MATTHEWS DESIGN GROUP

DRAINAGE ANALYSIS

OCEAN WALK

for

City of St. Augustine Beach
St. Augustine Beach, Florida

MDG Project No.: 21013

October 27, 2021

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Introduction

Matthews Design Group (MDG) was selected to conduct a drainage assessment for the Ocean Walk residential subdivision in St Augustine Beach. The property is approximately 19 acres including houses and roadways. Ocean Walk is bordered on the north and south by canals, on the west by a recently piped canal, and on the east by multifamily developments. The roads and lots are well treed with many large oak trees and other old growth vegetation throughout the property.

The Ocean Walk subdivision currently experiences significant flooding during larger storm events, resulting in damage to roadways and private property. The roadway serving the subdivision has a poorly developed drainage system with a single point of collection and connection to the recently installed pipe along Mickler Blvd.

The intent of this assessment is to provide the City of St Augustine Beach an analysis of the existing drainage system and conditions in relation to the experienced flooding of the Ocean Walk subdivision, and to develop conceptual improvements.

Narrative

Matthews Design Group (MDG) utilized historical documents, as-built documents, stormwater models by Stone Engineering and newly created models, recent survey data, and field exploration to verify and validate the existing condition of the stormwater management system at the time of analysis.

Existing Conditions

The Ocean Walk neighborhood covers an area of 19 acres with single family lots ranging from approximately 0.20 to 0.40 acres. The neighborhood is in Saint Augustine Beach and has a single driveway access along Pope Road. The property is divided into zones of interior and exterior lots in relation to the roadway that serves the neighborhood. The property generally slopes from East to West for collection by two existing catch basins that outfall through a single 24” RCP pipe. The 24” pipe conveys stormwater to the recently installed canal along Mickler Blvd. The Mickler system the neighborhood outfalls to is a 29” x 45” elliptical reinforced concrete pipe (ERCP), which is equivalent to a 36” standard RCP pipe. This pipe also conveys stormwater from Anastasia Park from the North, totaling approximately 60 acres of contributing area. This additional drainage area connects to the system after flowing through culvert crossings via under A1A Beach Blvd and Pope Road.

The Ocean Walk neighborhood is relatively low in elevation with undeveloped swales and poor conveyance. The community lacks a well-designed drainage system. The interior lots, having no drainage easements, require any collected stormwater from eastern property to be routed around the interior lots along the roadside, driving the invert of any proposed system lower than is desired to be practically considered.

Using ICPR 4, the existing conditions were modeled to establish a base line against the proposed improvement comparison. The 19-acre property was modeled to have the single outfall connection to the West and connecting into the Mickler inlet S-3. Anastasia Park was delineated into a single basin flowing North to South. These flows collect in a swale along the north of Pope Road and then cross via culverts underneath the roadway. The flow then enters the Pope Road South swale and then travel West to the Mickler system inlet S-1. The 36” equivalent ERCP conveys the stormwater to the South along Mickler for approximately 1,400 feet to the boundary location at 16th Street in the model. Tailwater time stages were provided by the Regional Stormwater Model prepared by Stone Engineering.

The Ocean Walk neighborhood contains four houses with a finished floor elevation (FFE) below 7.0 and a total of twenty-six homes below elevation 8.0. The results from this model are provided below and will be used as the base line comparison for all proposed improvements for the Ocean Walk neighborhood staging.

Existing Model with Anastasia Park Area Included

	Max Stage (ft)				
	100yr-24hr	25yr-24hr	10yr-24hr	5yr-24hr	MA-24hr
A:ONSITE BASIN	7.72	7.22	6.87	6.70	6.46

Potential Solutions

MDG performed multiple analyses to provide the Ocean Walk neighborhood with an acceptable relief from stormwater drainage impacts. With so many variables to remain unchanged, such as lot elevations and the Mickler system inverts downstream, the remining options were studied singularly and in combination. Any onsite drainage improvements done without offsite conveyance improvements will have little to no positive impacts to the property. Onsite improvements will help collect and direct water away from the property, but the Regional system must be made available to accept these additional flows.

The neighborhood has four houses with a finished floor elevation (FFE) lower than 7.00. The lowest FFE was shown to be interior lot #1, with an elevation of 6.35 per N.A.V.D. 88 datum provided by a recent topography survey. It is assumed house FFEs are 4” higher than the elevations found in their respective garages. The desired results are to protect garages during a 10 year – 24hour storm, while only protecting the houses from flood damage during a 25 year – 24-hour storm.

Anastasia Park Area Removed

During large storm events (greater than 10yr-24hr) the Mickler drainage system operates at capacity for the areas conveyed through it. The approximate 60-acre basin North of Pope Road for Anastasia Park may feasibly be removed from the system. The road culverts under Pope Road connecting the basins can be taken offline, resulting in a large volume reduction for the existing system to handle. A general study of the Anastasia Park basin would be required to make this a definitive option for neighborhood drainage improvements.

For the sake of analysis, this additional basin area was removed. This basin removal was the only change from the original existing condition model. A reduction in stormwater staging for the neighborhood was expected and the modeled results are provided below.

Proposed Model Without Anastasia Park Area Included

	Max Stage (ft)		
	100yr-24hr	25yr-24hr	10yr-24hr
A:ONSITE BASIN	7.38	6.96	6.69

Pump With Anastasia Park Area

The existing infrastructure to be considered in the design is as follows: pipe sizes, pipe inverts and existing contributing areas. With the modeled tailwater being equal to the lowest FFE for the neighborhood, a pump must be required to reduce stormwater staging. The conveyance piping from the neighborhood was upsized from the existing 24" pipe to two 30" pipes. This improvement will be included for all proposed models to account for the anticipated collection and conveyance improvements for the neighborhood.

Outside of the piping upgrade for the onsite neighborhood, the pump was the only proposed improvement in this model. To model flow through when not pumping, an additional pipe, Pipe 2B-2, was added to the model for analysis purposes only. Pipe 2B-2 was modeled for positive flows only and will not allow for any reverse flows to enter the assessment from downstream. All the following models containing a pump will have use of this bypass pipe.

The existing 36" ERCP will act as the wet well storage container for supplying the pump for operation. The pump was set to operate during stages at or above 4.0 and turn off at elevation 1.3 while ranging in flows of 15 to 20 cubic feet per second (cfs) respectively.

The Anastasia Park Area is present in this model as part of the total system. The large volume of water conveyed from the total basin was restricted by the existing pipe when supplying the pump. It is advisable to equip the pump with variable velocity drive to decrease the starting and stopping of the system during storm events. Results for the combined pumping capacity for the total basin are shown below.

Proposed Pump Model With Anastasia Park Area Included

	Max Stage (ft)		
	100yr-24hr	25yr-24hr	10yr-24hr
A:ONSITE BASIN	7.15	6.78	6.50

Dual Pumps With Anastasia Park Area

Due to variability of rainfall events, an analysis was conducted for a dual pump system with differing operation points for the pumps. Each pump operates at a flow rate from 15 – 20 (cfs). The first pump was set to operate at or above stages of 3 and turn off at 1.0, while the second pump operates at stages at or above 4 and will turn off at 1.3.

With this dual pump system, the flows are only maximized when both pumps are on, allowing for a transition between flows of 15 – 40 (cfs). This dual pump arrangement allows the system to provide greater relief when higher volumes of stormwater are encounter without operating during lower flow scenarios resulting in probable pump failures and heavier maintenance costs. The results from this analysis can be seen below.

Proposed 2-Pump Model With Anastasia Park Area Included

	Max Stage (ft)		
	100yr-24hr	25yr-24hr	10yr-24hr
A:ONSITE BASIN	6.97	6.66	5.87

Pump Without Anastasia Park Area

In a final analysis, a combination assessment using a single pump and the removal of the contributing Anastasia Basin Area to the North was conducted. With the removal of the Anastasia Park Area, the existing conveyance system has a great reduction in stormwater volume to handle. This volume reduction allows for the easy acceptance of flows from the Ocean Walk Neighborhood as shown in a previous model. With the addition of a stormwater pump, the existing system can reach maximum potential for stormwater conveyance and a reduction in flood elevation.

The proposed pump was designed to operate at or above stages of 3.0 and turn off once stage 1.3 is reached. Pump flows are to operate between 15 – 20 (cfs). Results from this analysis are provided below.

Proposed Pump Model Without Anastasia Park Area Included

	Max Stage (ft)		
	100yr-24hr	25yr-24hr	10yr-24hr
A:ONSITE BASIN	7.13	6.77	6.43

Summary

The flooding in Ocean Walk is driven mostly by the tailwater conditions and inadequate collection and conveyance system that slows flows from the site. Based on our modeling, the installation of a pump is a viable solution in reducing stormwater staging. Removal of the Anastasia Park areas is a second solution for providing relief from drainage problems. The most cost-effective solution has been shown to be the addition of a pump in tandem with the removal of the Anastasia Park basin area.

The modeled stage for the 10 year – 24 hour with this configuration resulted in a stormwater stage of 6.32. It should be noted that ICPR 4 does not allow for the accurate modeling of stormwater pumps with a variable frequency drive. The rough starting and stopping shown in the pump's flow graphs can be reduced with the application of a variable frequency drive.

Recent survey information indicates that this stage will still negatively impact the assumed garage finished floor elevation (FFE). The impacted lot for the 10yr-24hr storm will be interior lot 1 (FFE: 6.35).

The modeled stage for the 25 year – 24 hour with this proposed configuration resulted in the stormwater stage of 6.76. The total number of houses expected to be impacted by this stage will be 2. The impacted lots for the 25yr-24hr storm will be interior lot 1 (FFE: 6.35) and exterior lot 9 (FFE: 6.40).

	Max Stage (ft)		
	100yr-24hr	25yr-24hr	10yr-24hr
Existing Condition	7.72	7.22	6.87
Anastasia Removed	7.38	6.96	6.69
Pump	7.15	6.78	6.50
2 Pumps	6.97	6.66	5.87
Pump (Anastasia Removed)	7.13	6.77	6.43

The homes to be impacted represent only 1.8% and 3.6% of the neighborhood for the 10yr-24hr and 25yr-24hr respectively.

Calibration Model

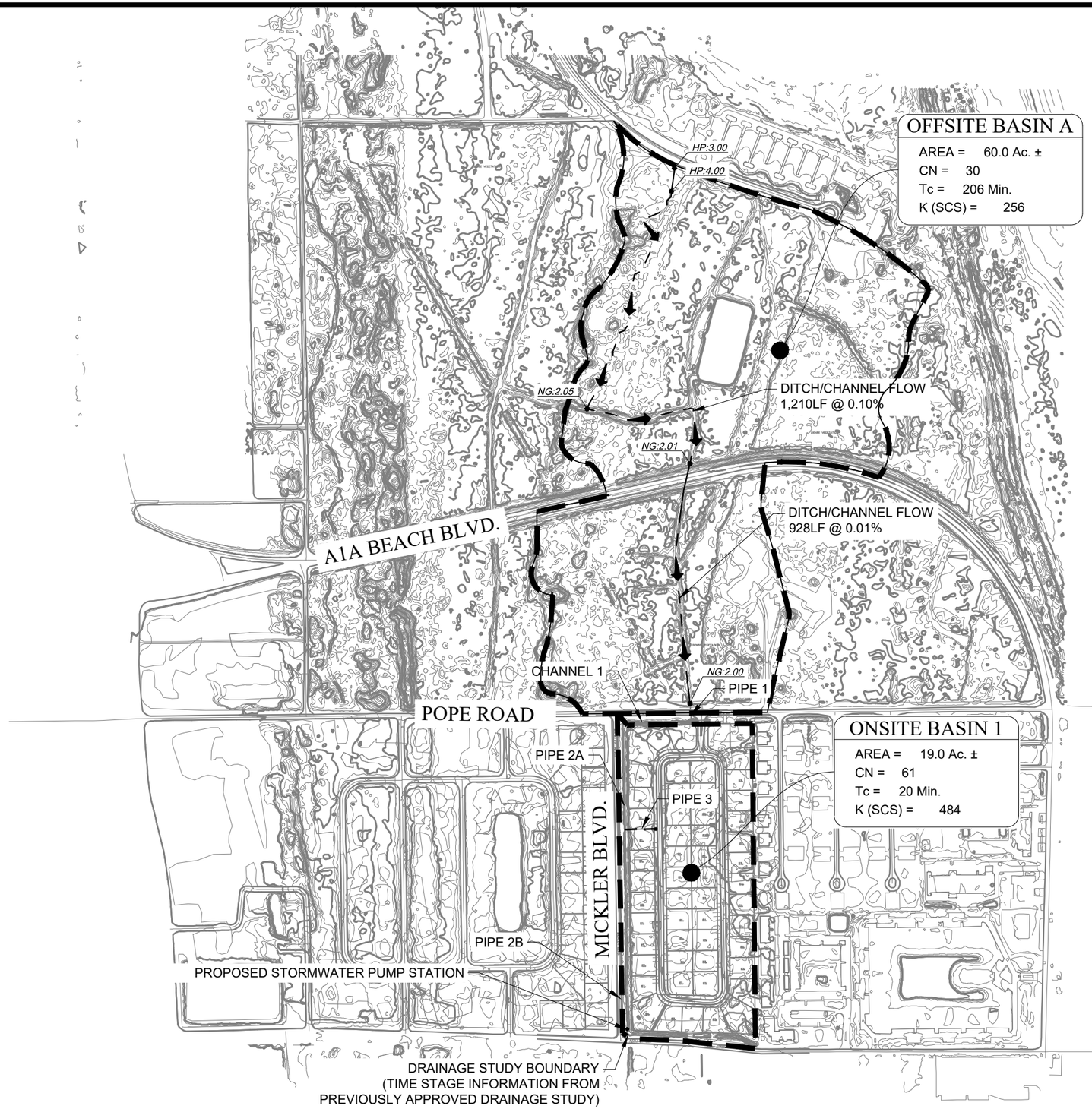
Historical information by the City of Saint Augustine Beach was provided to help calibrate the ICPR 4 model to a real-world event.

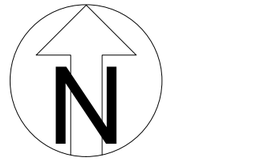
Records indicate on September 27, 2020, that radar rainfall was shown to be 4.2 inches of rainfall within approximately 2.5 hours. This storm event, equivalent to between a 10-year to 25-year storm, resulted in no garage flooding unless resultant from wave action. With the lowest FFE at 6.35, and an approximate garage floor grade of 6.10, we can expect this modeled storm event to provide a similar elevational stage for the neighborhood's onsite basin.

Using the existing model, the staging result from a 4.2 inch rain event within a 3 hour time period was shown to be 6.48. This modeled result was within 0.38' of the real-world data. It can be expected that a numerical reduction of 0.38' may be accurately applied to all modeled results for smaller storms, such as the 10 year – 24 hour.

The final result for the proposed removal of the Anastasia area and the addition of a single pump for neighborhood staging was 6.05 after the application of the numerical reduction provided through calibration.

DRAINAGE STUDY MAP





DRAINAGE STUDY MAP

OCEAN WALK DRAINAGE

ST. JOHNS COUNTY, FLORIDA

PREPARED FOR

CITY OF ST. AUGUSTINE BEACH

MATTHEWS DESIGN GROUP

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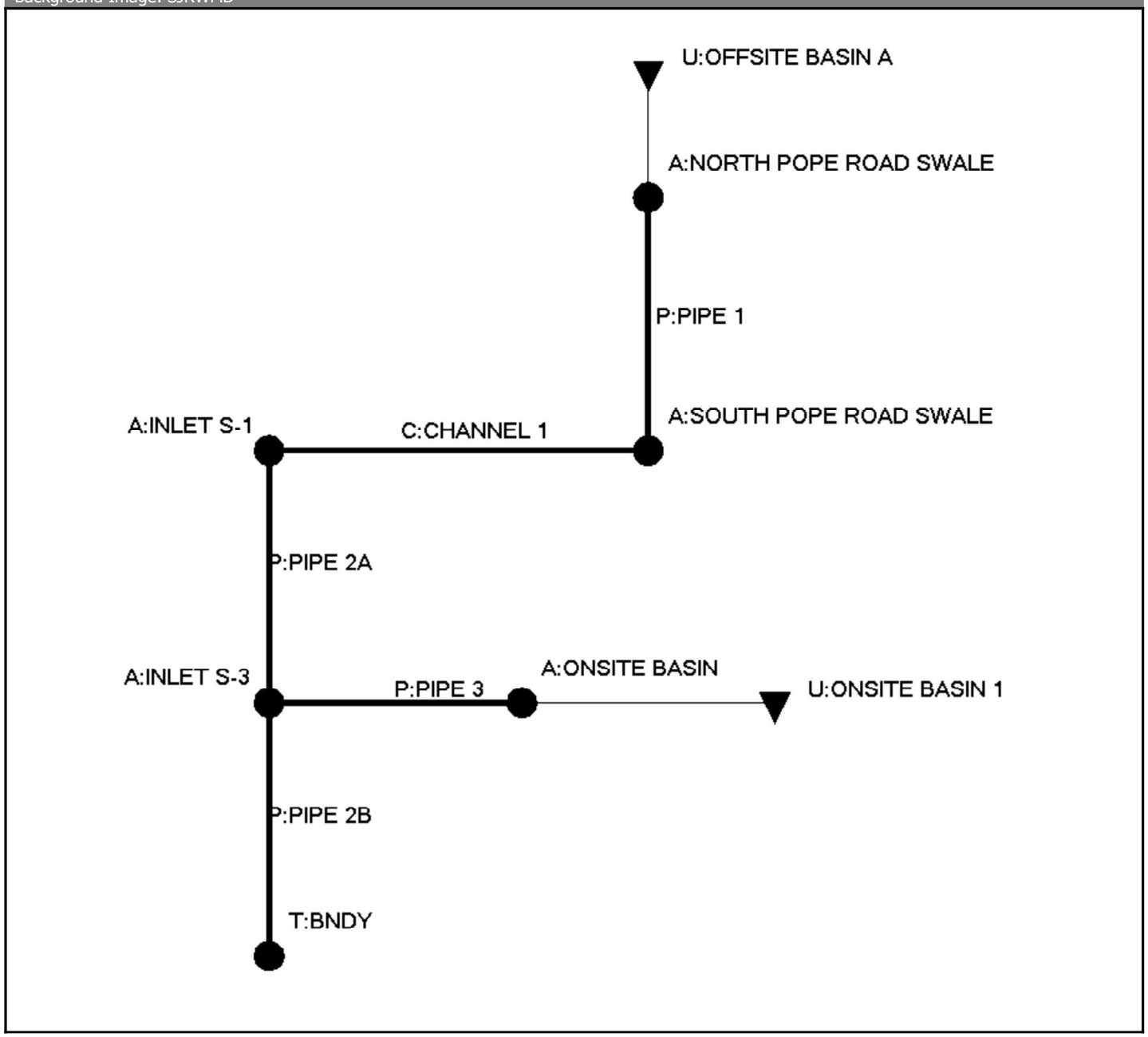
CHK BY:	SAK
DATE:	09-07-21
JOB No.:	21013

REVISIONS		
NO.	DATE	DESCRIPTION

E

ICPR 4
EXISTING CONDITION

Background Image: SJRWMD



Simple Basin: U:OFFSITE BASIN A

Scenario:	SJRWMD
Node:	A:NORTH POPE ROAD SWALE
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	138.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH256
Peaking Factor:	256.0

Area:	60.0000 ac
Curve Number:	83.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: U:ONSITE BASIN 1

Scenario:	SJRWMD
Node:	A:ONSITE BASIN
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	20.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	19.0000 ac
Curve Number:	63.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Node: A:INLET S-1

Scenario:	SJRWMD
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	1.11 ft
Warning Stage:	5.55 ft

Stage [ft]	Area [ac]	Area [ft2]
1.11	0.0005	22
2.11	0.0005	22
5.55	0.0005	22

Comment: TYPE "H" INLET

Node: A:INLET S-3

Scenario:	SJRWMD
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	0.00 ft

Warning Stage: 5.62 ft

Stage [ft]	Area [ac]	Area [ft2]
0.00	0.0005	22
1.34	0.0005	22
5.62	0.0005	22

Comment: TYPE "H" INLET

Node: A:NORTH POPE ROAD SWALE

Scenario: SJRWMD
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
0.00	0.0000	0

Comment:

Node: A:ONSITE BASIN

Scenario: SJRWMD
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 2.65 ft
Warning Stage: 6.50 ft

Stage [ft]	Area [ac]	Area [ft2]
1.00	0.0010	44
2.00	0.0020	87
5.00	0.0040	174
6.00	0.0100	436
6.50	0.1000	4356
6.70	3.0000	130680

Comment:

Node: A:SOUTH POPE ROAD SWALE

Scenario: SJRWMD
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
0.00	0.0000	0

Comment:

Node: T:BNDY

Scenario: SJRWMD
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 1.30 ft
Warning Stage: 6.40 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	1.30
0	0	0	17.5000	6.37
0	0	0	30.0000	5.66

Comment:

Channel Link: C:CHANNEL 1

Scenario: SJRWMD
From Node: A:SOUTH POPE ROAD SWALE
To Node: A:INLET S-1
Link Count: 1
Flow Direction: Both
Damping: 0.0000 ft
Length: 280.00 ft
Contraction Coef: 1.00
Expansion Coef: 0.50
Entr Loss Coef: 1.00
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Bend Location: 0.00 dec
Energy Switch: Energy

Upstream		Downstream	
Invert:	2.00 ft	Invert:	2.55 ft
Manning's N:	0.0000	Manning's N:	0.0000
Geometry: Irregular		Geometry: Irregular	
Cross Section:	SOUTH POPE ROAD	Cross Section:	SOUTH POPE ROAD

Comment:

Pipe Link: P:PIPE 1

Scenario: SJRWMD
From Node: A:NORTH POPE ROAD SWALE
To Node: A:SOUTH POPE ROAD SWALE
Link Count: 1
Flow Direction: Both
Damping: 0.0000 ft
Length: 71.00 ft
FHWA Code: 1

Upstream		Downstream	
Invert:	2.22 ft	Invert:	2.00 ft
Manning's N:	0.0120	Manning's N:	0.0120
Geometry: Circular		Geometry: Circular	
Max Depth:	2.00 ft	Max Depth:	2.00 ft
Bottom Clip			
Default:	0.00 ft	Default:	0.00 ft
Op Table:		Op Table:	
Ref Node:		Ref Node:	
Manning's N:	0.0000	Manning's N:	0.0000
Top Clip			

Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	1.00	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				

Comment:

Pipe Link: P:PIPE 2A		Upstream		Downstream	
Scenario:	SJRWMD	Invert:	2.11 ft	Invert:	1.77 ft
From Node:	A:INLET S-1	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	A:INLET S-3	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	
Link Count:	1	Max Depth:	2.42 ft	Max Depth:	2.42 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	234.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: P:PIPE 2B		Upstream		Downstream	
Scenario:	SJRWMD	Invert:	1.72 ft	Invert:	0.96 ft
From Node:	A:INLET S-3	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	T:BNDY	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	
Link Count:	1	Max Depth:	2.42 ft	Max Depth:	2.42 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	863.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: P:PIPE 3		Upstream		Downstream	
Scenario:	SJRWMD	Invert:	1.83 ft	Invert:	1.83 ft
From Node:	A:ONSITE BASIN	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	A:INLET S-3	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			

Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	113.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Node Max Conditions [SJRWMD]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:INLET S-1	100yr-24hr	5.55	18.60	-0.0010	111.35	86.35	1870
A:INLET S-1	10yr-24hr	5.55	10.11	0.0010	55.25	49.15	1870
A:INLET S-1	25yr-24hr	5.55	13.37	0.0010	73.79	65.82	1870
A:INLET S-1	5yr-24hr	5.55	8.54	-0.0010	42.32	38.74	1870
A:INLET S-1	MA-24hr	5.55	7.35	0.0010	28.53	28.39	1870

Node Max Conditions [SJRWMD]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:INLET S-3	100yr-24hr	5.62	12.37	-0.0010	86.35	86.32	3835
A:INLET S-3	10yr-24hr	5.62	8.12	-0.0010	49.15	49.13	3835
A:INLET S-3	25yr-24hr	5.62	9.76	-0.0010	65.82	65.80	3835
A:INLET S-3	5yr-24hr	5.62	7.36	-0.0010	38.74	38.71	3835
A:INLET S-3	MA-24hr	5.62	6.76	-0.0010	28.39	28.46	3835

Node Max Conditions [SJRWMD]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:NORTH POPE ROAD SWALE	100yr-24hr	0.00	46.06	0.0010	88.89	88.76	100
A:NORTH POPE ROAD SWALE	10yr-24hr	0.00	18.85	0.0010	49.89	49.86	100
A:NORTH POPE ROAD SWALE	25yr-24hr	0.00	29.15	0.0010	67.20	67.13	100
A:NORTH POPE ROAD SWALE	5yr-24hr	0.00	13.94	0.0010	39.16	39.14	100
A:NORTH POPE ROAD SWALE	MA-24hr	0.00	10.25	0.0010	28.59	28.59	100

Node Max Conditions [SJRWMD]

Node Name	Sim Name	Warning Stage	Max Stage [ft]	Min/Max Delta	Max Total	Max Total	Max Surface

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:ONSITE BASIN	100yr-24hr	6.50	10.89	0.0010	101.27	16.36	130682
A:ONSITE BASIN	10yr-24hr	6.50	8.06	0.0010	46.83	14.61	130682
A:ONSITE BASIN	25yr-24hr	6.50	9.26	0.0010	70.39	13.76	130682
A:ONSITE BASIN	5yr-24hr	6.50	7.37	0.0010	33.03	15.00	130682
A:ONSITE BASIN	MA-24hr	6.50	6.76	0.0010	20.36	15.08	130682

Node Max Conditions [SJRWMD]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:SOUTH POPE ROAD SWALE	100yr-24hr	0.00	18.61	0.0010	88.76	111.35	1841
A:SOUTH POPE ROAD SWALE	10yr-24hr	0.00	10.13	0.0010	49.86	55.25	1841
A:SOUTH POPE ROAD SWALE	25yr-24hr	0.00	13.38	0.0010	67.13	73.79	1841
A:SOUTH POPE ROAD SWALE	5yr-24hr	0.00	8.56	0.0010	39.14	42.32	1841
A:SOUTH POPE ROAD SWALE	MA-24hr	0.00	7.38	0.0010	28.59	28.53	1841

Node Max Conditions [SJRWMD]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
T:BNDY	100yr-24hr	6.40	6.37	0.0024	59.85	0.53	0
T:BNDY	10yr-24hr	6.40	6.37	0.0024	37.65	0.76	0
T:BNDY	25yr-24hr	6.40	6.37	0.0024	47.49	0.53	0
T:BNDY	5yr-24hr	6.40	6.37	0.0024	31.75	0.86	0
T:BNDY	MA-24hr	6.40	6.37	0.0024	26.83	0.88	0

Link Min/Max Conditions [SJRWMD]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
C:CHANNEL 1	100yr-24hr	111.35	-0.01	-48.69	0.56	2.24	1.22
C:CHANNEL 1	10yr-24hr	55.25	-0.38	-11.65	0.61	-1.69	-1.02
C:CHANNEL 1	25yr-24hr	73.79	-0.12	-15.20	0.57	-1.38	-0.84
C:CHANNEL 1	5yr-24hr	42.32	-0.48	-7.64	0.60	-1.69	-1.02
C:CHANNEL 1	MA-24hr	28.53	-0.50	4.30	-0.59	-1.69	-1.02

Link Min/Max Conditions [SJRWMD]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
P:PIPE 1	100yr-24hr	88.76	0.00	-0.11	28.25	28.25	28.25
P:PIPE 1	10yr-24hr	49.86	-0.19	-0.62	15.87	15.87	15.87
P:PIPE 1	25yr-24hr	67.13	0.00	-0.26	21.37	21.37	21.37
P:PIPE 1	5yr-24hr	39.14	-0.41	0.68	12.46	12.46	12.46
P:PIPE 1	MA-24hr	28.59	-0.44	-0.81	9.10	9.10	9.10

Link Min/Max Conditions [SJRWMD]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
P:PIPE 2A	100yr-24hr	86.35	-0.20	2.36	11.66	11.66	11.66
P:PIPE 2A	10yr-24hr	49.15	-0.46	2.07	6.64	6.64	6.64
P:PIPE 2A	25yr-24hr	65.82	-0.20	-2.26	8.89	8.89	8.89
P:PIPE 2A	5yr-24hr	38.74	-0.56	2.14	5.23	5.23	5.23
P:PIPE 2A	MA-24hr	28.39	-0.58	2.06	3.83	3.83	3.83

Link Min/Max Conditions [SJRWMD]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
P:PIPE 2B	100yr-24hr	59.85	-0.53	-0.13	8.08	8.08	8.08
P:PIPE 2B	10yr-24hr	37.65	-0.76	0.93	5.08	5.08	5.08
P:PIPE 2B	25yr-24hr	47.49	-0.53	-0.66	6.41	6.41	6.41
P:PIPE 2B	5yr-24hr	31.75	-0.86	-0.98	4.29	4.29	4.29
P:PIPE 2B	MA-24hr	26.83	-0.88	1.06	3.62	3.62	3.62

Link Min/Max Conditions [SJRWMD]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
P:PIPE 3	100yr-24hr	16.36	-26.58	-0.72	-8.46	-8.46	-8.46
P:PIPE 3	10yr-24hr	14.61	-11.52	0.89	4.65	4.65	4.65
P:PIPE 3	25yr-24hr	13.76	-18.39	0.83	-5.85	-5.85	-5.85
P:PIPE 3	5yr-24hr	15.00	-6.96	0.88	4.77	4.77	4.77
P:PIPE 3	MA-24hr	15.08	-1.94	-0.85	4.80	4.80	4.80

Simulation: 100yr-24hr

Scenario: SJRWMD
Run Date/Time: 10/8/2021 8:44:24 AM
Program Version: ICPR4 4.07.08

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:	30.0000	0.0500
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	5.0000

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

Tolerances & Options

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

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~FLMOD
Rainfall Amount: 12.00 in
Storm Duration: 24.0000 hr

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

Comment:

Simulation: 10yr-24hr

Scenario: SJRWMD
Run Date/Time: 10/8/2021 8:44:30 AM

Program Version: ICPR4 4.07.08

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:	30.0000	0.0500
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	5.0000

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

Tolerances & Options

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

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~FLMOD
Rainfall Amount: 7.50 in
Storm Duration: 24.0000 hr

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

Comment:

Simulation: 25yr-24hr

Scenario: SJRWMD
Run Date/Time: 10/8/2021 8:44:39 AM
Program Version: ICPR4 4.07.08

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:	30.0000	0.0500
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	5.0000

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

Tolerances & Options

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

IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FLMOD
Rainfall Amount: 9.50 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

Simulation: 5yr-24hr

Scenario: SJRWMD
Run Date/Time: 10/8/2021 8:44:46 AM
Program Version: ICPR4 4.07.08

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:	30.0000	0.0500
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	5.0000

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

Tolerances & Options

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

IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FLMOD

Edge Length Option: Automatic

Rainfall Amount: 6.25 in
Storm Duration: 24.0000 hr

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

Comment:

Simulation: MA-24hr

Scenario: SJRWMD
Run Date/Time: 10/8/2021 8:44:58 AM
Program Version: ICPR4 4.07.08

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:	30.0000	0.0500
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	5.0000

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

Tolerances & Options

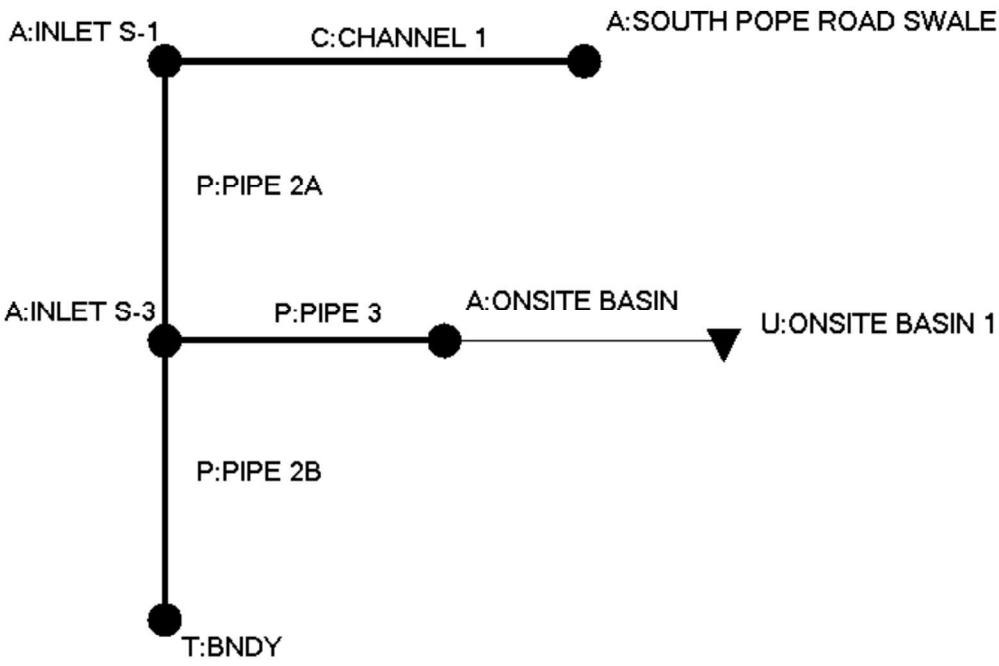
Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6		
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	5.00 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
		Dflt Damping (1D):	0.0050 ft
		Min Node Srf Area (1D):	100 ft2
		Energy Switch (1D):	Energy

Comment:

ICPR 4

ANASTASIA AREA REMOVED

Background Image: NoMCDS



Simple Basin: U:ONSITE BASIN 1

Scenario:	NoMCDS
Node:	A:ONSITE BASIN
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	20.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	19.0000 ac
Curve Number:	63.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Node: A:INLET S-1

Scenario: NoMCDS

Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 1.11 ft
Warning Stage: 5.55 ft

Stage [ft]	Area [ac]	Area [ft2]
1.11	0.0005	22
2.11	0.0005	22
5.55	0.0005	22

Comment: TYPE "H" INLET

Node: A:INLET S-3

Scenario: NoMCDS
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 5.62 ft

Stage [ft]	Area [ac]	Area [ft2]
0.00	0.0005	22
1.34	0.0005	22
5.62	0.0005	22

Comment: TYPE "H" INLET

Node: A:ONSITE BASIN

Scenario: NoMCDS
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 2.65 ft
Warning Stage: 6.50 ft

Stage [ft]	Area [ac]	Area [ft2]
1.00	0.0010	44
2.00	0.0020	87
5.00	0.0040	174
6.00	0.0100	436
6.50	0.1000	4356
6.70	3.0000	130680

Comment:

Node: A:SOUTH POPE ROAD SWALE

Scenario: NoMCDS
Type: Stage/Area
Base Flow: 0.00 cfs

Initial Stage: 0.00 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
0.00	0.0000	0

Comment:

Node: T:BNDY

Scenario: NoMCDS
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 1.30 ft
Warning Stage: 6.40 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	1.30
0	0	0	17.5000	6.37
0	0	0	30.0000	5.66

Comment:

Channel Link: C:CHANNEL 1

Scenario: NoMCDS
From Node: A:SOUTH POPE ROAD SWALE
To Node: A:INLET S-1
Link Count: 1
Flow Direction: Both
Damping: 0.0000 ft
Length: 280.00 ft
Contraction Coef: 1.00
Expansion Coef: 0.50
Entr Loss Coef: 1.00
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Bend Location: 0.00 dec
Energy Switch: Energy

Upstream	Downstream
Invert: 2.00 ft	Invert: 2.55 ft
Manning's N: 0.0000	Manning's N: 0.0000
Geometry: Irregular	Geometry: Irregular
Cross Section: SOUTH POPE ROAD	Cross Section: SOUTH POPE ROAD

Comment:

Pipe Link: P:PIPE 2A

Scenario: NoMCDS
From Node: A:INLET S-1
To Node: A:INLET S-3
Link Count: 1
Flow Direction: Both

Upstream	Downstream
Invert: 2.11 ft	Invert: 1.77 ft
Manning's N: 0.0120	Manning's N: 0.0120
Geometry: Horizontal Ellipse	Geometry: Horizontal Ellipse
Max Depth: 2.42 ft	Max Depth: 2.42 ft
Bottom Clip	

Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	234.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: P:PIPE 2B		Upstream		Downstream	
Scenario:	NoMCDS	Invert:	1.72 ft	Invert:	0.96 ft
From Node:	A:INLET S-3	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	T:BNDY	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	
Link Count:	1	Max Depth:	2.42 ft	Max Depth:	2.42 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	863.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: P:PIPE 3		Upstream		Downstream	
Scenario:	NoMCDS	Invert:	1.83 ft	Invert:	1.83 ft
From Node:	A:ONSITE BASIN	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	A:INLET S-3	Geometry: Circular		Geometry: Circular	
Link Count:	2	Max Depth:	2.50 ft	Max Depth:	2.50 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	113.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Node Max Conditions [NoMCDS]

Node Name	Sim Name	Warning Stage	Max Stage [ft]	Min/Max Delta	Max Total	Max Total	Max Surface

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:INLET S-1	100yr-24hr	5.55	7.04	0.0010	7.95	6.61	1870
A:INLET S-1	10yr-24hr	5.55	6.42	0.0010	6.35	10.46	1870
A:INLET S-1	25yr-24hr	5.55	6.67	0.0010	6.71	9.64	1870

Node Max Conditions [NoMCDS]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:INLET S-3	100yr-24hr	5.62	7.04	0.0019	33.27	33.90	3957
A:INLET S-3	10yr-24hr	5.62	6.42	0.0019	31.59	31.46	3957
A:INLET S-3	25yr-24hr	5.62	6.67	0.0019	32.10	31.96	3957

Node Max Conditions [NoMCDS]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:ONSITE BASIN	100yr-24hr	6.50	7.45	0.0010	101.27	33.27	130686
A:ONSITE BASIN	10yr-24hr	6.50	6.72	0.0010	46.83	31.59	130686
A:ONSITE BASIN	25yr-24hr	6.50	7.01	0.0010	70.39	32.10	130686

Node Max Conditions [NoMCDS]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:SOUTH POPE ROAD SWALE	100yr-24hr	0.00	7.04	0.0010	3.96	3.28	1840
A:SOUTH POPE ROAD SWALE	10yr-24hr	0.00	6.42	0.0010	3.15	5.18	1840
A:SOUTH POPE ROAD SWALE	25yr-24hr	0.00	6.67	0.0010	3.33	4.78	1840

Node Max Conditions [NoMCDS]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
T:BNDY	100yr-24hr	6.40	6.37	0.0024	32.68	0.75	0
T:BNDY	10yr-24hr	6.40	6.37	0.0024	28.06	0.75	0
T:BNDY	25yr-24hr	6.40	6.37	0.0024	29.88	0.75	0

Link Min/Max Conditions [NoMCDS]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta	Max Us Velocity	Max Ds Velocity	Max Avg

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
C:CHANNEL 1	100yr-24hr	3.28	-3.96	0.35	-0.55	-1.68	-1.01
C:CHANNEL 1	10yr-24hr	5.18	-3.15	-0.26	-0.55	-1.68	-1.01
C:CHANNEL 1	25yr-24hr	4.78	-3.33	0.31	-0.55	-1.68	-1.01

Link Min/Max Conditions [NoMCDS]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
P:PIPE 2A	100yr-24hr	6.61	-7.95	1.60	-1.07	-1.50	-1.07
P:PIPE 2A	10yr-24hr	10.46	-6.35	1.48	1.41	-1.50	1.41
P:PIPE 2A	25yr-24hr	9.64	-6.71	1.45	1.30	-1.50	1.30

Link Min/Max Conditions [NoMCDS]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
P:PIPE 2B	100yr-24hr	32.68	-0.75	-0.94	4.41	4.41	4.41
P:PIPE 2B	10yr-24hr	28.06	-0.75	1.02	3.79	3.79	3.79
P:PIPE 2B	25yr-24hr	29.88	-0.75	0.95	4.03	4.03	4.03

Link Min/Max Conditions [NoMCDS]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
P:PIPE 3	100yr-24hr	33.27	-0.28	3.12	3.39	3.39	3.39
P:PIPE 3	10yr-24hr	31.59	-0.29	2.80	3.22	3.22	3.22
P:PIPE 3	25yr-24hr	32.10	-0.26	2.77	3.27	3.27	3.27

Simulation: 100yr-24hr

Scenario: NoMCDS
Run Date/Time: 10/26/2021 8:23:11 AM
Program Version: ICPR4 4.07.08

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:	30.0000	0.0500
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	5.0000

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

Tolerances & Options

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

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~FLMOD
Rainfall Amount: 12.00 in
Storm Duration: 24.0000 hr

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

Comment:

Simulation: 10yr-24hr

Scenario: NoMCDS
Run Date/Time: 10/26/2021 8:23:31 AM
Program Version: ICPR4 4.07.08

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:	30.0000	0.0500
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	5.0000

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

Tolerances & Options

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

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~FLMOD
Rainfall Amount: 7.50 in
Storm Duration: 24.0000 hr

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

Comment:

Simulation: 25yr-24hr

Scenario: NoMCDS
Run Date/Time: 10/26/2021 8:23:56 AM
Program Version: ICPR4 4.07.08

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:	30.0000	0.0500
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	5.0000

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

Tolerances & Options

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

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~FLMOD
Rainfall Amount: 9.50 in
Storm Duration: 24.0000 hr

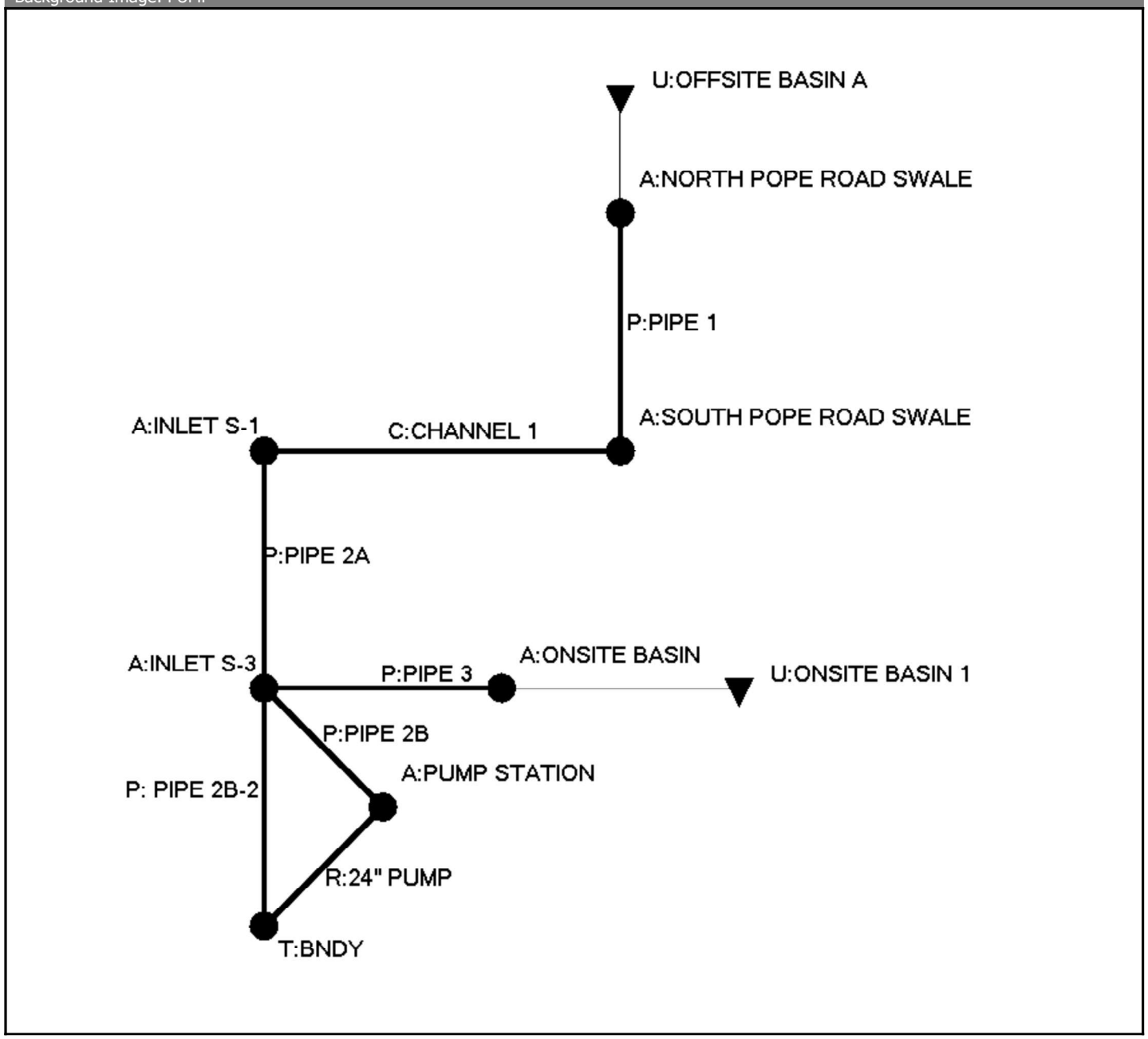
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

ICPR 4

PUMP WITH ANASTASIA AREA INCLUDED

Background Image: PUMP



Simple Basin: U:OFFSITE BASIN A

Scenario:	PUMP
Node:	A:NORTH POPE ROAD SWALE
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	206.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH256
Peaking Factor:	256.0

Area:	60.0000 ac
Curve Number:	30.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: U:ONSITE BASIN 1

Scenario:	PUMP
Node:	A:ONSITE BASIN
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	20.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	19.0000 ac
Curve Number:	61.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Node: A:INLET S-1

Scenario:	PUMP
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	1.11 ft
Warning Stage:	5.55 ft

Stage [ft]	Area [ac]	Area [ft2]
1.11	0.0005	22
2.11	0.0005	22
5.55	0.0005	22

Comment: TYPE "H" INLET

Node: A:INLET S-3

Scenario:	PUMP
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	0.00 ft

Warning Stage: 5.62 ft

Stage [ft]	Area [ac]	Area [ft2]
0.00	0.0005	22
1.34	0.0005	22
5.62	0.0005	22

Comment: TYPE "H" INLET

Node: A:NORTH POPE ROAD SWALE

Scenario: PUMP
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
0.00	0.0000	0

Comment:

Node: A:ONSITE BASIN

Scenario: PUMP
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 2.65 ft
Warning Stage: 6.50 ft

Stage [ft]	Area [ac]	Area [ft2]
1.00	0.0010	44
2.00	0.0020	87
5.00	0.0040	174
6.00	0.0100	436
6.50	0.1000	4356
6.70	3.0000	130680

Comment:

Node: A:PUMP STATION

Scenario: PUMP
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 1.00 ft
Warning Stage: 6.00 ft

Stage [ft]	Area [ac]	Area [ft2]
0.00	0.0040	174

Stage [ft]	Area [ac]	Area [ft2]
6.00	0.0040	174

Comment:

Node: A:SOUTH POPE ROAD SWALE

Scenario: PUMP
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
0.00	0.0000	0

Comment:

Node: T:BNDY

Scenario: PUMP
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 1.30 ft
Warning Stage: 6.40 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	1.30
0	0	0	17.5000	6.37
0	0	0	30.0000	5.66

Comment:

Channel Link: C:CHANNEL 1

Scenario: PUMP
From Node: A:SOUTH POPE ROAD SWALE
To Node: A:INLET S-1
Link Count: 1
Flow Direction: Both
Damping: 0.0000 ft
Length: 280.00 ft
Contraction Coef: 1.00
Expansion Coef: 0.50
Entr Loss Coef: 1.00
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Bend Location: 0.00 dec

Upstream	Downstream
Invert: 2.00 ft	Invert: 2.55 ft
Manning's N: 0.0000	Manning's N: 0.0000
Geometry: Irregular	Geometry: Irregular
Cross Section: SOUTH POPE ROAD	Cross Section: SOUTH POPE ROAD

Energy Switch: Energy

Comment:

Pipe Link: P: PIPE 2B-2		Upstream		Downstream	
Scenario:	PUMP	Invert:	1.72 ft	Invert:	0.96 ft
From Node:	A:INLET S-3	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	T:BNDY	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	
Link Count:	1	Max Depth:	2.42 ft	Max Depth:	2.42 ft
Flow Direction:	Positive	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	863.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: P:PIPE 1		Upstream		Downstream	
Scenario:	PUMP	Invert:	2.22 ft	Invert:	2.00 ft
From Node:	A:NORTH POPE ROAD SWALE	Manning's N:	0.0120	Manning's N:	0.0120
		Geometry: Circular		Geometry: Circular	
To Node:	A:SOUTH POPE ROAD SWALE	Max Depth:	2.00 ft	Max Depth:	2.00 ft
		Bottom Clip			
Link Count:	1	Default:	0.00 ft	Default:	0.00 ft
Flow Direction:	Both	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	
Length:	71.00 ft	Manning's N:	0.0000	Manning's N:	0.0000
FHWA Code:	1	Top Clip			
Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	1.00	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				

Comment:

Pipe Link: P:PIPE 2A		Upstream		Downstream	
Scenario:	PUMP	Invert:	2.11 ft	Invert:	1.77 ft
From Node:	A:INLET S-1	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	A:INLET S-3	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	
Link Count:	1	Max Depth:	2.42 ft	Max Depth:	2.42 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	234.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	

Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00		Top Clip		
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: P:PIPE 2B		Upstream		Downstream	
Scenario:	PUMP	Invert:	1.72 ft	Invert:	0.96 ft
From Node:	A:INLET S-3	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	A:PUMP STATION	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	
Link Count:	1	Max Depth:	2.42 ft	Max Depth:	2.42 ft
Flow Direction:	Both		Bottom Clip		
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	863.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00		Top Clip		
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: P:PIPE 3		Upstream		Downstream	
Scenario:	PUMP	Invert:	1.83 ft	Invert:	1.83 ft
From Node:	A:ONSITE BASIN	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	A:INLET S-3	Geometry: Circular		Geometry: Circular	
Link Count:	2	Max Depth:	2.50 ft	Max Depth:	2.50 ft
Flow Direction:	Both		Bottom Clip		
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	113.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00		Top Clip		
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Rating Curve Link: R:24" PUMP	
Scenario:	PUMP
From Node:	A:PUMP STATION
To Node:	T:BNDY
Link Count:	1

Flow Direction: Positive

Table	Elev On [ft]	Elev On Node	Elev Off [ft]	Elev Off Node
24" P37	4.00	A:PUMP STATION	1.30	A:PUMP STATION

Comment:

Node Max Conditions [PUMP]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:INLET S-1	100yr-24hr	5.55	6.47	0.0010	15.38	17.28	1870
A:INLET S-1	10yr-24hr	5.55	5.91	0.0010	13.80	8.88	1870
A:INLET S-1	25yr-24hr	5.55	6.15	-0.0010	16.40	15.53	1870

Node Max Conditions [PUMP]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:INLET S-3	100yr-24hr	5.62	6.46	0.0019	44.91	44.69	4324
A:INLET S-3	10yr-24hr	5.62	5.91	0.0019	40.53	40.41	3875
A:INLET S-3	25yr-24hr	5.62	6.15	0.0019	44.73	44.51	4072

Node Max Conditions [PUMP]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:NORTH POPE ROAD SWALE	100yr-24hr	0.00	6.47	0.0010	8.72	8.74	100
A:NORTH POPE ROAD SWALE	10yr-24hr	0.00	5.91	0.0015	2.96	1.48	100
A:NORTH POPE ROAD SWALE	25yr-24hr	0.00	6.16	0.0010	3.66	3.78	100

Node Max Conditions [PUMP]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:ONSITE BASIN	100yr-24hr	6.50	7.15	0.0010	96.96	44.91	130686
A:ONSITE BASIN	10yr-24hr	6.50	6.50	0.0010	43.52	40.53	4325
A:ONSITE BASIN	25yr-24hr	6.50	6.78	0.0010	66.54	44.73	130686

Node Max Conditions [PUMP]

Node Name	Sim Name	Warning Stage	Max Stage [ft]	Min/Max Delta	Max Total	Max Total	Max Surface

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:PUMP STATION	100yr-24hr	6.00	6.02	-0.0033	16.26	19.50	1803
A:PUMP STATION	10yr-24hr	6.00	5.47	-0.0035	16.60	19.50	1803
A:PUMP STATION	25yr-24hr	6.00	5.71	0.0039	20.64	19.50	1803

Node Max Conditions [PUMP]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:SOUTH POPE ROAD SWALE	100yr-24hr	0.00	6.47	0.0010	8.74	11.05	1841
A:SOUTH POPE ROAD SWALE	10yr-24hr	0.00	5.91	0.0010	7.55	4.23	1841
A:SOUTH POPE ROAD SWALE	25yr-24hr	0.00	6.16	0.0010	9.47	8.11	1841

Node Max Conditions [PUMP]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
T:BNDY	100yr-24hr	6.40	6.37	0.0024	43.01	0.00	0
T:BNDY	10yr-24hr	6.40	6.37	0.0024	38.35	0.00	0
T:BNDY	25yr-24hr	6.40	6.37	0.0024	40.40	0.00	0

Link Min/Max Conditions [PUMP]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
C:CHANNEL 1	100yr-24hr	11.05	-8.68	6.28	-0.94	3.55	2.10
C:CHANNEL 1	10yr-24hr	4.23	-7.55	0.25	-1.00	-2.99	-1.88
C:CHANNEL 1	25yr-24hr	8.11	-9.47	-0.37	-0.84	3.05	1.75

Link Min/Max Conditions [PUMP]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
P: PIPE 2B-2	100yr-24hr	28.01	0.00	-0.61	3.78	3.78	3.78
P: PIPE 2B-2	10yr-24hr	23.35	0.00	0.75	3.15	3.15	3.15
P: PIPE 2B-2	25yr-24hr	25.40	0.00	-0.30	3.43	3.43	3.43

Link Min/Max Conditions [PUMP]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta	Max Us Velocity	Max Ds Velocity	Max Avg

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
P:PIPE 1	100yr-24hr	8.74	-0.97	-0.79	2.78	2.78	2.78
P:PIPE 1	10yr-24hr	1.48	-2.96	-0.84	-1.47	-3.61	-2.47
P:PIPE 1	25yr-24hr	3.78	-1.15	-0.63	1.56	-2.79	-1.82

Link Min/Max Conditions [PUMP]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
P:PIPE 2A	100yr-24hr	17.28	-15.38	2.15	2.33	-2.61	2.33
P:PIPE 2A	10yr-24hr	8.88	-13.80	1.43	-1.86	-1.86	-1.86
P:PIPE 2A	25yr-24hr	15.53	-16.40	-1.63	-2.21	-2.42	-2.22

Link Min/Max Conditions [PUMP]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
P:PIPE 2B	100yr-24hr	16.26	0.00	0.99	2.91	4.76	3.63
P:PIPE 2B	10yr-24hr	16.60	0.00	0.96	2.82	4.35	3.33
P:PIPE 2B	25yr-24hr	20.64	0.00	0.99	3.16	5.31	4.04

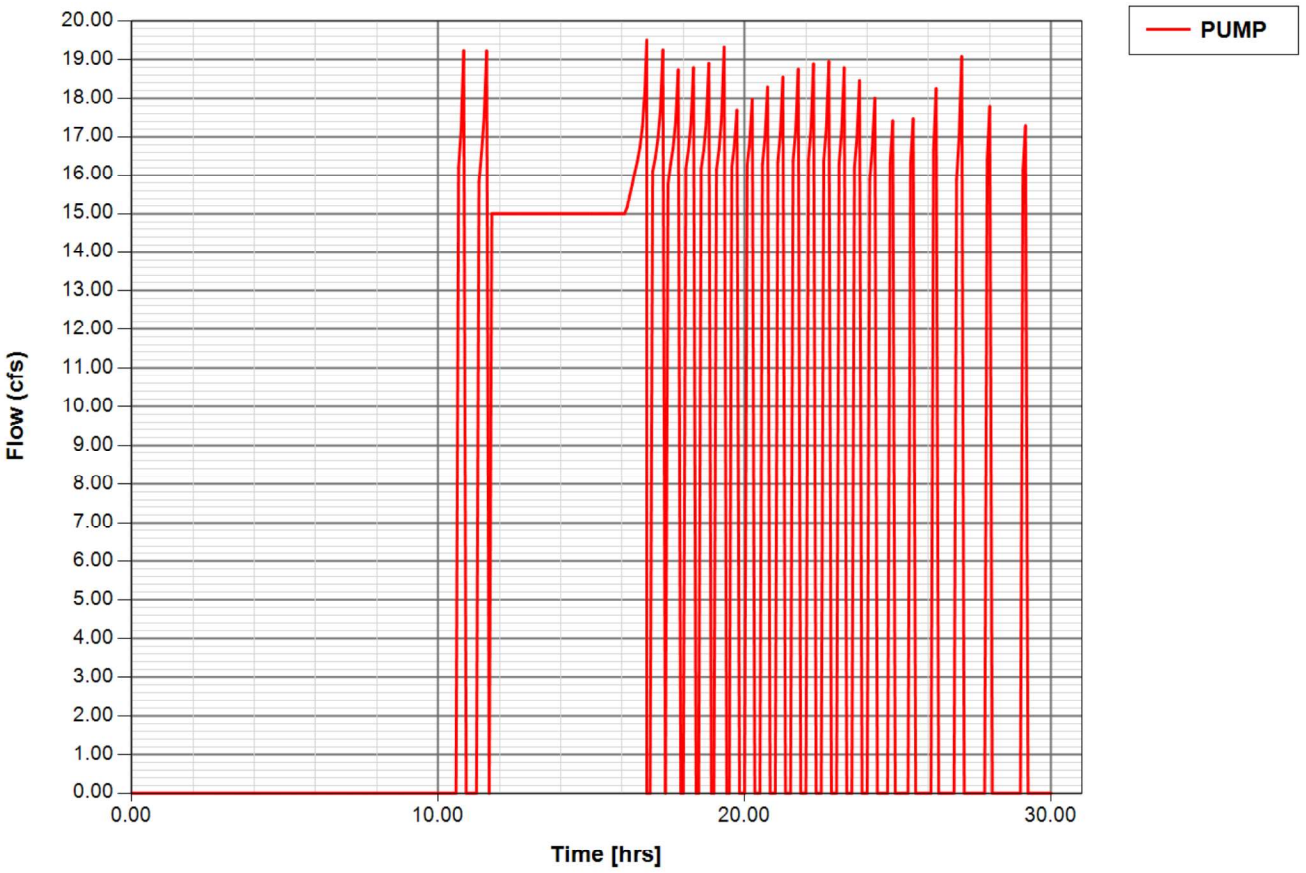
Link Min/Max Conditions [PUMP]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
P:PIPE 3	100yr-24hr	44.91	-0.42	-1.60	4.57	4.57	4.57
P:PIPE 3	10yr-24hr	40.53	-0.11	-1.61	4.13	4.13	4.13
P:PIPE 3	25yr-24hr	44.73	-0.27	-0.46	4.56	4.56	4.56

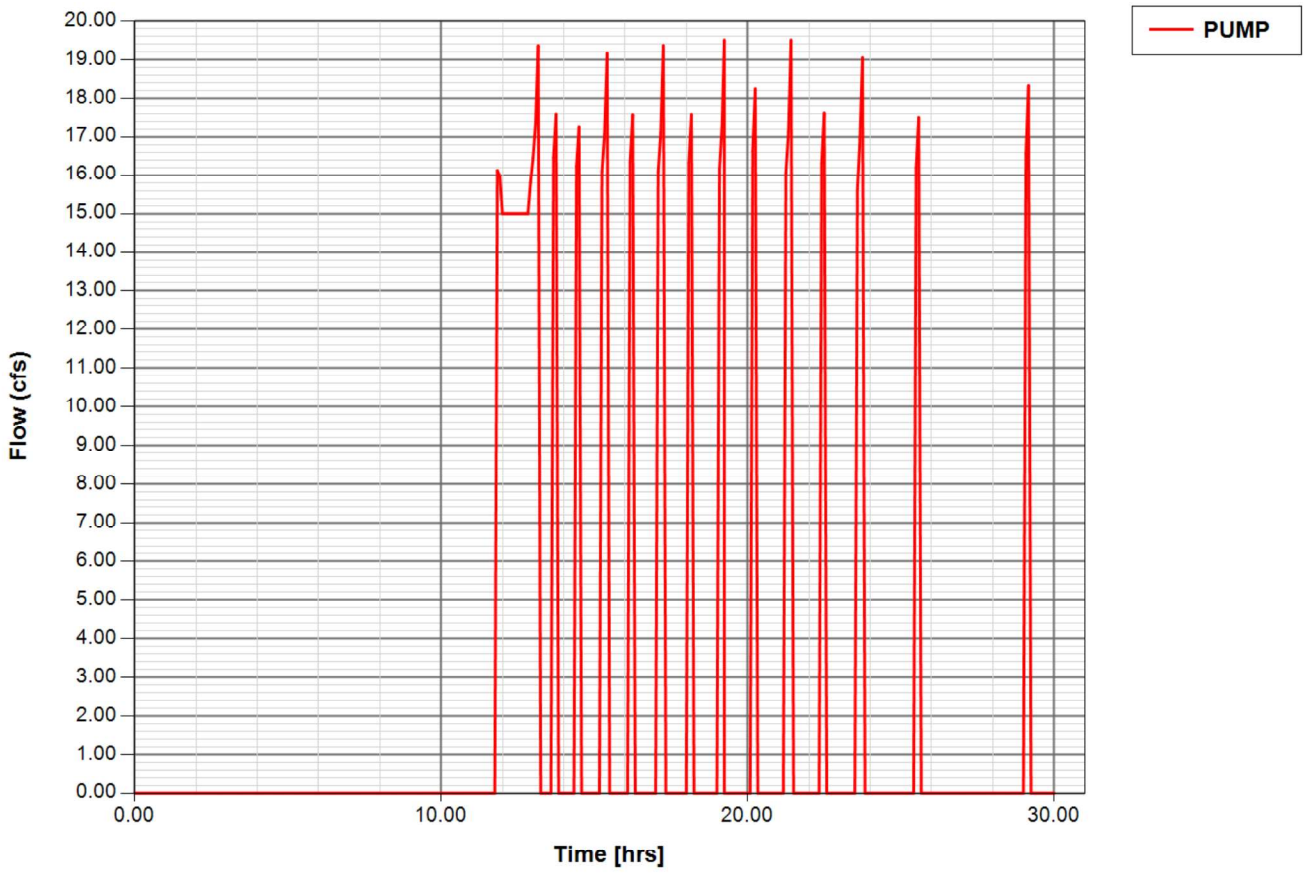
Link Min/Max Conditions [PUMP]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
R:24" PUMP	100yr-24hr	19.50	0.00	-9.75	0.00	0.00	0.00
R:24" PUMP	10yr-24hr	19.50	0.00	15.00	0.00	0.00	0.00
R:24" PUMP	25yr-24hr	19.50	0.00	-9.75	0.00	0.00	0.00

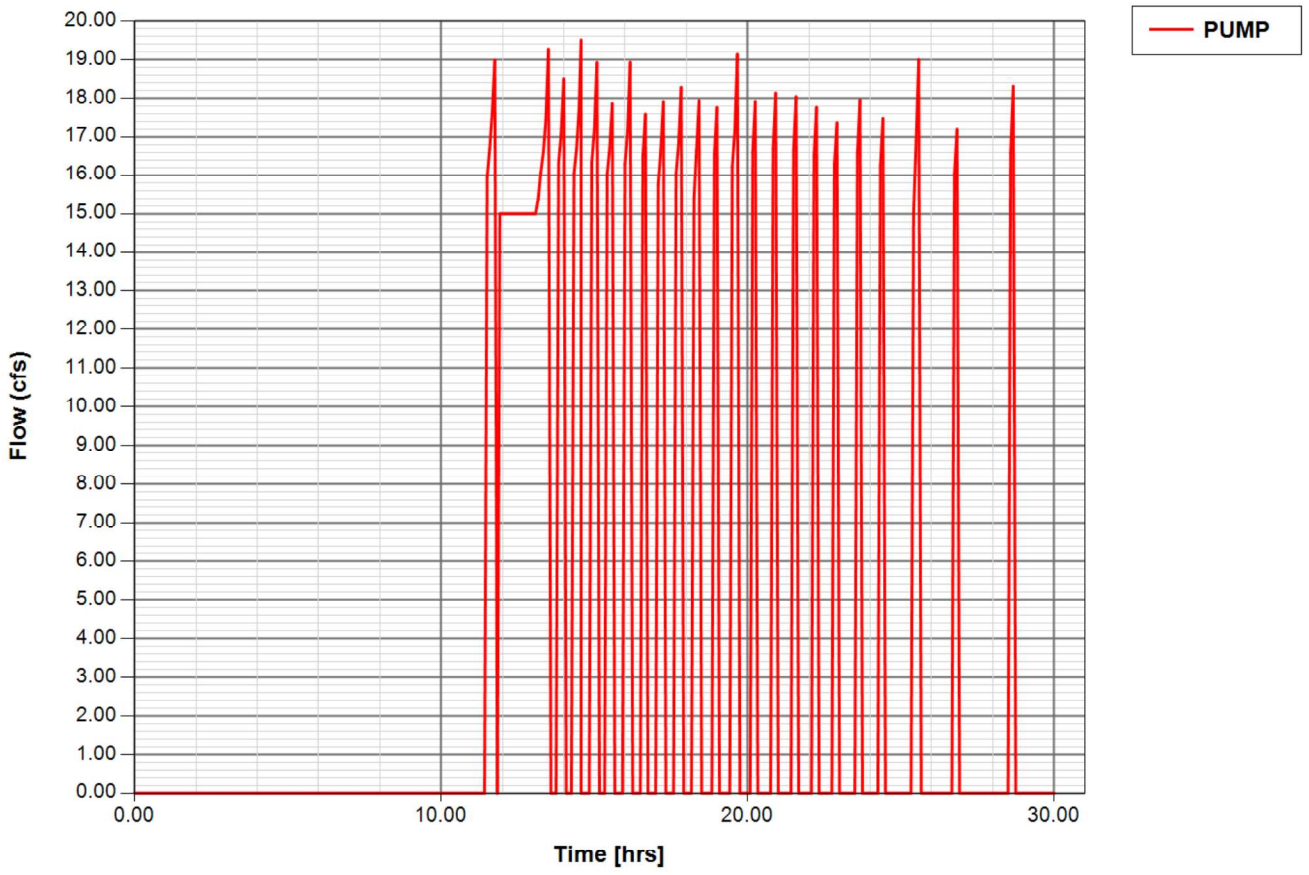
Flow | Multi-Scenario [Link: R:24" PUMP] Sim: 100yr-24hr



Flow | Multi-Scenario [Link: R:24" PUMP] Sim: 10yr-24hr



Flow | Multi-Scenario [Link: R:24" PUMP] Sim: 25yr-24hr



Rating Curve: 24" P37

Scenario: PUMP
Type: Upstream Stage

Upstream Stage [ft]	Discharge [cfs]
4.00	15.00
1.00	20.00

Comment:

Simulation: 100yr-24hr

Scenario: PUMP
Run Date/Time: 10/28/2021 10:33:32 AM
Program Version: ICPR4 4.07.08

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:	30.0000	0.0500
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	5.0000

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

Tolerances & Options

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

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~FLMOD
Rainfall Amount: 12.00 in
Storm Duration: 24.0000 hr

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

Comment:

Simulation: 10yr-24hr

Scenario: PUMP

Run Date/Time: 10/28/2021 10:33:48 AM
Program Version: ICPR4 4.07.08

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:	30.0000	0.0500
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	5.0000

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

Tolerances & Options

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

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~FLMOD
Rainfall Amount: 7.50 in
Storm Duration: 24.0000 hr

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

Comment:

Simulation: 25yr-24hr

Scenario: PUMP
Run Date/Time: 10/28/2021 10:34:02 AM
Program Version: ICPR4 4.07.08

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:	30.0000	0.0500
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	5.0000

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

Tolerances & Options

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

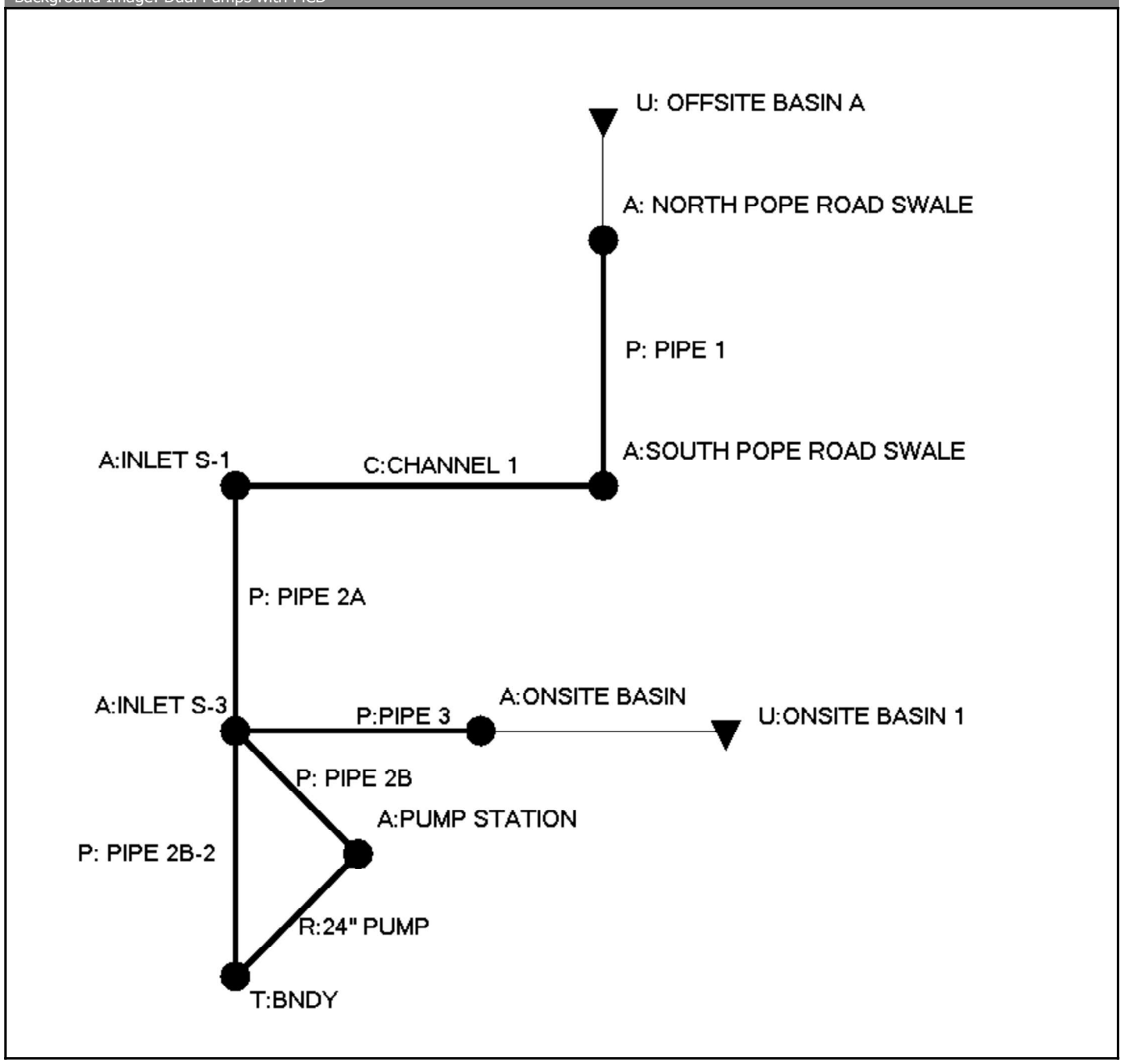
IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FLMOD
Rainfall Amount: 9.50 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

ICPR 4

DUAL PUMPS WITH ANASTASIA AREA INCLUDED

Background Image: Dual Pumps with MCD



Simple Basin: U: OFFSITE BASIN A

Scenario:	PUMP
Node:	A: NORTH POPE ROAD SWALE
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	206.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr

Unit Hydrograph:	UH256
Peaking Factor:	256.0
Area:	60.0000 ac
Curve Number:	30.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: U:ONSITE BASIN 1

Scenario:	PUMP
Node:	A:ONSITE BASIN
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	20.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	19.0000 ac
Curve Number:	61.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Node: A: NORTH POPE ROAD SWALE

Scenario:	PUMP
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	0.00 ft
Warning Stage:	0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
0.00	0.0000	0

Comment:

Node: A:INLET S-1

Scenario:	PUMP
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	1.11 ft

Warning Stage: 5.55 ft

Stage [ft]	Area [ac]	Area [ft2]
1.11	0.0005	22
2.11	0.0005	22
5.55	0.0005	22

Comment: TYPE "H" INLET

Node: A:INLET S-3

Scenario: PUMP
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 5.62 ft

Stage [ft]	Area [ac]	Area [ft2]
0.00	0.0005	22
1.34	0.0005	22
5.62	0.0005	22

Comment: TYPE "H" INLET

Node: A:ONSITE BASIN

Scenario: PUMP
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 2.65 ft
Warning Stage: 6.50 ft

Stage [ft]	Area [ac]	Area [ft2]
1.00	0.0010	44
2.00	0.0020	87
5.00	0.0040	174
6.00	0.0100	436
6.50	0.1000	4356
6.70	3.0000	130680

Comment:

Node: A:PUMP STATION

Scenario: PUMP
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 1.00 ft
Warning Stage: 6.00 ft

Stage [ft]	Area [ac]	Area [ft2]
0.00	0.0040	174
6.00	0.0040	174

Comment:

Node: A:SOUTH POPE ROAD SWALE

Scenario: PUMP
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
0.00	0.0000	0

Comment:

Node: T:BNDY

Scenario: PUMP
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 1.30 ft
Warning Stage: 6.40 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	1.30
0	0	0	17.5000	6.37
0	0	0	30.0000	5.66

Comment:

Channel Link: C:CHANNEL 1

Scenario: PUMP
From Node: A:SOUTH POPE ROAD SWALE
To Node: A:INLET S-1
Link Count: 1
Flow Direction: Both
Damping: 0.0000 ft
Length: 280.00 ft
Contraction Coef: 1.00
Expansion Coef: 0.50
Entr Loss Coef: 1.00
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00

Upstream	Downstream
Invert: 2.00 ft	Invert: 2.55 ft
Manning's N: 0.0000	Manning's N: 0.0000
Geometry: Irregular	Geometry: Irregular
Cross Section: SOUTH POPE ROAD	Cross Section: SOUTH POPE ROAD

Bend Location:	0.00 dec
Energy Switch:	Energy

Comment:

Pipe Link: P: PIPE 1		Upstream		Downstream	
Scenario:	PUMP	Invert:	2.22 ft	Invert:	2.00 ft
From Node:	A: NORTH POPE ROAD SWALE	Manning's N:	0.0120	Manning's N:	0.0120
		Geometry: Circular		Geometry: Circular	
To Node:	A:SOUTH POPE ROAD SWALE	Max Depth:	2.00 ft	Max Depth:	2.00 ft
		Bottom Clip			
Link Count:	1	Default:	0.00 ft	Default:	0.00 ft
Flow Direction:	Both	Op Table:		Op Table:	
Damping:	0.0000 ft	Ref Node:		Ref Node:	
Length:	71.00 ft	Manning's N:	0.0000	Manning's N:	0.0000
FHWA Code:	1	Top Clip			
Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	1.00	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				

Comment:

Pipe Link: P: PIPE 2A		Upstream		Downstream	
Scenario:	PUMP	Invert:	2.11 ft	Invert:	1.77 ft
From Node:	A:INLET S-1	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	A:INLET S-3	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	
Link Count:	1	Max Depth:	2.42 ft	Max Depth:	2.42 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	234.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: P: PIPE 2B		Upstream		Downstream	
Scenario:	PUMP	Invert:	1.72 ft	Invert:	0.96 ft
From Node:	A:INLET S-3	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	A:PUMP STATION	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	
Link Count:	1	Max Depth:	2.42 ft	Max Depth:	2.42 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	863.00 ft	Op Table:		Op Table:	

FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: P: PIPE 2B-2		Upstream		Downstream	
Scenario:	PUMP	Invert:	1.72 ft	Invert:	0.96 ft
From Node:	A:INLET S-3	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	T:BNDY	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	
Link Count:	1	Max Depth:	2.42 ft	Max Depth:	2.42 ft
Flow Direction:	Positive	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	863.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: P:PIPE 3		Upstream		Downstream	
Scenario:	PUMP	Invert:	1.83 ft	Invert:	1.83 ft
From Node:	A:ONSITE BASIN	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	A:INLET S-3	Geometry: Circular		Geometry: Circular	
Link Count:	2	Max Depth:	2.50 ft	Max Depth:	2.50 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	113.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Rating Curve Link: R:24" PUMP	
Scenario:	PUMP
From Node:	A:PUMP STATION
To Node:	T:BNDY

Link Count: 1
Flow Direction: Positive

Table	Elev On [ft]	Elev On Node	Elev Off [ft]	Elev Off Node
24" P37	3.00	A:PUMP STATION	1.00	A:PUMP STATION
24" P37	4.00	A:PUMP STATION	1.30	A:PUMP STATION

Comment:

Node Max Conditions [PUMP]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A: NORTH POPE ROAD SWALE	100yr-24hr	0.00	5.94	0.0010	8.72	8.73	100
A: NORTH POPE ROAD SWALE	10yr-24hr	0.00	5.15	0.0010	1.95	1.29	100
A: NORTH POPE ROAD SWALE	25yr-24hr	0.00	5.67	0.0010	3.66	3.66	100

Node Max Conditions [PUMP]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:INLET S-1	100yr-24hr	5.55	5.93	0.0010	18.38	20.45	1870
A:INLET S-1	10yr-24hr	5.55	5.16	0.0010	18.11	10.70	1726
A:INLET S-1	25yr-24hr	5.55	5.67	0.0010	14.45	14.30	1870

Node Max Conditions [PUMP]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:INLET S-3	100yr-24hr	5.62	5.93	0.0019	53.54	53.48	4324
A:INLET S-3	10yr-24hr	5.62	5.16	0.0019	45.10	45.16	3875
A:INLET S-3	25yr-24hr	5.62	5.67	0.0019	53.96	53.82	4072

Node Max Conditions [PUMP]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:ONSITE BASIN	100yr-24hr	6.50	6.97	-0.0021	96.96	53.54	130686
A:ONSITE BASIN	10yr-24hr	6.50	5.87	0.0010	43.52	43.51	593
A:ONSITE BASIN	25yr-24hr	6.50	6.66	-0.0011	66.54	53.96	104628

Node Max Conditions [PUMP]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:PUMP STATION	100yr-24hr	6.00	4.17	0.0042	34.02	39.00	1803
A:PUMP STATION	10yr-24hr	6.00	4.00	0.0039	32.67	39.00	1803
A:PUMP STATION	25yr-24hr	6.00	4.00	0.0036	32.69	39.00	1803

Node Max Conditions [PUMP]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:SOUTH POPE ROAD SWALE	100yr-24hr	0.00	5.93	0.0010	9.90	11.48	1841
A:SOUTH POPE ROAD SWALE	10yr-24hr	0.00	5.16	0.0010	10.70	3.82	1798
A:SOUTH POPE ROAD SWALE	25yr-24hr	0.00	5.67	0.0010	8.08	7.44	1841

Node Max Conditions [PUMP]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
T:BNDY	100yr-24hr	6.40	6.37	0.0024	52.82	0.00	0
T:BNDY	10yr-24hr	6.40	6.37	0.0024	48.22	0.00	0
T:BNDY	25yr-24hr	6.40	6.37	0.0024	50.87	0.00	0

Link Min/Max Conditions [PUMP]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
C:CHANNEL 1	100yr-24hr	11.48	-9.90	-3.30	-1.00	3.57	2.12
C:CHANNEL 1	10yr-24hr	3.82	-10.70	-0.16	-1.11	2.47	-1.48
C:CHANNEL 1	25yr-24hr	7.44	-8.08	-0.23	-0.97	3.05	1.74

Link Min/Max Conditions [PUMP]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
P: PIPE 1	100yr-24hr	8.73	-0.66	-0.80	2.78	2.78	2.78
P: PIPE 1	10yr-24hr	1.29	-1.95	0.35	-1.20	-3.21	-2.15
P: PIPE 1	25yr-24hr	3.66	-1.54	0.49	1.55	-3.00	-1.98

Link Min/Max Conditions [PUMP]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
P: PIPE 2A	100yr-24hr	20.45	-18.38	2.15	2.76	2.76	2.76
P: PIPE 2A	10yr-24hr	7.41	-18.11	0.22	-2.44	-2.64	-2.54
P: PIPE 2A	25yr-24hr	14.30	-14.45	1.60	2.07	-1.95	-1.95

Link Min/Max Conditions [PUMP]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
P: PIPE 2B	100yr-24hr	34.02	0.00	0.47	4.59	6.30	5.10
P: PIPE 2B	10yr-24hr	32.67	0.00	0.52	4.41	6.24	4.99
P: PIPE 2B	25yr-24hr	32.69	0.00	0.53	4.41	6.10	4.83

Link Min/Max Conditions [PUMP]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
P: PIPE 2B-2	100yr-24hr	22.82	0.00	0.20	3.08	3.08	3.08
P: PIPE 2B-2	10yr-24hr	13.15	0.00	-0.12	1.77	1.77	1.77
P: PIPE 2B-2	25yr-24hr	20.19	0.00	0.21	2.73	2.73	2.73

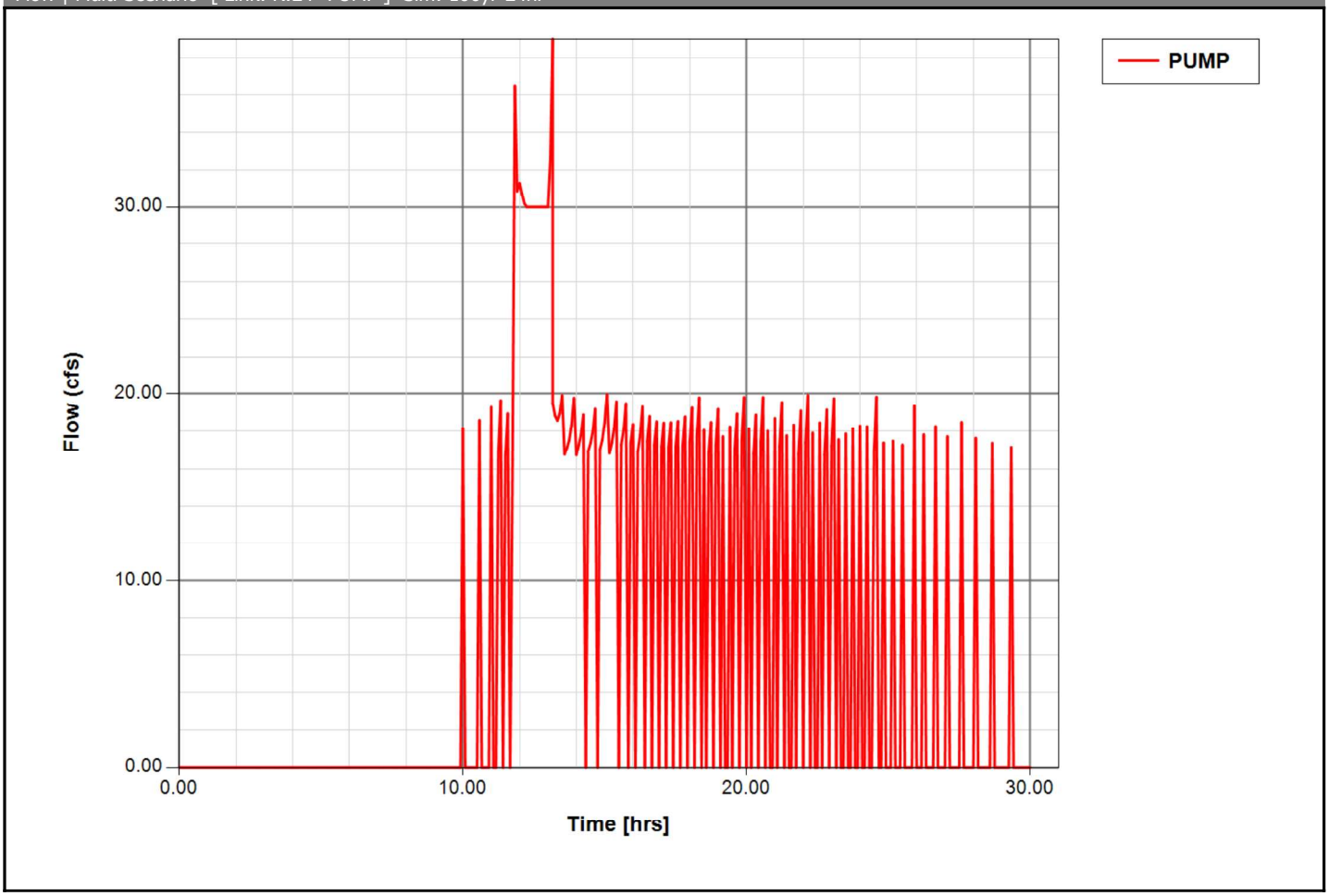
Link Min/Max Conditions [PUMP]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
P:PIPE 3	100yr-24hr	53.54	-0.33	-0.17	5.45	5.45	5.45
P:PIPE 3	10yr-24hr	43.51	-0.08	0.08	4.43	4.43	4.43
P:PIPE 3	25yr-24hr	53.96	-0.17	-0.09	5.50	5.50	5.50

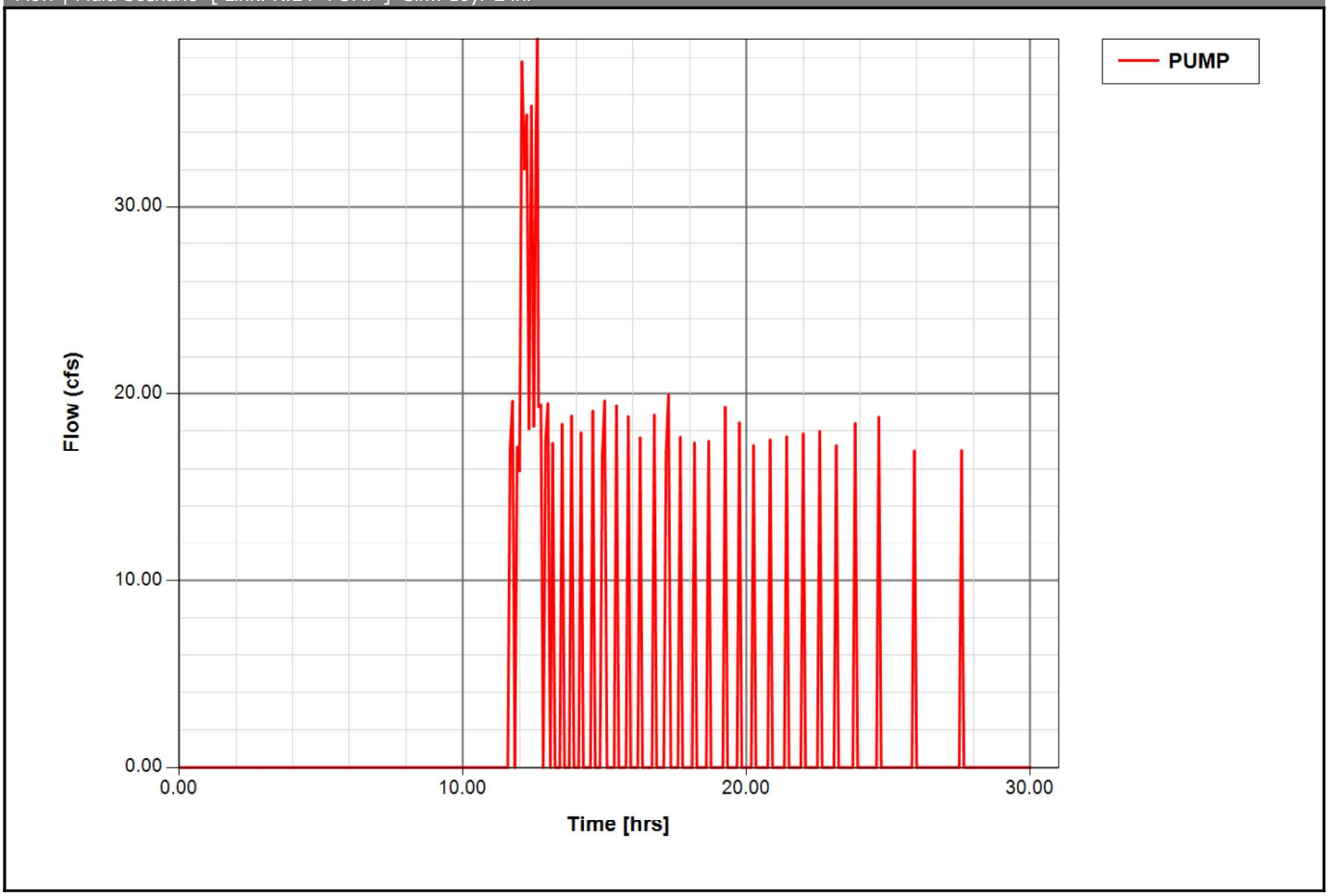
Link Min/Max Conditions [PUMP]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
R:24" PUMP	100yr-24hr	39.00	0.00	-10.00	0.00	0.00	0.00
R:24" PUMP	10yr-24hr	39.00	0.00	-10.00	0.00	0.00	0.00
R:24" PUMP	25yr-24hr	39.00	0.00	-10.00	0.00	0.00	0.00

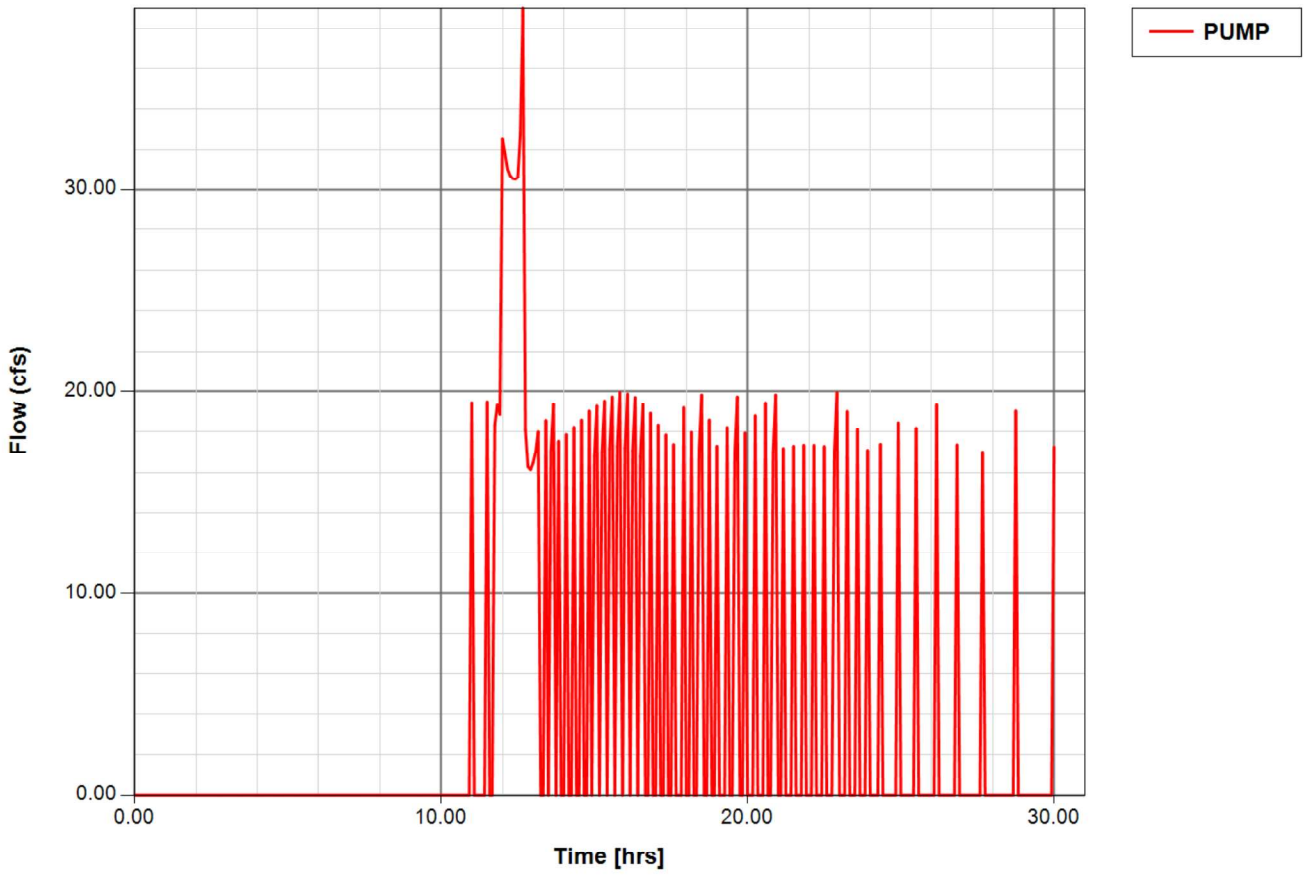
Flow | Multi-Scenario [Link: R:24" PUMP] Sim: 100yr-24hr



Flow | Multi-Scenario [Link: R:24" PUMP] Sim: 10yr-24hr



Flow | Multi-Scenario [Link: R:24" PUMP] Sim: 25yr-24hr



Rating Curve: 24" P37

Scenario: PUMP
Type: Upstream Stage

Upstream Stage [ft]	Discharge [cfs]
4.00	15.00
1.00	20.00

Comment:

Simulation: 100yr-24hr

Scenario: PUMP
Run Date/Time: 10/28/2021 10:37:35 AM
Program Version: ICPR4 4.07.08

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:	30.0000	0.0500
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	5.0000

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

Tolerances & Options

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

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~FLMOD
Rainfall Amount: 12.00 in
Storm Duration: 24.0000 hr

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

Comment:

Simulation: 10yr-24hr

Scenario: PUMP

Run Date/Time: 10/28/2021 10:37:52 AM
Program Version: ICPR4 4.07.08

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:	30.0000	0.0500
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	5.0000

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

Tolerances & Options

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

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~FLMOD
Rainfall Amount: 7.50 in
Storm Duration: 24.0000 hr

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

Comment:

Simulation: 25yr-24hr

Scenario: PUMP
Run Date/Time: 10/28/2021 10:38:07 AM
Program Version: ICPR4 4.07.08

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:	30.0000	0.0500
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	5.0000

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

Tolerances & Options

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

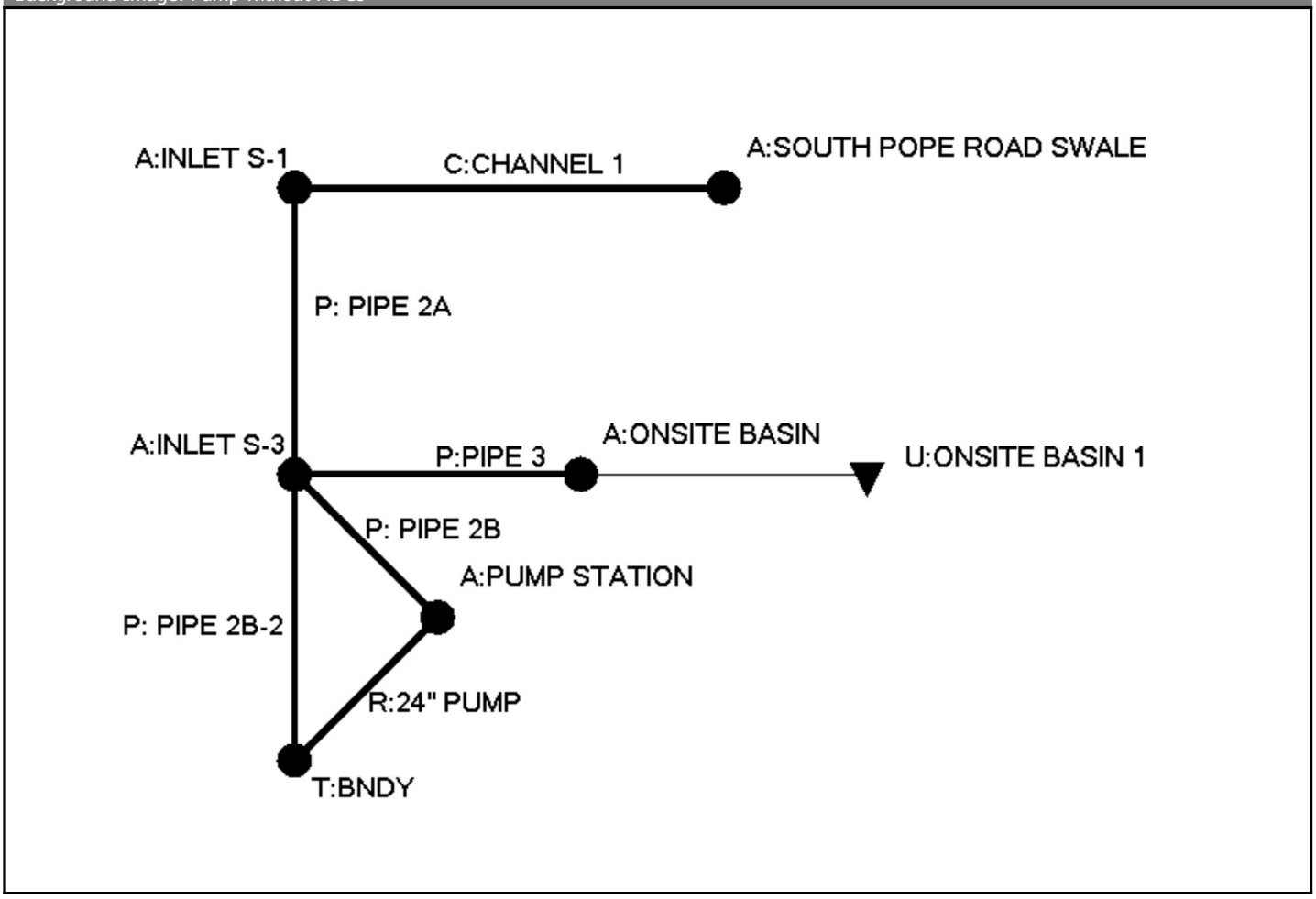
IA Recovery Time: 24.0000 hr
Smp/Man Basin Rain Opt: Global
Rainfall Name: ~FLMOD
Rainfall Amount: 9.50 in
Storm Duration: 24.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

ICPR 4

PUMP WITH ANASTASIA AREA REMOVED

Background Image: Pump without MDCs



Simple Basin: U:ONSITE BASIN 1

Scenario:	PUMP
Node:	A:ONSITE BASIN
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	20.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	19.0000 ac
Curve Number:	61.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Node: A:INLET S-1

Scenario: PUMP
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 1.11 ft
Warning Stage: 5.55 ft

Stage [ft]	Area [ac]	Area [ft2]
1.11	0.0005	22
2.11	0.0005	22
5.55	0.0005	22

Comment: TYPE "H" INLET

Node: A:INLET S-3

Scenario: PUMP
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 5.62 ft

Stage [ft]	Area [ac]	Area [ft2]
0.00	0.0005	22
1.34	0.0005	22
5.62	0.0005	22

Comment: TYPE "H" INLET

Node: A:ONSITE BASIN

Scenario: PUMP
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 2.65 ft
Warning Stage: 6.50 ft

Stage [ft]	Area [ac]	Area [ft2]
1.00	0.0010	44
2.00	0.0020	87
5.00	0.0040	174
6.00	0.0100	436
6.50	0.1000	4356
6.70	3.0000	130680

Comment:

Node: A:PUMP STATION

Scenario: PUMP

Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 1.00 ft
Warning Stage: 6.00 ft

Stage [ft]	Area [ac]	Area [ft2]
0.00	0.0040	174
6.00	0.0040	174

Comment:

Node: A:SOUTH POPE ROAD SWALE

Scenario: PUMP
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
0.00	0.0000	0

Comment:

Node: T:BNDY

Scenario: PUMP
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 1.30 ft
Warning Stage: 6.40 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	1.30
0	0	0	17.5000	6.37
0	0	0	30.0000	5.66

Comment:

Channel Link: C:CHANNEL 1

Scenario: PUMP
From Node: A:SOUTH POPE ROAD SWALE
To Node: A:INLET S-1
Link Count: 1
Flow Direction: Both
Damping: 0.0000 ft
Length: 280.00 ft

Upstream		Downstream	
Invert:	2.00 ft	Invert:	2.55 ft
Manning's N:	0.0000	Manning's N:	0.0000
Geometry: Irregular		Geometry: Irregular	
Cross Section:	SOUTH POPE ROAD	Cross Section:	SOUTH POPE ROAD

Contraction Coef:	1.00
Expansion Coef:	0.50
Entr Loss Coef:	1.00
Exit Loss Coef:	0.00
Bend Loss Coef:	0.00
Bend Location:	0.00 dec
Energy Switch:	Energy

Comment:

Pipe Link: P: PIPE 2A		Upstream		Downstream	
Scenario:	PUMP	Invert:	2.11 ft	Invert:	1.77 ft
From Node:	A:INLET S-1	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	A:INLET S-3	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	
Link Count:	1	Max Depth:	2.42 ft	Max Depth:	2.42 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	234.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: P: PIPE 2B		Upstream		Downstream	
Scenario:	PUMP	Invert:	1.72 ft	Invert:	0.96 ft
From Node:	A:INLET S-3	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	A:PUMP STATION	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	
Link Count:	1	Max Depth:	2.42 ft	Max Depth:	2.42 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	863.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: P: PIPE 2B-2		Upstream		Downstream	
Scenario:	PUMP	Invert:	1.72 ft	Invert:	0.96 ft
From Node:	A:INLET S-3	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	T:BNDY	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	

Link Count:	1	Max Depth:	2.42 ft	Max Depth:	2.42 ft
Flow Direction:	Positive	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	863.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: P:PIPE 3		Upstream		Downstream	
Scenario:	PUMP	Invert:	1.83 ft	Invert:	1.83 ft
From Node:	A:ONSITE BASIN	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	A:INLET S-3	Geometry: Circular		Geometry: Circular	
Link Count:	2	Max Depth:	2.50 ft	Max Depth:	2.50 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	113.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Rating Curve Link: R:24" PUMP

Scenario:	PUMP
From Node:	A:PUMP STATION
To Node:	T:BNDY
Link Count:	1
Flow Direction:	Positive

Table	Elev On [ft]	Elev On Node	Elev Off [ft]	Elev Off Node
24" P37	3.00	A:PUMP STATION	1.30	A:PUMP STATION

Comment:

Node Max Conditions [PUMP]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:INLET S-1	100yr-24hr	5.55	6.43	0.0010	14.13	15.54	1870
A:INLET S-1	10yr-24hr	5.55	5.86	0.0010	18.89	10.57	1870
A:INLET S-1	25yr-24hr	5.55	6.15	-0.0010	17.79	15.19	1870

Node Max Conditions [PUMP]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:INLET S-3	100yr-24hr	5.62	6.43	0.0019	48.06	47.83	4324
A:INLET S-3	10yr-24hr	5.62	5.86	0.0019	41.57	41.29	3875
A:INLET S-3	25yr-24hr	5.62	6.15	0.0019	44.93	44.70	4072

Node Max Conditions [PUMP]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:ONSITE BASIN	100yr-24hr	6.50	7.13	-0.0011	96.96	48.06	130686
A:ONSITE BASIN	10yr-24hr	6.50	6.43	-0.0010	43.52	41.57	3802
A:ONSITE BASIN	25yr-24hr	6.50	6.77	-0.0010	66.54	44.93	130686

Node Max Conditions [PUMP]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:PUMP STATION	100yr-24hr	6.00	5.99	0.0036	31.65	19.50	1803
A:PUMP STATION	10yr-24hr	6.00	5.42	0.0015	22.69	19.50	1803
A:PUMP STATION	25yr-24hr	6.00	5.71	-0.0010	19.38	19.50	1803

Node Max Conditions [PUMP]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:SOUTH POPE ROAD SWALE	100yr-24hr	0.00	6.43	0.0010	7.64	7.66	1840
A:SOUTH POPE ROAD SWALE	10yr-24hr	0.00	5.86	0.0010	10.57	2.44	1840
A:SOUTH POPE ROAD SWALE	25yr-24hr	0.00	6.15	0.0010	10.00	7.48	1840

Node Max Conditions [PUMP]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
T:BNDY	100yr-24hr	6.40	6.37	0.0024	42.73	0.00	0
T:BNDY	10yr-24hr	6.40	6.37	0.0024	37.76	0.00	0
T:BNDY	25yr-24hr	6.40	6.37	0.0024	40.37	0.00	0

Link Min/Max Conditions [PUMP]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
C:CHANNEL 1	100yr-24hr	7.66	-7.64	0.28	-0.66	-1.86	-1.14
C:CHANNEL 1	10yr-24hr	2.44	-10.57	-0.28	-0.89	-2.41	-1.48
C:CHANNEL 1	25yr-24hr	7.48	-10.00	0.29	-0.86	-1.84	-1.11

Link Min/Max Conditions [PUMP]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
P: PIPE 2A	100yr-24hr	15.54	-14.13	1.61	2.10	2.10	2.10
P: PIPE 2A	10yr-24hr	5.31	-18.89	-1.47	-2.55	-2.56	-2.55
P: PIPE 2A	25yr-24hr	15.19	-17.79	1.47	-2.40	-2.41	-2.41

Link Min/Max Conditions [PUMP]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
P: PIPE 2B	100yr-24hr	31.65	0.00	0.51	4.27	6.10	4.82
P: PIPE 2B	10yr-24hr	22.69	0.00	0.56	3.20	4.37	3.46
P: PIPE 2B	25yr-24hr	19.38	0.00	0.51	2.99	4.91	3.74

Link Min/Max Conditions [PUMP]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
P: PIPE 2B-2	100yr-24hr	27.73	0.00	0.20	3.74	3.74	3.74
P: PIPE 2B-2	10yr-24hr	22.76	0.00	0.83	3.07	3.07	3.07
P: PIPE 2B-2	25yr-24hr	25.37	0.00	0.23	3.42	3.42	3.42

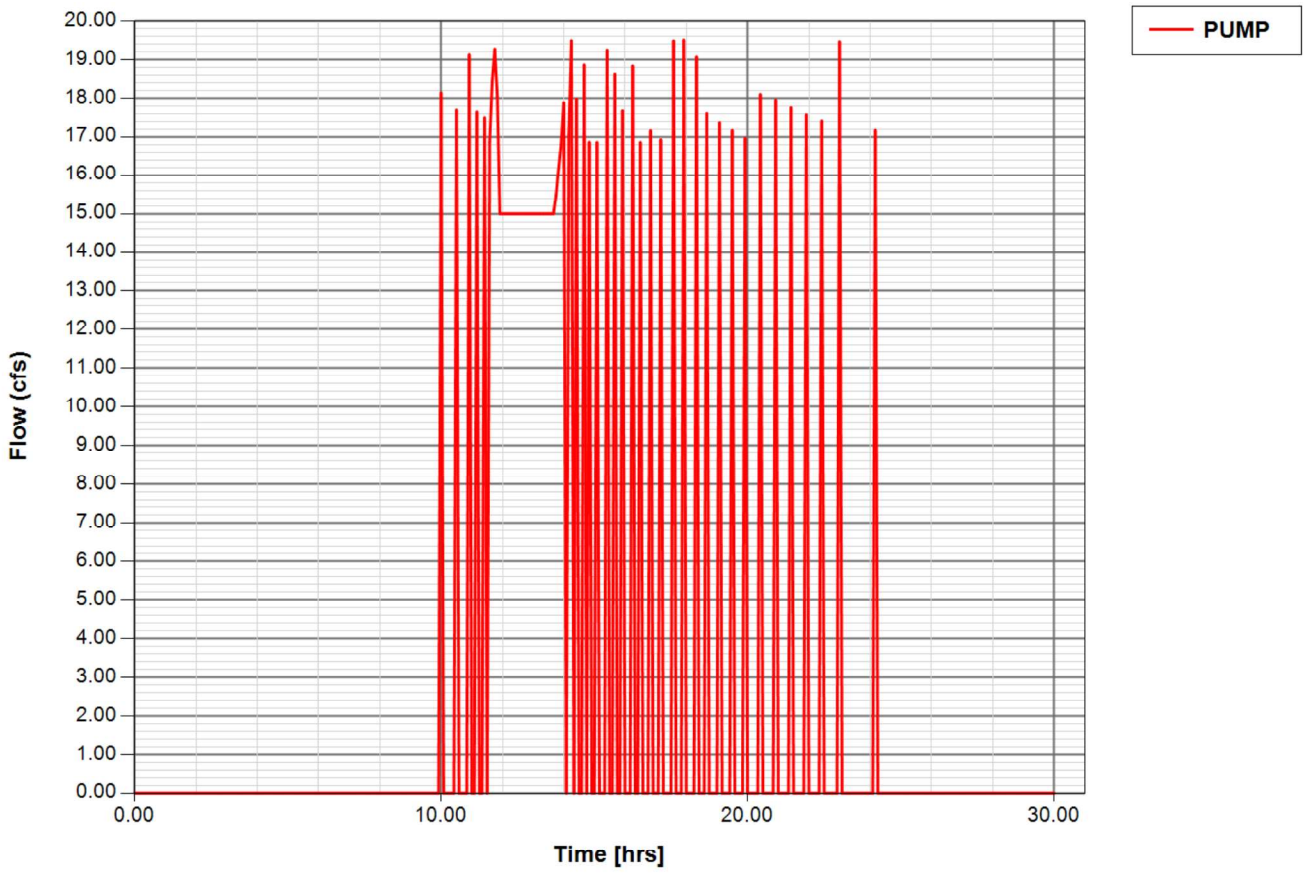
Link Min/Max Conditions [PUMP]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
P:PIPE 3	100yr-24hr	48.06	0.00	-0.17	4.89	4.89	4.89
P:PIPE 3	10yr-24hr	41.57	0.00	-0.38	4.23	4.23	4.23
P:PIPE 3	25yr-24hr	44.93	0.00	-0.40	4.58	4.58	4.58

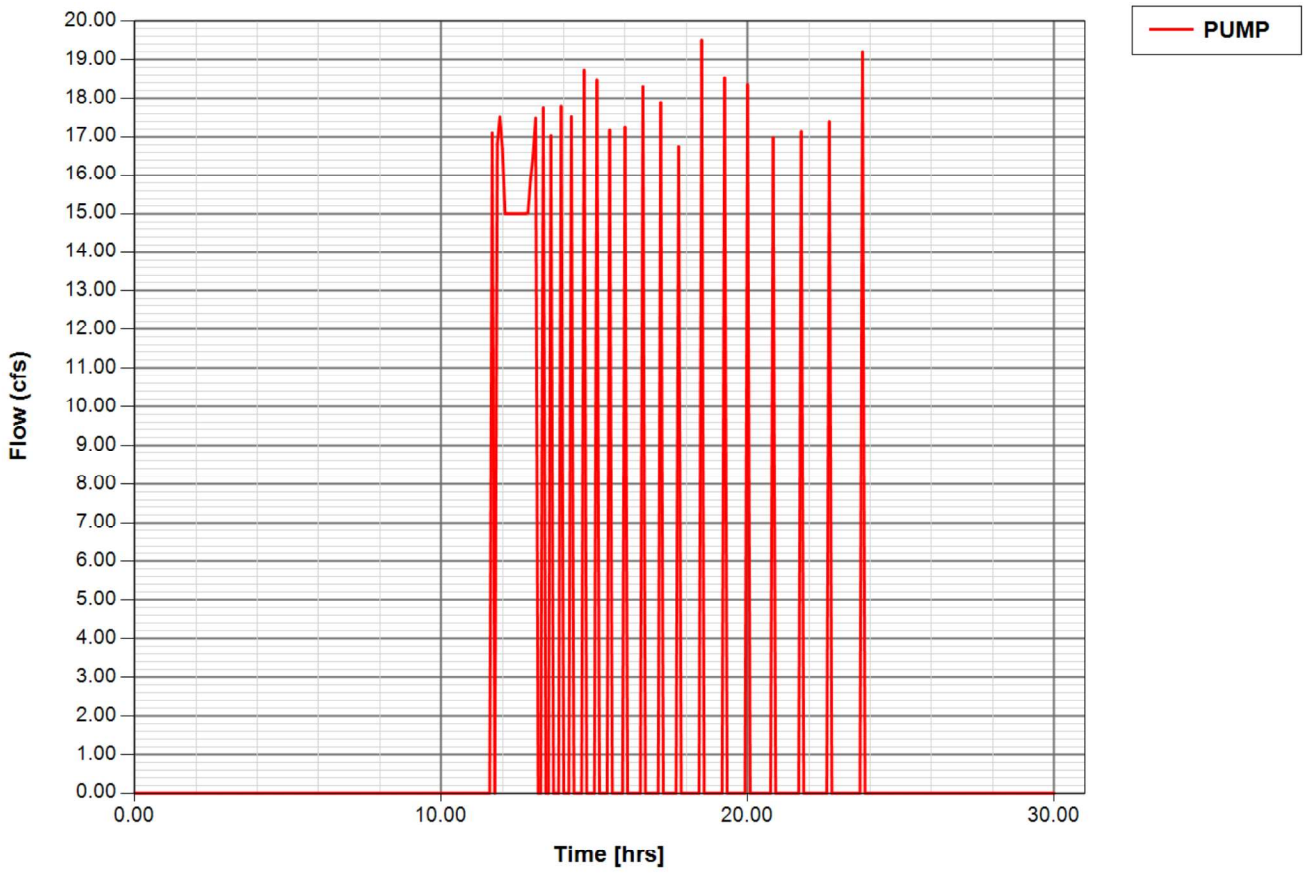
Link Min/Max Conditions [PUMP]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
R:24" PUMP	100yr-24hr	19.50	0.00	-9.75	0.00	0.00	0.00
R:24" PUMP	10yr-24hr	19.50	0.00	-9.75	0.00	0.00	0.00
R:24" PUMP	25yr-24hr	19.50	0.00	-9.75	0.00	0.00	0.00

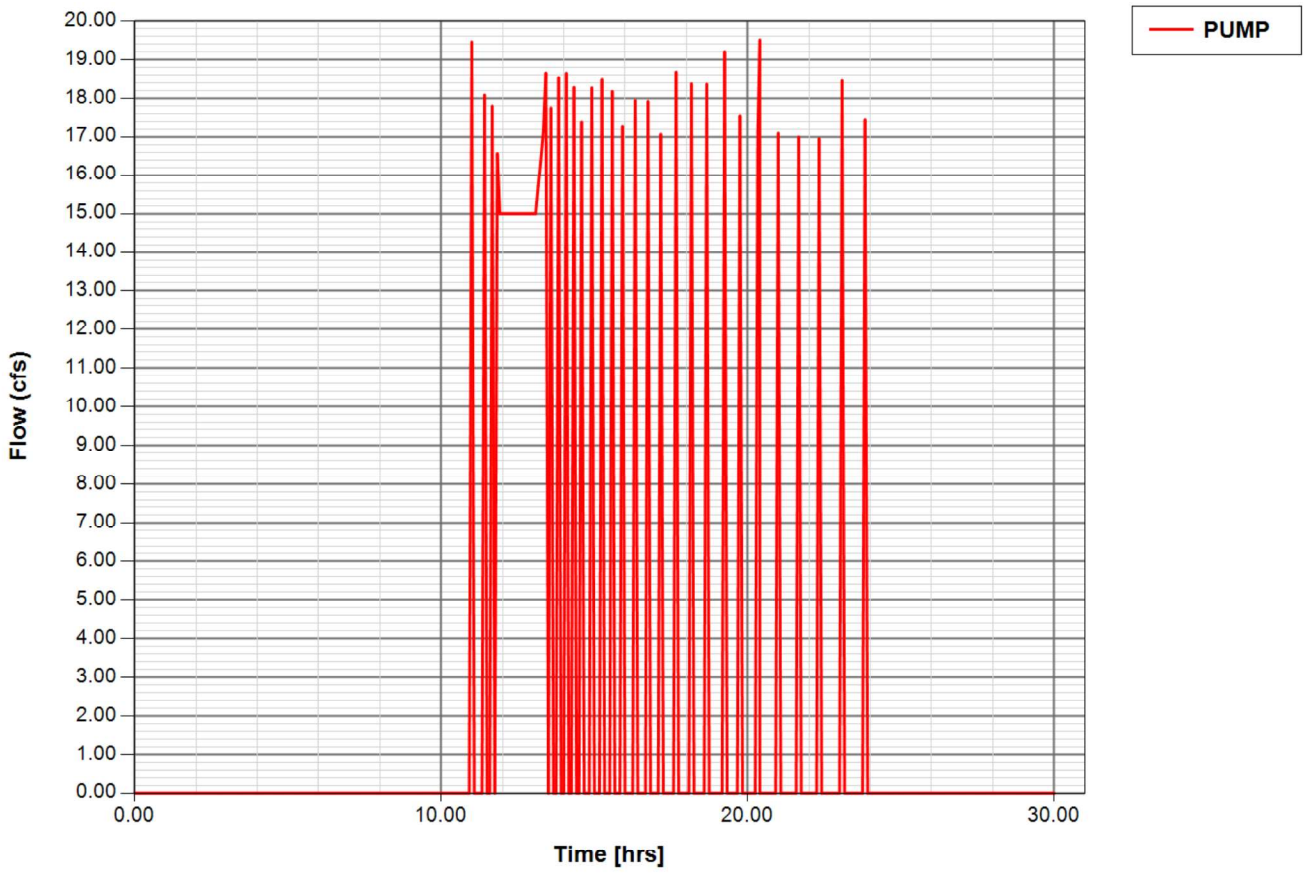
Flow | Multi-Scenario [Link: R:24" PUMP] Sim: 100yr-24hr



Flow | Multi-Scenario [Link: R:24" PUMP] Sim: 10yr-24hr



Flow | Multi-Scenario [Link: R:24" PUMP] Sim: 25yr-24hr



Rating Curve: 24" P37

Scenario: PUMP
Type: Upstream Stage

Upstream Stage [ft]	Discharge [cfs]
4.00	15.00
1.00	20.00

Comment:

Simulation: 100yr-24hr

Scenario: PUMP
Run Date/Time: 10/28/2021 10:41:30 AM
Program Version: ICPR4 4.07.08

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:	30.0000	0.0500
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	5.0000

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

Tolerances & Options

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

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~FLMOD
Rainfall Amount: 12.00 in
Storm Duration: 24.0000 hr

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

Comment:

Simulation: 10yr-24hr

Scenario: PUMP

Run Date/Time: 10/28/2021 10:41:44 AM
Program Version: ICPR4 4.07.08

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:	30.0000	0.0500
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	5.0000

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

Tolerances & Options

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

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~FLMOD
Rainfall Amount: 7.50 in
Storm Duration: 24.0000 hr

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

Comment:

Simulation: 25yr-24hr

Scenario: PUMP
Run Date/Time: 10/28/2021 10:41:55 AM
Program Version: ICPR4 4.07.08

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:	30.0000	0.0500
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	5.0000

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

Tolerances & Options

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

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~FLMOD
Rainfall Amount: 9.50 in
Storm Duration: 24.0000 hr

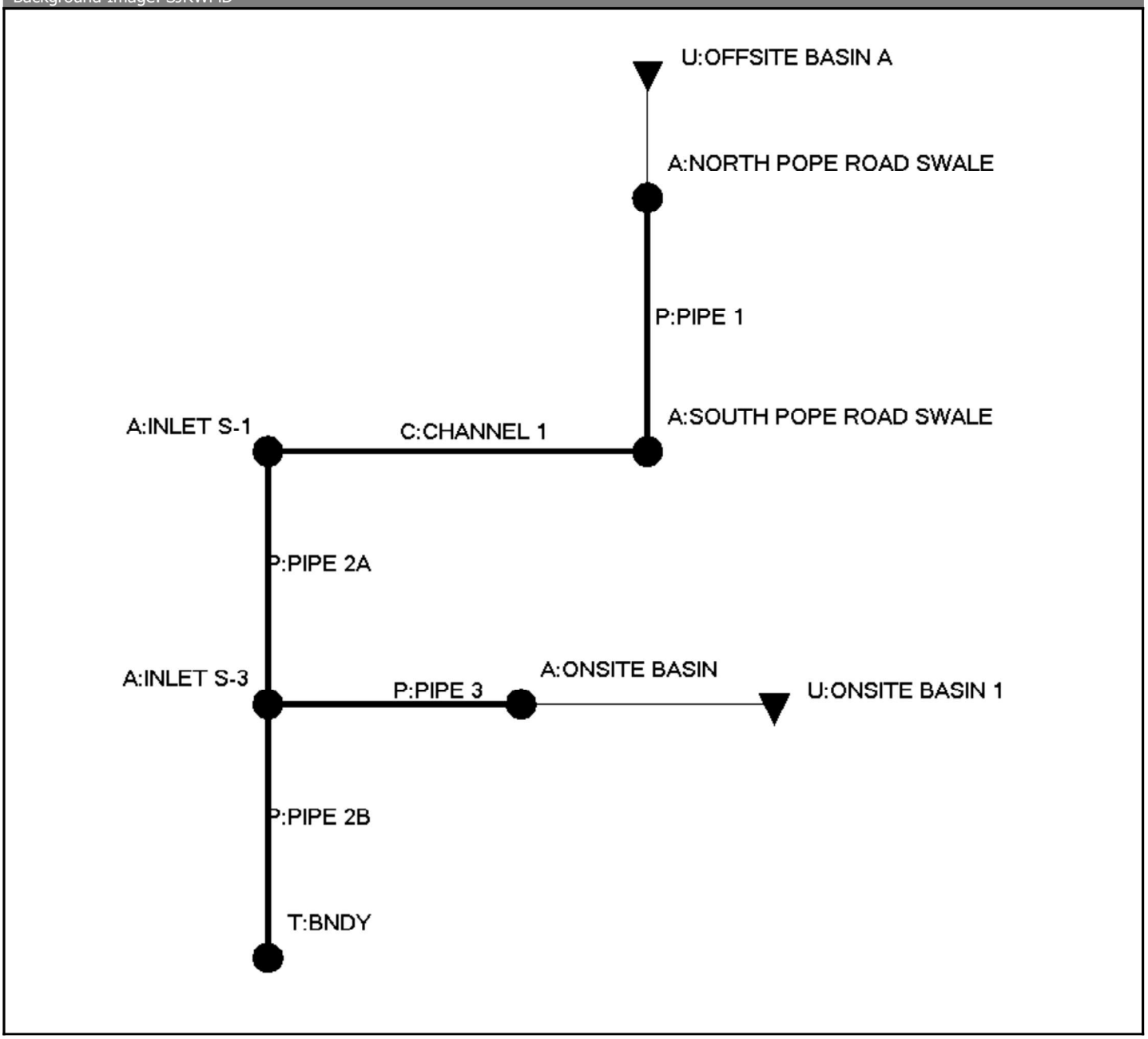
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 100 ft2
Energy Switch (1D): Energy

Comment:

ICPR 4

EXISTING CONDITION CALIBRATION MODEL (4.2IH - 3HR)

Background Image: SJRWMD



Simple Basin: U:OFFSITE BASIN A

Scenario:	SJRWMD
Node:	A:NORTH POPE ROAD SWALE
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	206.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH256
Peaking Factor:	256.0

Area:	60.0000 ac
Curve Number:	30.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: U:ONSITE BASIN 1

Scenario:	SJRWMD
Node:	A:ONSITE BASIN
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	20.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH484
Peaking Factor:	484.0
Area:	19.0000 ac
Curve Number:	61.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Node: A:INLET S-1

Scenario:	SJRWMD
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	1.11 ft
Warning Stage:	5.55 ft

Stage [ft]	Area [ac]	Area [ft2]
1.11	0.0005	22
2.11	0.0005	22
5.55	0.0005	22

Comment: TYPE "H" INLET

Node: A:INLET S-3

Scenario:	SJRWMD
Type:	Stage/Area
Base Flow:	0.00 cfs
Initial Stage:	0.00 ft

Warning Stage: 5.62 ft

Stage [ft]	Area [ac]	Area [ft2]
0.00	0.0005	22
1.34	0.0005	22
5.62	0.0005	22

Comment: TYPE "H" INLET

Node: A:NORTH POPE ROAD SWALE

Scenario: SJRWMD
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
0.00	0.0000	0

Comment:

Node: A:ONSITE BASIN

Scenario: SJRWMD
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 2.65 ft
Warning Stage: 6.50 ft

Stage [ft]	Area [ac]	Area [ft2]
1.00	0.0010	44
2.00	0.0020	87
5.00	0.0040	174
6.00	0.0100	436
6.50	0.1000	4356
6.70	3.0000	130680

Comment:

Node: A:SOUTH POPE ROAD SWALE

Scenario: SJRWMD
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 0.00 ft
Warning Stage: 0.00 ft

Stage [ft]	Area [ac]	Area [ft2]
0.00	0.0000	0

Comment:

Node: T:BNDY

Scenario: SJRWMD
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 1.30 ft
Warning Stage: 6.40 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	1.30
0	0	0	17.5000	6.37
0	0	0	30.0000	5.66

Comment:

Channel Link: C:CHANNEL 1

Scenario: SJRWMD
From Node: A:SOUTH POPE ROAD SWALE
To Node: A:INLET S-1
Link Count: 1
Flow Direction: Both
Damping: 0.0000 ft
Length: 280.00 ft
Contraction Coef: 1.00
Expansion Coef: 0.50
Entr Loss Coef: 1.00
Exit Loss Coef: 0.00
Bend Loss Coef: 0.00
Bend Location: 0.00 dec
Energy Switch: Energy

Upstream		Downstream	
Invert:	2.00 ft	Invert:	2.55 ft
Manning's N:	0.0000	Manning's N:	0.0000
Geometry: Irregular		Geometry: Irregular	
Cross Section:	SOUTH POPE ROAD	Cross Section:	SOUTH POPE ROAD

Comment:

Pipe Link: P:PIPE 1

Scenario: SJRWMD
From Node: A:NORTH POPE ROAD SWALE
To Node: A:SOUTH POPE ROAD SWALE
Link Count: 1
Flow Direction: Both
Damping: 0.0000 ft
Length: 71.00 ft
FHWA Code: 1

Upstream		Downstream	
Invert:	2.22 ft	Invert:	2.00 ft
Manning's N:	0.0120	Manning's N:	0.0120
Geometry: Circular		Geometry: Circular	
Max Depth:	2.00 ft	Max Depth:	2.00 ft
Bottom Clip			
Default:	0.00 ft	Default:	0.00 ft
Op Table:		Op Table:	
Ref Node:		Ref Node:	
Manning's N:	0.0000	Manning's N:	0.0000
Top Clip			

Entr Loss Coef:	0.50	Default:	0.00 ft	Default:	0.00 ft
Exit Loss Coef:	1.00	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				

Comment:

Pipe Link: P:PIPE 2A		Upstream		Downstream	
Scenario:	SJRWMD	Invert:	2.11 ft	Invert:	1.77 ft
From Node:	A:INLET S-1	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	A:INLET S-3	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	
Link Count:	1	Max Depth:	2.42 ft	Max Depth:	2.42 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	234.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: P:PIPE 2B		Upstream		Downstream	
Scenario:	SJRWMD	Invert:	1.72 ft	Invert:	0.96 ft
From Node:	A:INLET S-3	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	T:BNDY	Geometry: Horizontal Ellipse		Geometry: Horizontal Ellipse	
Link Count:	1	Max Depth:	2.42 ft	Max Depth:	2.42 ft
Flow Direction:	Both	Bottom Clip			
Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	863.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Pipe Link: P:PIPE 3		Upstream		Downstream	
Scenario:	SJRWMD	Invert:	1.83 ft	Invert:	1.83 ft
From Node:	A:ONSITE BASIN	Manning's N:	0.0120	Manning's N:	0.0120
To Node:	A:INLET S-3	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	2.00 ft	Max Depth:	2.00 ft
Flow Direction:	Both	Bottom Clip			

Damping:	0.0000 ft	Default:	0.00 ft	Default:	0.00 ft
Length:	113.00 ft	Op Table:		Op Table:	
FHWA Code:	1	Ref Node:		Ref Node:	
Entr Loss Coef:	0.50	Manning's N:	0.0000	Manning's N:	0.0000
Exit Loss Coef:	1.00	Top Clip			
Bend Loss Coef:	0.00	Default:	0.00 ft	Default:	0.00 ft
Bend Location:	0.00 dec	Op Table:		Op Table:	
Energy Switch:	Energy	Ref Node:		Ref Node:	
		Manning's N:	0.0000	Manning's N:	0.0000

Comment:

Node Max Conditions [SJRWMD]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:INLET S-1	4.2in - 3hr	5.55	6.36	0.0010	5.31	5.02	1870

Node Max Conditions [SJRWMD]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:INLET S-3	4.2in - 3hr	5.62	6.36	0.0010	25.49	24.38	3982

Node Max Conditions [SJRWMD]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:NORTH POPE ROAD SWALE	4.2in - 3hr	0.00	6.36	0.0013	2.55	0.06	100

Node Max Conditions [SJRWMD]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:ONSITE BASIN	4.2in - 3hr	6.50	6.48	0.0010	27.58	25.49	4209

Node Max Conditions [SJRWMD]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
A:SOUTH POPE ROAD SWALE	4.2in - 3hr	0.00	6.36	0.0010	5.02	2.55	1841

Node Max Conditions [SJRWMD]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
T:BNDY	4.2in - 3hr	6.40	6.37	0.0024	19.47	1.02	0

Link Min/Max Conditions [SJRWMD]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
C:CHANNEL 1	4.2in - 3hr	0.85	-5.02	-0.08	-0.97	-2.95	-1.85

Link Min/Max Conditions [SJRWMD]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
P:PIPE 1	4.2in - 3hr	0.06	-2.55	0.02	-1.37	-3.46	-2.35

Link Min/Max Conditions [SJRWMD]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
P:PIPE 2A	4.2in - 3hr	1.84	-5.31	1.10	-1.08	-3.14	-2.01

Link Min/Max Conditions [SJRWMD]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
P:PIPE 2B	4.2in - 3hr	19.47	-1.02	-0.93	2.86	5.49	4.17

Link Min/Max Conditions [SJRWMD]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
P:PIPE 3	4.2in - 3hr	25.49	-0.51	0.50	8.11	8.49	8.23

Simulation: 4.2in - 3hr

Scenario: SJRWMD
Run Date/Time: 10/28/2021 10:45:33 AM
Program Version: ICPR4 4.07.08

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:	30.0000	0.0500
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	5.0000

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

Tolerances & Options

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

Edge Length Option: Automatic

IA Recovery Time: 24.0000 hr

Smp/Man Basin Rain Opt: Global

Rainfall Name: ~FLMOD
Rainfall Amount: 4.20 in
Storm Duration: 3.0000 hr

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

Comment: