catchment Number: 6 Name: Post 7

Project: Mission Rise - Post

Date: 8/18/2025

Wet Detention with Littoral Shelf Design

Permanent Pool Volume (ac-ft)	2.370
Permanent Pool Volume (ac-ft) for 31 days residence	0.577
Annual Residence Time (days)	127
Littoral Zone Efficiency Credit	42
Wetland Efficiency Credit	

Watershed Characteristics

Catchment Area (acres)	7.73
Contributing Area (acres)	7.090
Non-DCIA Curve Number	57.10
DCIA Percent	26.10
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	55
Provided TN Treatment Efficiency (%)	67
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	86

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

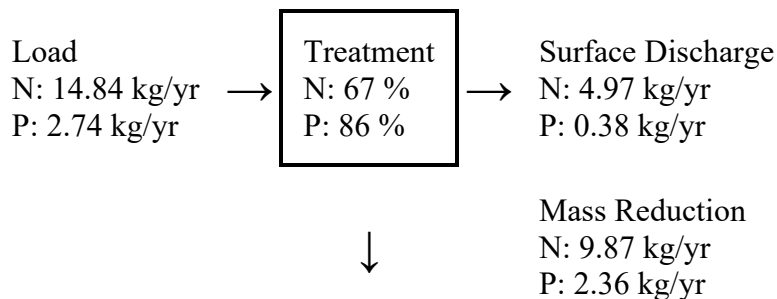
TN Mass Load (kg/yr) 0.000

TN Concentration (mg/L) 0.000

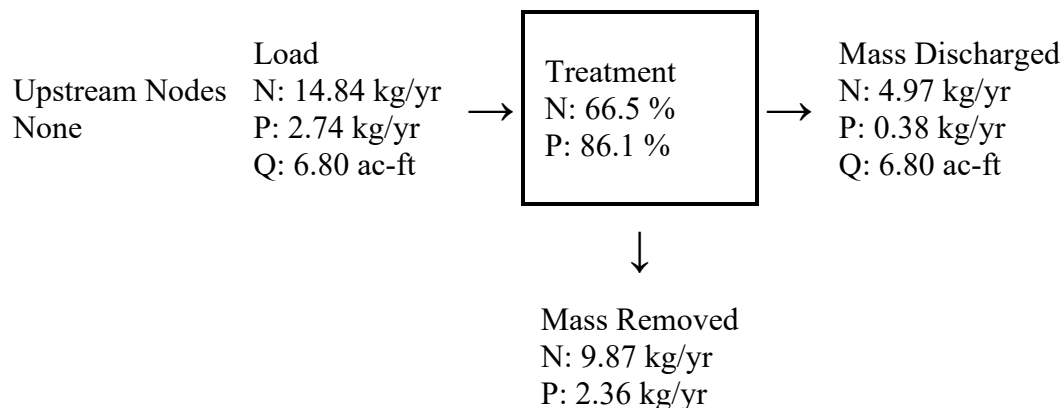
TP Mass Load (kg/yr) 0.000

TP Concentration (mg/L) 0.000

Load Diagram for Wet Detention with Littoral Shelf (stand-alone)



Load Diagram for Wet Detention (As Used In Routing)



Catchment Number: 7 Name: Post 6

Project: Mission Rise - Post

Date: 8/18/2025

Wet Detention with Littoral Shelf Design

Permanent Pool Volume (ac-ft)	1.630
Permanent Pool Volume (ac-ft) for 31 days residence	0.620
Annual Residence Time (days)	82
Littoral Zone Efficiency Credit	28
Wetland Efficiency Credit	

Watershed Characteristics

Catchment Area (acres)	7.25
Contributing Area (acres)	6.860
Non-DCIA Curve Number	53.60
DCIA Percent	29.80
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	55
Provided TN Treatment Efficiency (%)	58
Required TP Treatment Efficiency (%)	80
Provided TP Treatment Efficiency (%)	80

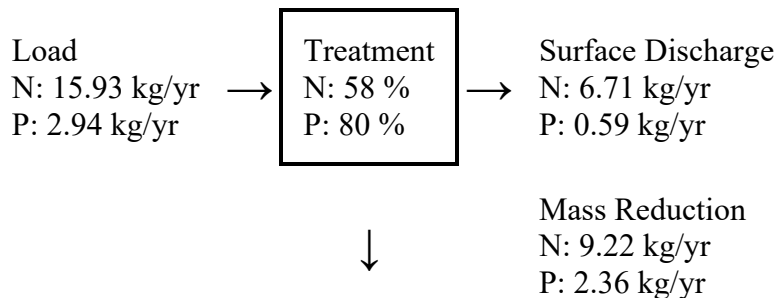
Media Mix Information

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

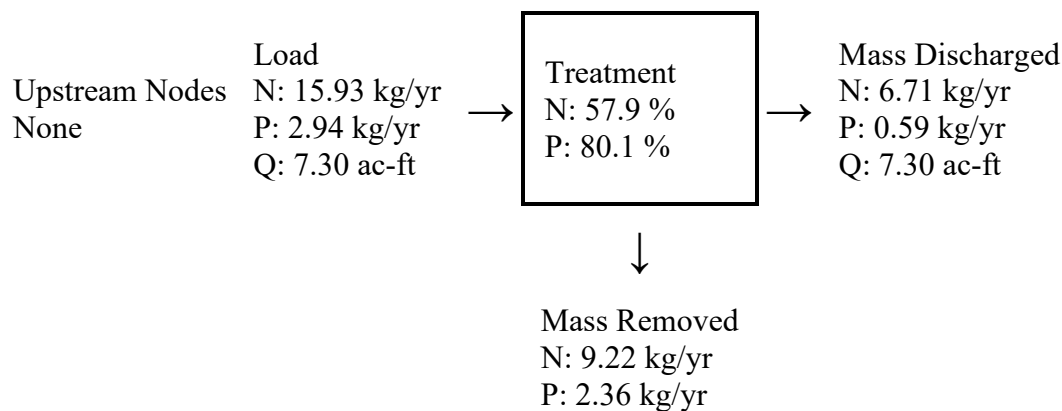
Groundwater Discharge (Stand-Alone)

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

Load Diagram for Wet Detention with Littoral Shelf (stand-alone)



Load Diagram for Wet Detention (As Used In Routing)



Catchment Number: 8 Name: Post 5

Project: Mission Rise - Post

Date: 8/18/2025

Wet Detention with Littoral Shelf Design

Permanent Pool Volume (ac-ft)	3.920
Permanent Pool Volume (ac-ft) for 31 days residence	0.846
Annual Residence Time (days)	144
Littoral Zone Efficiency Credit	37
Wetland Efficiency Credit	

Watershed Characteristics

Catchment Area (acres) 9.43
Contributing Area (acres) 8.480
Non-DCIA Curve Number 59.90
DCIA Percent 32.30
Rainfall Zone Florida Zone 2
Rainfall (in) 50.00

Surface Water Discharge

Required TN Treatment Efficiency (%) 55
Provided TN Treatment Efficiency (%) 64
Required TP Treatment Efficiency (%) 80
Provided TP Treatment Efficiency (%) 86

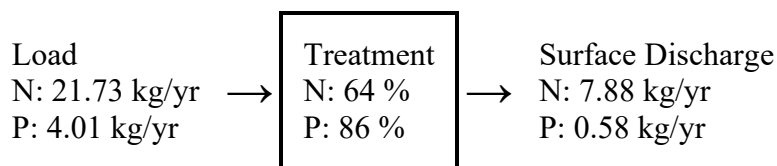
Media Mix Information

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

Groundwater Discharge (Stand-Alone)

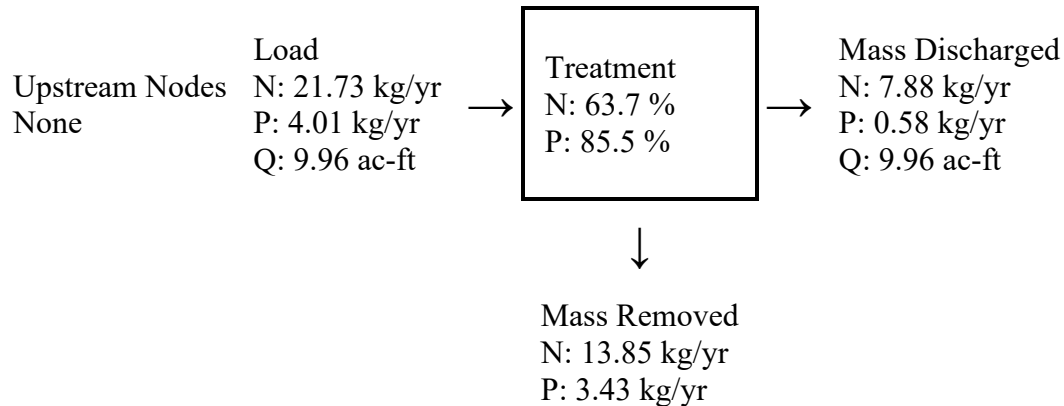
Treatment Rate (MG/yr) 0.000
TN Mass Load (kg/yr) 0.000
TN Concentration (mg/L) 0.000
TP Mass Load (kg/yr) 0.000
TP Concentration (mg/L) 0.000

Load Diagram for Wet Detention with Littoral Shelf (stand-alone)



↓
Mass Reduction
N: 13.85 kg/yr
P: 3.43 kg/yr

Load Diagram for Wet Detention (As Used In Routing)



Catchment Number: 9 Name: Post 4

Project: Mission Rise - Post

Date: 8/18/2025

Retention Design

Retention Depth (in) 0.750

Retention Volume (ac-ft) 1.476

Watershed Characteristics

Catchment Area (acres) 23.62

Contributing Area (acres) 23.620

Non-DCIA Curve Number 57.70

DCIA Percent 35.50

Rainfall Zone Florida Zone 2

Rainfall (in) 50.00

Surface Water Discharge

Required TN Treatment Efficiency (%) 55

Provided TN Treatment Efficiency (%) 85

Required TP Treatment Efficiency (%) 80
Provided TP Treatment Efficiency (%) 85

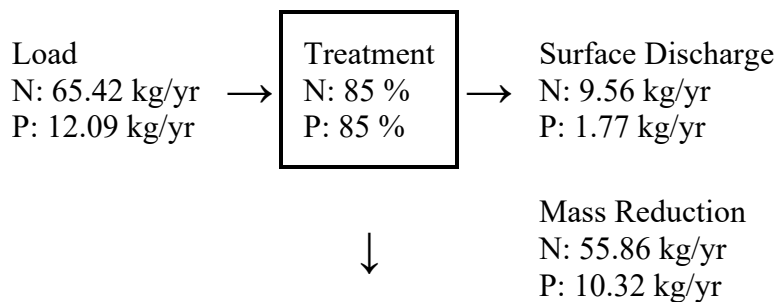
Media Mix Information

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

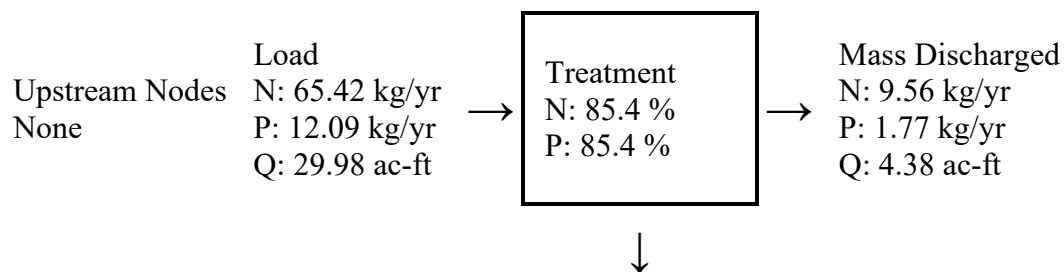
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr) 0.000
TN Mass Load (kg/yr) 55.864
TN Concentration (mg/L) 0.000
TP Mass Load (kg/yr) 10.321
TP Concentration (mg/L) 0.000

Load Diagram for Retention (stand-alone)



Load Diagram for Retention (As Used In Routing)



Mass Removed
N: 55.86 kg/yr
P: 10.32 kg/yr

Catchment Number: 10 Name: Post 3

Project: Mission Rise - Post

Date: 8/18/2025

Retention Design

Retention Depth (in) 1.000

Retention Volume (ac-ft) 0.562

Watershed Characteristics

Catchment Area (acres) 6.74

Contributing Area (acres) 6.740

Non-DCIA Curve Number 57.00

DCIA Percent 36.10

Rainfall Zone Florida Zone 2

Rainfall (in) 50.00

Surface Water Discharge

Required TN Treatment Efficiency (%) 55

Provided TN Treatment Efficiency (%) 90

Required TP Treatment Efficiency (%) 80

Provided TP Treatment Efficiency (%) 90

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

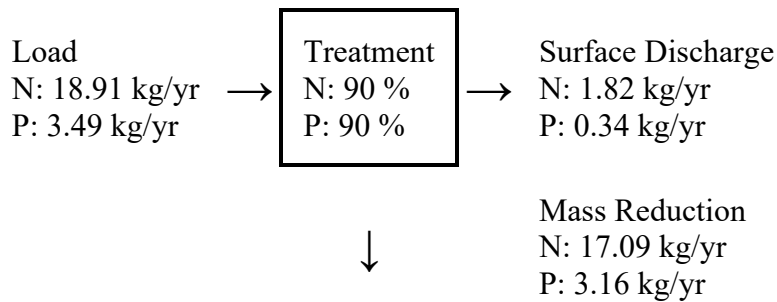
TN Mass Load (kg/yr) 17.094

TN Concentration (mg/L) 0.000

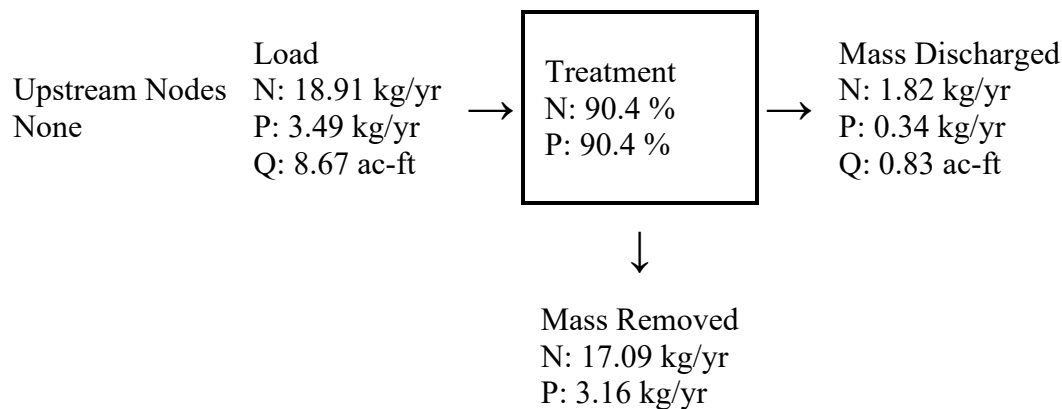
TP Mass Load (kg/yr) 3.158

TP Concentration (mg/L) 0.000

Load Diagram for Retention (stand-alone)



Load Diagram for Retention (As Used In Routing)



Catchment Number: 11 Name: Post 2

Project: Mission Rise - Post

Date: 8/18/2025

Wet Detention with Littoral Shelf Design

Permanent Pool Volume (ac-ft)	3.920
Permanent Pool Volume (ac-ft) for 31 days residence	1.424
Annual Residence Time (days)	85
Littoral Zone Efficiency Credit	41

Wetland Efficiency Credit

Watershed Characteristics

Catchment Area (acres) 15.99
Contributing Area (acres) 14.930
Non-DCIA Curve Number 58.70
DCIA Percent 30.90
Rainfall Zone Florida Zone 2
Rainfall (in) 50.00

Surface Water Discharge

Required TN Treatment Efficiency (%) 55
Provided TN Treatment Efficiency (%) 65
Required TP Treatment Efficiency (%) 80
Provided TP Treatment Efficiency (%) 83

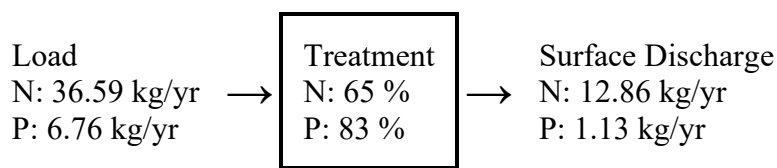
Media Mix Information

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

Groundwater Discharge (Stand-Alone)

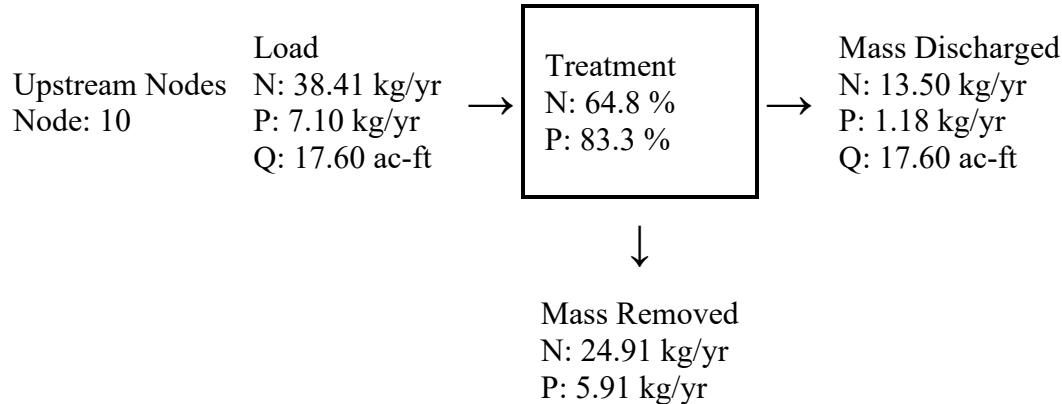
Treatment Rate (MG/yr) 0.000
TN Mass Load (kg/yr) 0.000
TN Concentration (mg/L) 0.000
TP Mass Load (kg/yr) 0.000
TP Concentration (mg/L) 0.000

Load Diagram for Wet Detention with Littoral Shelf (stand-alone)



↓
Mass Reduction
N: 23.73 kg/yr
P: 5.63 kg/yr

Load Diagram for Wet Detention (As Used In Routing)



Catchment Number: 12 Name: Post 1

Project: Mission Rise - Post

Date: 8/18/2025

Wet Detention Design

Permanent Pool Volume (ac-ft)	2.790
Permanent Pool Volume (ac-ft) for 31 days residence	1.277
Annual Residence Time (days)	68
Littoral Zone Efficiency Credit	
Wetland Efficiency Credit	

Watershed Characteristics

Catchment Area (acres)	12.87
Contributing Area (acres)	12.450
Non-DCIA Curve Number	57.20
DCIA Percent	33.70
Rainfall Zone	Florida Zone 2
Rainfall (in)	50.00

Surface Water Discharge

Required TN Treatment Efficiency (%) 55

Provided TN Treatment Efficiency (%) 41

Required TP Treatment Efficiency (%) 80

Provided TP Treatment Efficiency (%) 71

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

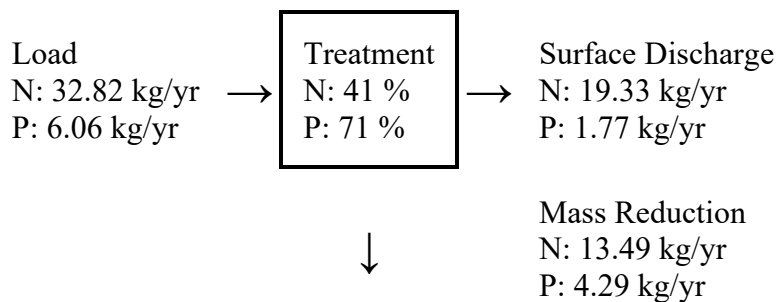
TN Mass Load (kg/yr) 0.000

TN Concentration (mg/L) 0.000

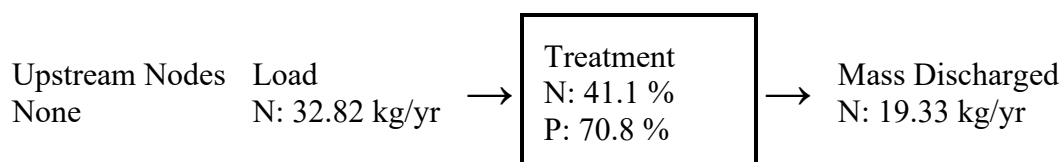
TP Mass Load (kg/yr) 0.000

TP Concentration (mg/L) 0.000

Load Diagram for Wet Detention (stand-alone)



Load Diagram for Wet Detention (As Used In Routing)



P: 6.06 kg/yr
Q: 15.04 ac-ft



P: 1.77 kg/yr
Q: 15.04 ac-ft



Mass Removed
N: 13.49 kg/yr
P: 4.29 kg/yr

Summary Treatment Report Version: 4.3.5

Project: Mission Rise - Post

Analysis Type: Specified
Removal Efficiency

BMP Types:

Catchment 1 - (Post 12)
Wet Detention with Littoral
Shelf

Date: 8/18/2025

Catchment 2 - (Post 11)
Wet Detention with Littoral
Shelf

Catchment 3 - (Post 10)
Wet Detention with Littoral
Shelf

Catchment 4 - (Post 9) Wet
Detention with Littoral Shelf

Catchment 5 - (Post 8) Wet
Detention

Catchment 6 - (Post 7) Wet
Detention with Littoral Shelf

Catchment 7 - (Post 6) Wet
Detention with Littoral Shelf

Catchment 8 - (Post 5) Wet
Detention with Littoral Shelf

Catchment 9 - (Post 4)
Retention

Routing Summary

Catchment 1 Routed to Outlet
Catchment 2 Routed to Outlet
Catchment 3 Routed to Outlet
Catchment 4 Routed to Outlet
Catchment 5 Routed to Outlet
Catchment 6 Routed to Outlet
Catchment 7 Routed to Outlet
Catchment 8 Routed to Outlet
Catchment 9 Routed to Outlet
Catchment 10 Routed to Catchment
11
Catchment 11 Routed to Outlet
Catchment 12 Routed to Outlet

Catchment 10 - (Post 3)
Retention
Catchment 11 - (Post 2)
Wet Detention with Littoral
Shelf
Catchment 12 - (Post 1)
Wet Detention
Based on % removal values to
the nearest percent
Total nitrogen target removal met? **Yes**
Total phosphorus target removal met? **Yes**

Summary Report

Nitrogen

Surface Water Discharge

Total N pre load	kg/yr	
Total N post load	404.74 kg/yr	
Target N load reduction	55 %	
Target N discharge load	182.13 kg/yr	
Percent N load reduction	63 %	
Provided N discharge load	150.99 kg/yr	332.93 lb/yr
Provided N load removed	253.76 kg/yr	559.53 lb/yr

Phosphorus

Surface Water Discharge

Total P pre load	kg/yr	
Total P post load	74.775 kg/yr	
Target P load reduction	80 %	
Target P discharge load	14.955 kg/yr	
Percent P load reduction	82 %	
Provided P discharge load	13.133 kg/yr	28.96 lb/yr
Provided P load removed	61.642 kg/yr	135.921 lb/yr

