A STORMWATER MANAGMENT ANALYSIS

OF THE PROPOSED DEVELOPMENT OF

BROCK'S TREE SERVICE

IN THE

CITY OF O'FALLON, MISSOURI

FOR

BROCK'S TREE SERVICE
8 OAK RIDGE COURT
O'FALLON, MO 63366

BAX PROJECT NO. 05-13456B

September 8, 2023

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CITY OF O'FALLON
ENGINEERING DEPARTMENT
ACCEPTED FOR CONSTRUCTION
BY: Karl Ebert DATE: 10-19-2023
PROFESSIONAL ENGINEER'S SEAL
INDICATES RESPONSIBILITY FOR DESIGN

INTRODUCTION:

The currently undeveloped site is located in the City of O'Fallon, Missouri and is comprised of 3.04 acres of land. The site shall be analyzed for the construction of the proposed tree service disturbing approximately 1.86 acres of land. A dry detention basin is proposed to provide the Stormwater Attenuation required by the City of O'Fallon Design Standards for the proposed development. The storage volume and outflow rates shall be proportioned to ensure that the peak rate of runoff leaving the tract under Postdeveloped conditions is less than or equal to the peak rate of runoff under Predeveloped conditions for the 2, 15, 25, and 100 Year 20 Minute Design Storms. In addition, the basin provides safe passage of the 100 Year 20 Minute Design Storm assuming the low flow slot is blocked. The site has been analyzed under normal conditions and flooded conditions to analyze the effects of the downstream creek on the basin.

Water Quality for this site is provided by native vegetation lining the basin bottom and side slopes. A level spreader is used as pretreatment to reduce the velocity of the flow.

GENERAL SITE DATA AND RUNOFF CALCULATIONS

The Predeveloped Runoff Factors used for the analysis are:

Land Use	% Impervious	PI Factors (cfs/ac)			
		2 year	15 year	25 year	100 year
Greenspace	5%	1.15	1.70	2.00	2.29
Pavement	100%	2.39	3.54	4.16	4.77

The Postdeveloped Runoff Factors used for the analysis are:

Land Use	% Impervious	PI Factors (cfs/ac)			
		2 year	15 year	25 year	100 year
Greenspace	5%	1.15	1.70	2.00	2.29
Pavement	100%	2.39	3.54	4.16	4.77

WATER QUALITY

To ensure that sedimentation and pollution in receiving streams due to development of this site is minimized, our design will consider the Water Quality Volume requirement as described in the "Georgia Stormwater Management Manual Volumes 1, 2". Water quality volume is defined as "The storage needed to capture and treat the runoff from 90% of the recorded daily rainfall events." Water Quality treatment will be provided by the use of native vegetation being planted in the basin.

Area Treated

Onsite/ Offsite	Cover	% Impervious	Area (acres)	Impervious Area (acres)	Pervious Area (acres)
Onsite	Greenspace	5%	0.10	0.01	0.09
	Pavement/Building	100%	0.60	0.60	-
		Total =	0.70	0.61	0.09

WATER QUALITY VOLUME

$WQ_v = PR_vA/12$ Where: P = 1.14"

$R_v = 0.05 + 0.009(I)$

I = % Impervious

A = Watershed Area = 0.70 ac

A_I = Impervious Area = 0.61 ac

$I = A_I/A$

I = 0.61 ac / 0.70 ac = 0.8714 = 87.14%

$R_v = 0.05 + 0.009(87.14) = 0.8343$

$WQ_v = 1.14(0.8343)(0.70)/12 = 0.0555$ ac-ft = 2,417 ft^3

The total water quality volume for this watershed is 2,417 ft^3.

The Water Quality is treated by using a level spreader as a pretreatment to disperse the inflow and reduce the runoff velocity. Once the flow exits the level spreader in to the basin, native plants planted in the basin provide water quality treatment by absorbing pollutants and further reducing the velocity of the flow, allowing sediment to drop out of suspension bottom of the basin.

Pretreatment

Sheet Flow to Level Spreader

The level spreader is approximately 72 ft long by 3 ft wide. The level spreader is used as pretreatment to reduce the velocity of the flow coming from the parking lot and building before entering the basin. To determine the velocity of the runoff across the level spreader, the water quality rate was calculated below.

Qa = P*Rv
P = 1.14”
Qa = 1.14*0.8343 = 0.95 watershed inches
$CN = \frac{1000}{[10+5P+10Qa-10\sqrt{(Qa^2+1.25QaP)}]}$.
CN = 98.24

Ia=(200/CN)-2= 0.03583
Ia/P = 0.03

Time of concentration sheet flow = $0.007*(nL)^{0.8} \div P^{0.5}*S^{0.4}$
n = 0.035
L = 100 ft
P = 3.1 in
S = 0.03 ft/ft
Time of Concentration = 0.044 hrs

Time of Concentration unpaved shallow concentrated flow = L ÷ (V*3,600 sec/hr)
L = 21.38 ft
$V = 16.13*S^{0.5}$
S = 0.11 ft/ft
$V = 16.13*0.11^{0.5}$
V = 5.35 ft/s
Time of Concentration = 21.38 ft / 5.35 ft/s*3600 sec/hr = 0.0011 hrs

Time of Concentration paved shallow concentrated flow = L ÷ (V*3,600 sec/hr)
L = 490.12 ft
$V = 20.33 * S^{0.5}$
S = 0.015 ft/ft
$V = 20.33 * 0.015^{0.5}$
V =2.49 ft/s
Time of Concentration = 490.12 ft / 2.49 ft/s*3600 sec/hr = 0.055 hrs

Total Time of Concentration = sheet flow + unpaved shallow + paved shallow
= 0.044 + 0.001 + 0.055
= 0.01 hrs

From Chart D.11.1 qu = 1,000 csm/in

Qp = qu x A x Qa
A = 0.70 acres → 0.00109375 mi^2
Qp = 1,000 csm/in x 0.00109375 mi^2 x 0.950 watershed inches = 1.04 cfs

Velocity Calculation
The high water of the water quality storm flow must be calculated first. The weir equation was used to calculate the ponding height.

$Q = CLH^{3/2}$
Rearrange to solve for height
$H = (Q/CxL)^{2/3}$
Q = 1.04 cfs
L = 72 ft
C = 3.0
H = 0.0285 ft

Q=VA
Rearrange to solve for velocity
V=Q/A
Q = 1.04 cfs
A = L*H (ponding) of level spreader
A = 72 ft * 0.0285 ft = 2.05 ft^2
V = 1.04 cfs/ 2.05 ft^2
V = 0.506 ft/s

DETENTION CALCULATIONS

PREDEVELOPED CONDITIONS:

The Predeveloped site is comprised of one watershed analyzed to determine the total runoff from the site. Using the rational method, the Predeveloped Peak Runoff rate can be determined for each watershed. The Predeveloped Runoff for the 2, 15, 25, and 100 year 20 minute design storms are calculated for comparison to the Postdeveloped Runoff to determine the quantity of detention required.

Watershed A
Stormwater Runoff in Watershed A flows overland and discharges into the western area of the site.

2 Year

Onsite Greenspace		2.45	ac	x	1.15	cfs/ac	=	2.82	cfs
Onsite Pavement		0.59	ac	x	2.39	cfs/ac	=	1.41	cfs
Offsite Greenspace		2.54	ac	x	1.15	cfs/ac	=	2.92	cfs
Offsite Pavement		0.02	ac	x	2.39	cfs/ac	=	0.05	cfs
Total	=	5.60	ac			Total	=	7.20	cfs

15 Year

Onsite Greenspace		2.45	ac	x	1.70	cfs/ac	=	4.17	cfs
Onsite Pavement		0.59	ac	x	3.54	cfs/ac	=	2.09	cfs
Offsite Greenspace		2.54	ac	x	1.70	cfs/ac	=	4.32	cfs
Offsite Pavement		0.02	ac	x	3.54	cfs/ac	=	0.07	cfs
Total	=	5.60	ac			Total	=	10.65	cfs

25 Year

Onsite Greenspace		2.45	ac	x	2.00	cfs/ac	=	4.90	cfs
Onsite Pavement		0.59	ac	x	4.16	cfs/ac	=	2.45	cfs
Offsite Greenspace		2.54	ac	x	2.00	cfs/ac	=	5.08	cfs
Offsite Pavement		0.02	ac	x	4.16	cfs/ac	=	0.08	cfs
Total	=	5.60	ac			Total	=	12.51	cfs

100 Year

Onsite Greenspace	2.45	ac	x	2.29	cfs/ac	=	5.61	cfs
Onsite Pavement	0.59	ac	x	4.77	cfs/ac	=	2.81	cfs
Offsite Greenspace	2.54	ac	x	2.29	cfs/ac	=	5.82	cfs
Offsite Pavement	0.02	ac	x	4.77	cfs/ac	=	0.10	cfs
Total =	5.60	ac			Total	=	14.34	cfs

2 Year-20 Minute storm:	7.20 cfs
15 Year-20 Minute storm:	10.65 cfs
25 Year-20 Minute storm:	12.51 cfs
100 Year-20 Minute storm:	14.34 cfs

POSTDEVELOPED CONDITIONS:

The Postdeveloped site maintains the same discharge point as in the Predeveloped Analysis. The total runoff from the watershed is calculated using the rational method to determine the Postdeveloped Peak Runoff rates for each watershed. For this analysis, the Postdeveloped runoff for the 2, 15, 25, and 100 year 20 minute design storms is calculated for comparison to the Predeveloped Runoff to determine the quantity of detention required for the development.

Watershed A

2 Year

Onsite Greenspace		1.89	ac	x	1.15	cfs/ac	=	2.17	cfs
Onsite Pavement		1.14	ac	x	2.39	cfs/ac	=	2.72	cfs
Offsite Greenspace		2.54	ac	x	1.15	cfs/ac	=	2.92	cfs
Offsite Pavement		0.02	ac	x	2.39	cfs/ac	=	0.05	cfs
Total	=	5.59	ac			Total	=	7.86	cfs

15 Year

Onsite Greenspace		1.89	ac	x	1.70	cfs/ac	=	3.21	cfs
Onsite Pavement		1.14	ac	x	3.54	cfs/ac	=	4.04	cfs
Offsite Greenspace		2.54	ac	x	1.70	cfs/ac	=	4.32	cfs
Offsite Pavement		0.02	ac	x	3.54	cfs/ac	=	0.07	cfs
Total	=	5.59	ac			Total	=	11.64	cfs

25 Year

Onsite Greenspace		1.89	ac	x	2.00	cfs/ac	=	3.78	cfs
Onsite Pavement		1.14	ac	x	4.16	cfs/ac	=	4.74	cfs
Offsite Greenspace		2.54	ac	x	2.00	cfs/ac	=	5.08	cfs
Offsite Pavement		0.02	ac	x	4.16	cfs/ac	=	0.08	cfs
Total	=	5.59	ac			Total	=	13.68	cfs

100 Year

Onsite Greenspace	1.89	ac	x	2.29	cfs/ac	=	4.33	cfs
Onsite Pavement	1.14	ac	x	4.77	cfs/ac	=	5.44	cfs
Offsite Greenspace	2.54	ac	x	2.29	cfs/ac	=	5.82	cfs
Offsite Pavement	0.02	ac	x	4.77	cfs/ac	=	0.10	cfs
Total =	5.59	ac			Total	=	15.69	cfs

2 Year-20 Minute storm:	7.86 cfs
15 Year-20 Minute storm:	11.64 cfs
25 Year-20 Minute storm:	13.68 cfs
100 Year-20 Minute storm:	15.69 cfs

DIFFERENTIAL RUNOFF

The differential runoff for the discharge point is determined by subtracting the Predeveloped Runoff rate from the Postdeveloped Runoff rate. A differential runoff of more than 0 cfs requires stormwater detention within that watershed.

Watershed A

Design Storm	Postdeveloped Runoff (cfs)	Predeveloped Runoff (cfs)	Differential Runoff (cfs)
2 Year 20 Minute	7.86	7.20	0.66
15 Year 20 Minute	11.64	10.65	0.99
25 Year 20 Minute	13.68	12.51	1.17
100 Year 20 Minute	15.69	14.34	1.35

Detention is required in Watershed A.

DISCHARGE POINT A – BASIN ROUTING

TIME OF CONCENTRATION:

Time of concentration is defined as the time needed for stormwater to flow from the most remote point in the watershed to the proposed detention basin. The most remote point of flow on this site tributary to the detention basin lies near the southern corner of the watershed. Flow travels overland for 577.58 feet until it reaches the outfall structure. Time of Concentration is calculated as follows:

Watershed A

$T_{overland}$:	L = 577.58 feet
	Elevation difference = 53.37 feet
	Surface Coefficient = 0.4 (asphalt)
	$T_{overland}$ = 2.9 min*0.4 = 1.16 minutes
$T_{storm\ sewer}$:	= 0

Total time = 1.16 + 0 = 1.16 min => **use 1 minute**

Basin Peak Inflow

Watershed A

2 Year

Onsite Greenspace		0.10	ac	x	1.15	cfs/ac	=	0.12	cfs
Onsite Pavement		0.60	ac	x	2.39	cfs/ac	=	1.43	cfs
Total	=	0.70	ac			Total	=	1.55	cfs

15 Year

Onsite Greenspace		0.10	ac	x	1.70	cfs/ac	=	0.17	cfs
Onsite Pavement		0.60	ac	x	3.54	cfs/ac	=	2.12	cfs
Total	=	0.70	ac			Total	=	2.29	cfs

25 Year

Onsite Greenspace		0.10	ac	x	2.00	cfs/ac	=	0.20	cfs
Onsite Pavement		0.60	ac	x	4.16	cfs/ac	=	2.50	cfs
Total	=	0.70	ac			Total	=	2.70	cfs

100 Year

Onsite Greenspace		0.10	ac	x	2.29	cfs/ac	=	0.23	cfs
Onsite Pavement		0.60	ac	x	4.77	cfs/ac	=	2.86	cfs
Total	=	0.70	ac			Total	=	3.09	cfs

2 Year-20 Minute storm:	1.55 cfs
15 Year-20 Minute storm:	2.29 cfs
25 Year-20 Minute storm:	2.70 cfs
100 Year-20 Minute storm:	3.09 cfs

Direct Runoff

Watershed A

2 Year

Onsite Greenspace		1.79	ac	x	1.15	cfs/ac	=	2.06	cfs
Onsite Pavement		0.54	ac	x	2.39	cfs/ac	=	1.29	cfs
Offsite Greenspace		2.54	ac	x	1.15	cfs/ac	=	2.92	cfs
Offsite Pavement		0.02	ac	x	2.39	cfs/ac	=	0.05	cfs
Total	=	4.89	ac			Total	=	6.32	cfs

15 Year

Onsite Greenspace		1.79	ac	x	1.70	cfs/ac	=	3.04	cfs
Onsite Pavement		0.54	ac	x	3.54	cfs/ac	=	1.91	cfs
Offsite Greenspace		2.54	ac	x	1.70	cfs/ac	=	4.32	cfs
Offsite Pavement		0.02	ac	x	3.54	cfs/ac	=	0.07	cfs
Total	=	4.89	ac			Total	=	9.34	cfs

25 Year

Onsite Greenspace		1.79	ac	x	2.00	cfs/ac	=	3.58	cfs
Onsite Pavement		0.54	ac	x	4.16	cfs/ac	=	2.25	cfs
Offsite Greenspace		2.54	ac	x	2.00	cfs/ac	=	5.08	cfs
Offsite Pavement		0.02	ac	x	4.16	cfs/ac	=	0.08	cfs
Total	=	4.89	ac			Total	=	10.99	cfs

100 Year

Onsite Greenspace		1.79	ac	x	2.29	cfs/ac	=	4.10	cfs
Onsite Pavement		0.54	ac	x	4.77	cfs/ac	=	2.58	cfs
Offsite Greenspace		2.54	ac	x	2.29	cfs/ac	=	5.82	cfs
Offsite Pavement		0.02	ac	x	4.77	cfs/ac	=	0.10	cfs
Total	=	4.89	ac			Total	=	12.60	cfs

2 Year-20 Minute storm:	6.32 cfs
15 Year-20 Minute storm:	9.34 cfs
25 Year-20 Minute storm:	10.99 cfs
100 Year-20 Minute storm:	12.60 cfs

ALLOWABLE RELEASE RATE

Allowable Release Rate is defined as the maximum amount of stormwater that can be released from the proposed basin in any given storm duration. This is determined subtracting the Differential Runoff Rate from the Basin Inflow for each design storm. The following table shows the calculated Allowable Release Rate for this site:

Storm Frequency (20 Minute Duration)	Basin Inflow (cfs)	Differential Runoff (cfs)	Allowable Release Rate (cfs)
2 Year	1.55	0.66	0.89
15 Year	2.29	0.99	1.30
25 Year	2.70	1.17	1.53
100 Year	3.09	1.35	1.74

STORM ROUTING CALCULATIONS AND RESULTS

The computer program PONDPACK was used in routing the 2, 15, 25 and 100 year storms through the dry detention basin required for this site. The routing calculations are found in Appendix B for the 2, 15, 25 and 100 year storms for the watershed and also the calculations for safe passage of the 100 year storms with the low flow blocked (LFB) with the basin ponded full to the top of the outfall structure. As found in the routing calculations, the results are as follows:

Storm Frequency	Peak Inflow (cfs)	Allowable Release Rate (cfs)	Calculated Release Rate (cfs)	Peak Elevation (ft)	Freeboard (ft)
2 Yr 20 Min	1.55	0.89	0.76	490.35	3.65
15 Yr 20 Min	2.29	1.30	1.28	490.88	3.12
25 Yr 20 Min	2.70	1.53	1.45	491.12	2.88
100 Yr 20 Min	3.09	1.74	1.58	491.34	2.66
100 Yr 20 Min (LFB)	3.09	NA	3.09	492.79	1.21

FLOODED STORM ROUTING CALCULATIONS AND RESULTS

The computer program PONDPACK was used in routing the 2, 15, 25, and 100 year storms through the dry detention basin required for this site while the creek is at flood stage. A tailwater of 487.96 was used to model the effects of the 100 year base flood elevation in the creek. The routing calculations are found in Appendix C for the 2, 15, 25, and 100 year storms for the watershed. As found in the routing calculations, the results are as follows:

Storm Frequency	Peak Inflow (cfs)	Allowable Release Rate (cfs)	Calculated Release Rate (cfs)	Peak Elevation (ft)	Freeboard (ft)
2 Yr 20 Min	1.55	0.89	0.75	490.35	3.65
15 Yr 20 Min	2.29	1.30	1.28	490.88	3.12
25 Yr 20 Min	2.70	1.53	1.45	491.12	2.88
100 Yr 20 Min	3.09	1.74	1.58	491.35	2.65
100 Yr 20 Min (LFB)	3.09	NA	3.09	492.79	1.21

SEDIMENT STORAGE CALCULATIONS

The City of O'Fallon design standards require that all detention basins are designed to accommodate two years of sediment storage. This is accomplished by routing the design storms through the outfall structure and determining the 100 year, 20 minute storm high-water elevation. Using the annual sediment storage nomograph included in Appendix A of this report, we calculate the volume of sediment delivered to the detention basin over a two year period. By adding the volume of sediment to the storage volume required for the 100 year, 20 minute storm, we can calculate the crest elevation of the standpipe which must be above the volume required for the 100 year, 20 minute storm and the volume required sediment storage when added together. Pondpack has been used to calculate this elevation and the results are as follows:

100 Year, 20 Minute Storage = 2,525.86 ft^3
100 Year highwater elevation = 491.35 ft
2 Year Sediment Storage Volume = 238.00 ft^3
Required Storage Volume = 2,763.86 ft^3
Volume Achieved at Elevation = 491.49 ft
Crest of Outfall Structure and Sill = 492.79 ft

SUMMARY

WATERSHED A SUMMARY - NORMAL CONDITION

Outlet Point: Watershed A

	Outflow Rate	High Water
2 Year, 20 Minute	0.76 cfs	490.35 ft
15 Year, 20 Minute	1.28 cfs	490.88 ft
25 Year, 20 Minute	1.45 cfs	491.12 ft
100 Year, 20 Minute	1.58 cfs	491.34 ft
100 Year, 20 Minute (LFB)	3.09 cfs	492.79 ft

Dry Detention Basin

Low Flow Slot	3" W x 6" H Rectangular Orifice
Low Flow Slot Elevation	488.50
Upper Flow Slot	5" W x 4" H Rectangular Orifice
Upper Flow Slot Elevation	490.35
Crest Elevation	492.60
Top of Berm	494.00
Freeboard (ft)	1.21

✓ Dry Detention Basin meets Freeboard Requirements ✓

WATERSHED A SUMMARY - FLOODED CONDITION

Outlet Point: Watershed A

	Outflow Rate	High Water
2 Year, 20 Minute	0.75 cfs	490.35 ft
15 Year, 20 Minute	1.28 cfs	490.88 ft
25 Year, 20 Minute	1.45 cfs	491.12 ft
100 Year, 20 Minute	1.58 cfs	491.35 ft
100 Year, 20 Minute (LFB)	3.09 cfs	492.79 ft

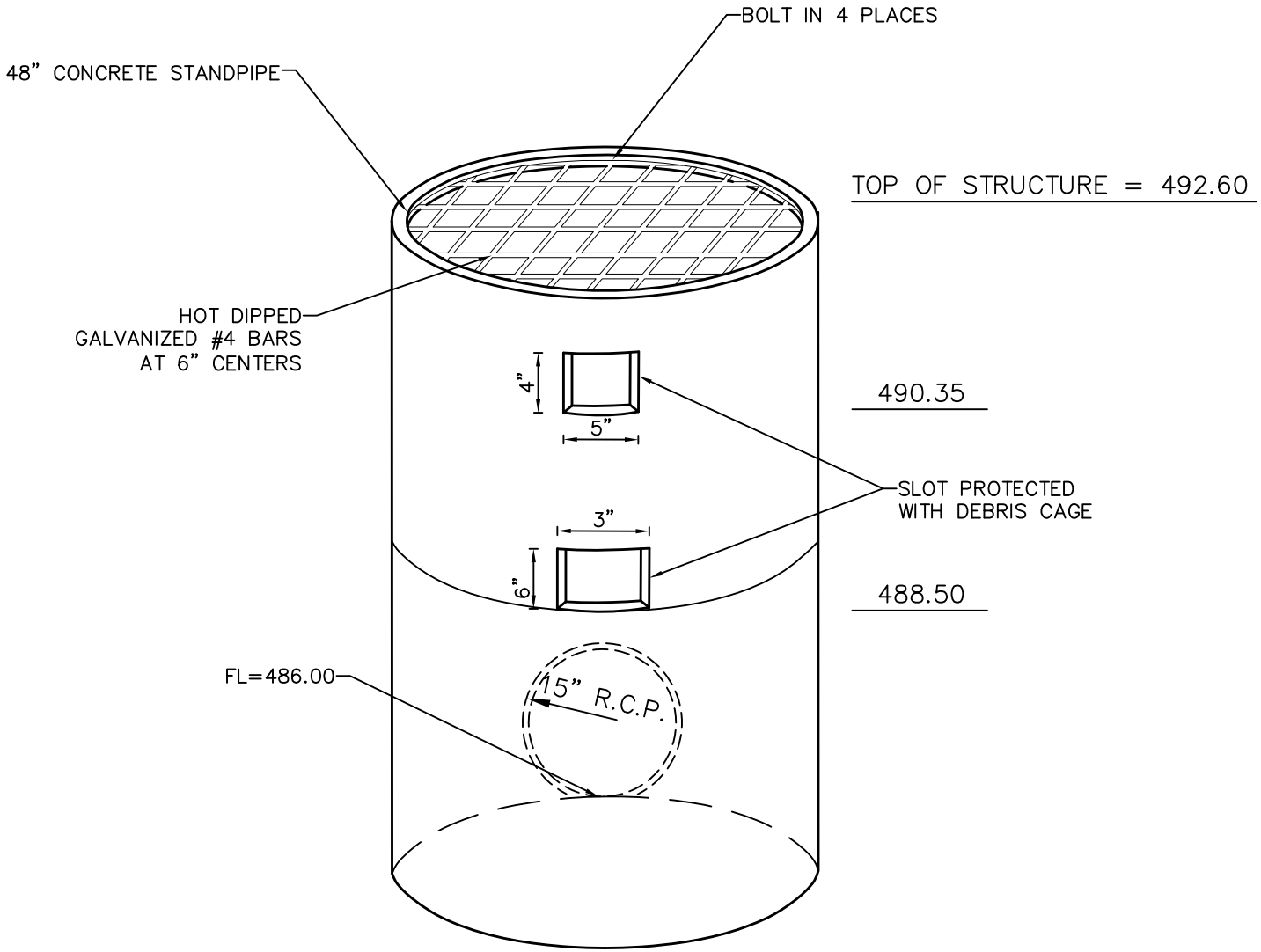
Dry Detention Basin

Low Flow Slot	3" W x 6" H Rectangular Orifice
Low Flow Slot Elevation	488.50
Upper Flow Slot	5" W x 4" H Rectangular Orifice
Upper Flow Slot Elevation	490.35
Crest Elevation	492.60
Top of Berm	494.00
Freeboard (ft)	1.21

✓ Dry Detention Basin meets Freeboard Requirements ✓

Appendix A

-Structure Details
-Time of Concentration
-Misc Figures



OVERFLOW STRUCTURE DETAIL

NOT TO SCALE

NORMAL ELEVATION
2 YEAR HIGHWATER 490.35
15 YEAR HIGHWATER 490.88
25 YEAR HIGHWATER 491.12
100 YEAR HIGHWATER 491.34
100 YEAR HIGHWATER LFB 492.79

FLOODED ELEVATION
2 YEAR HIGHWATER 490.35
15 YEAR HIGHWATER 490.88
25 YEAR HIGHWATER 491.12
100 YEAR HIGHWATER 491.35
100 YEAR HIGHWATER LFB 492.79

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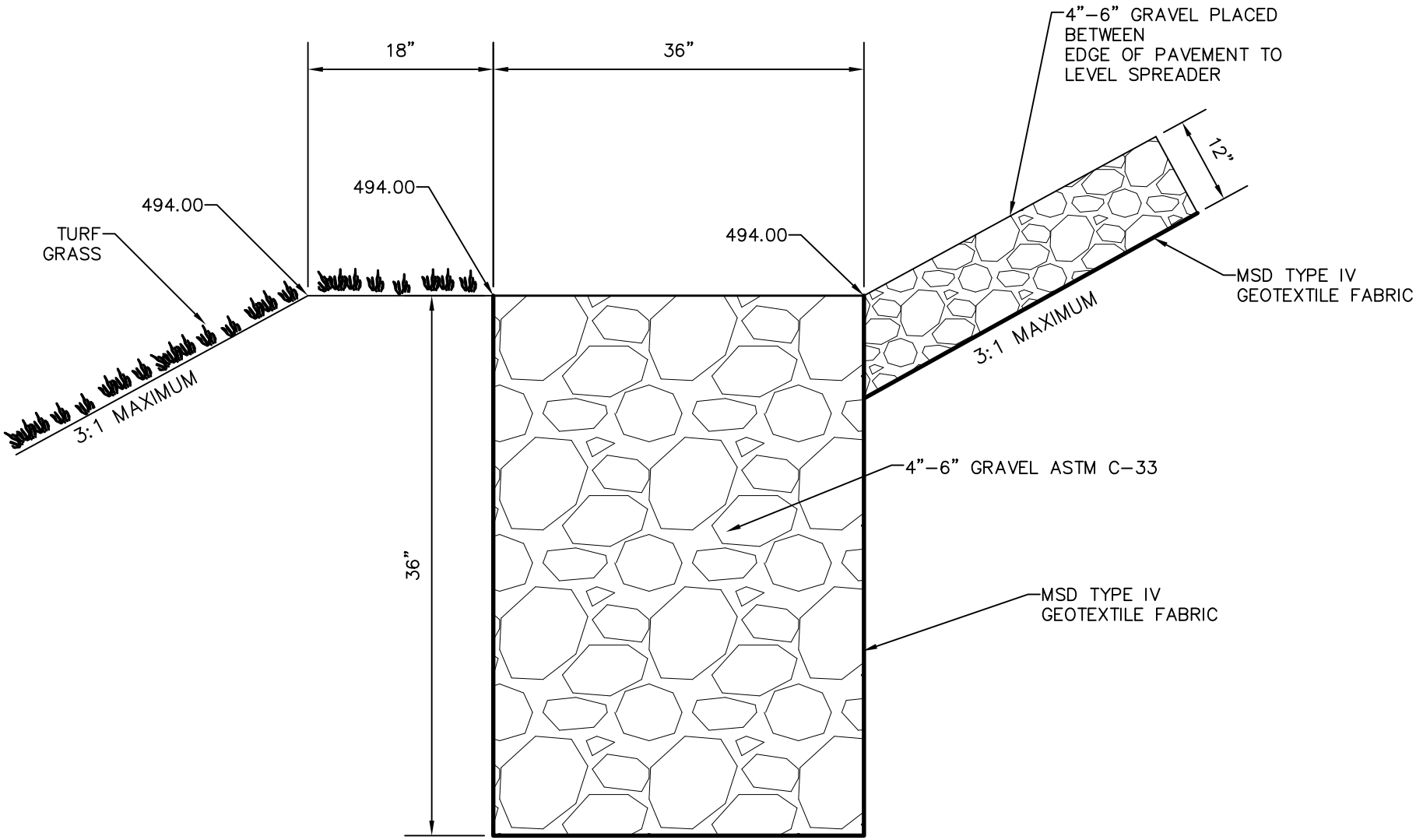

LEVEL SPREADER CROSS SECTION

NOT TO SCALE

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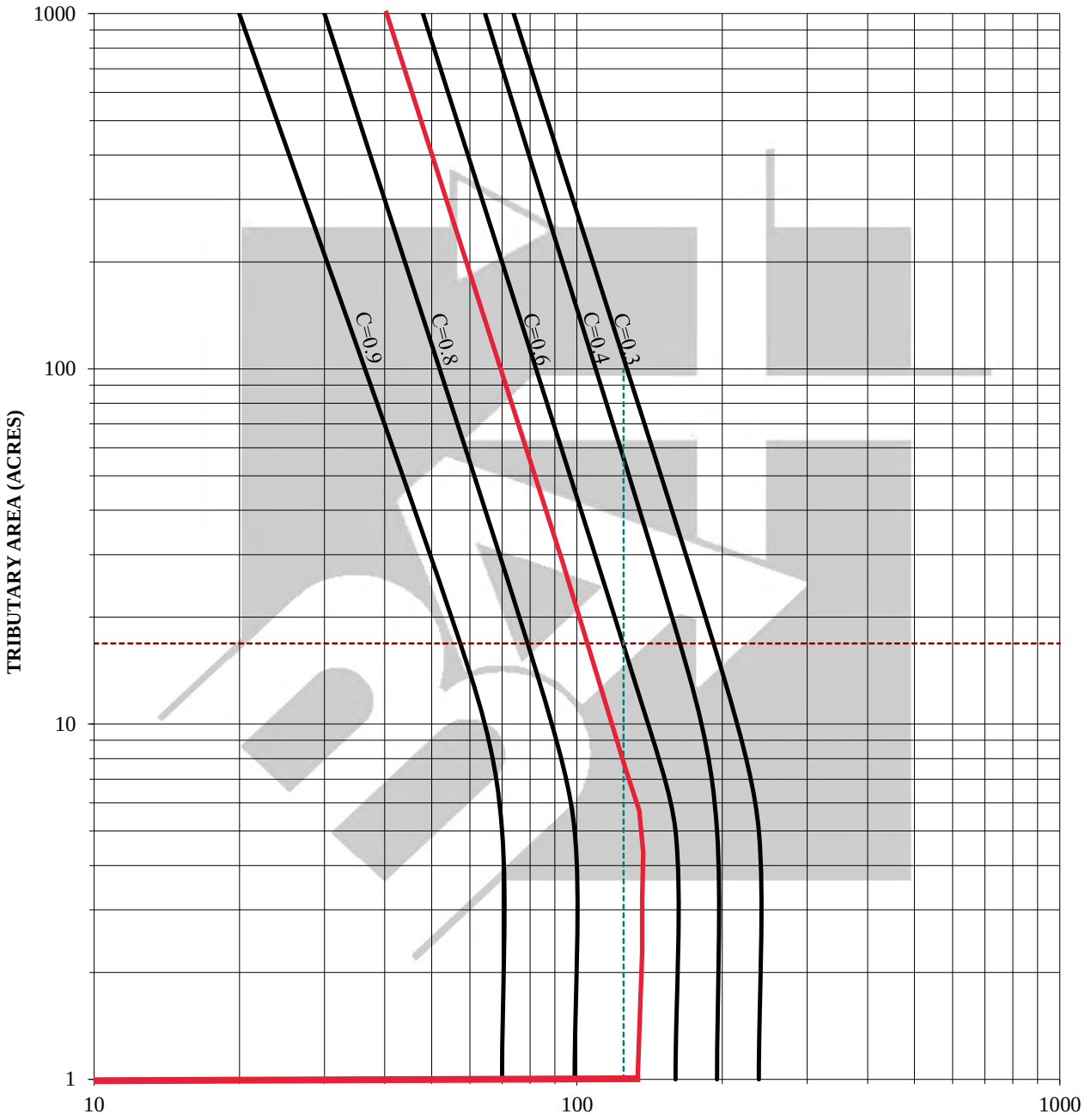
ANNUAL SEDIMENT STORAGE



Storage Required = Years of Storage * Annual Sediment * Drainage Area

RUNOFF C VALUE =	0.70	YEARS OF STORAGE =	2 years
DRAINAGE AREA =	0.70 ac		
ANNUAL SEDIMENT =	170 cf/ac	STORAGE REQUIRED =	2 * 170 * 0.7 = 238 cf

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AKS

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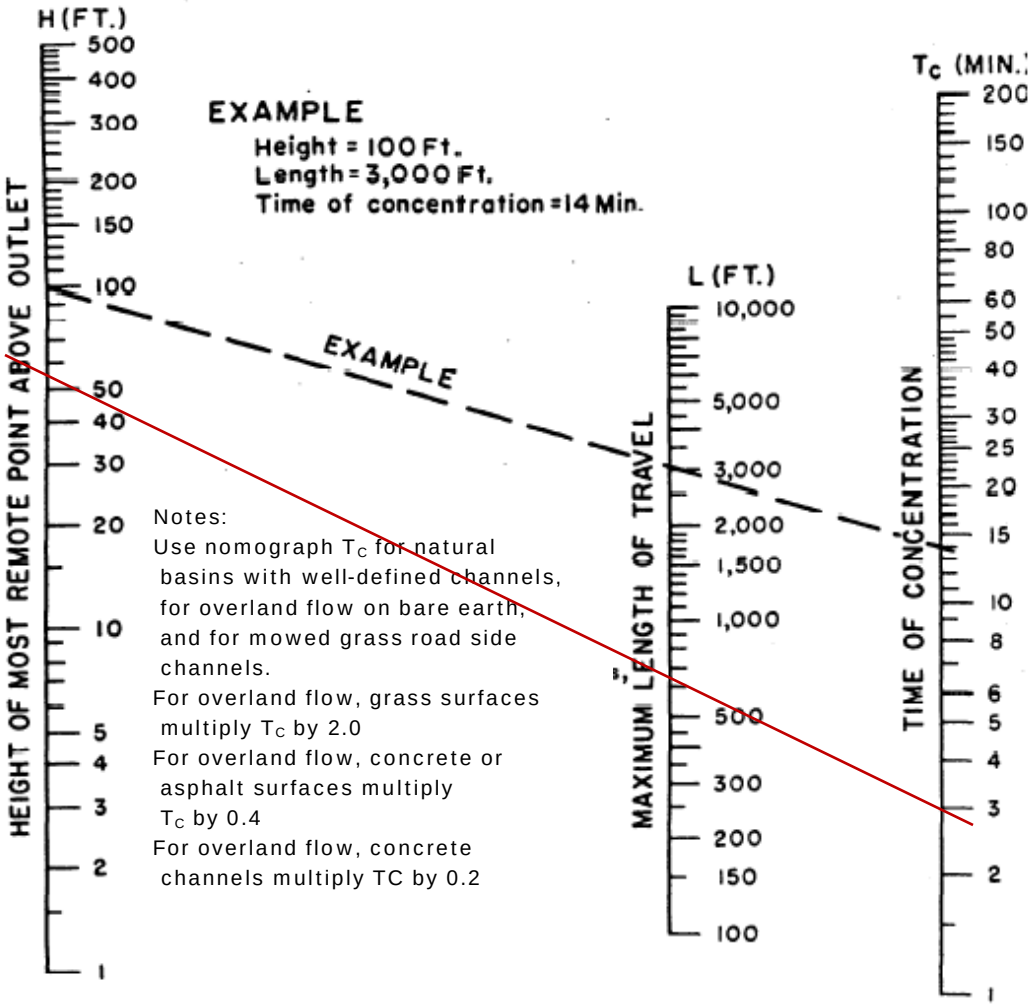
Project: Brock's Tree Service
Date: 08/21/2023 Project No: 05-13456B
Designer: AKS Checked:

TIME OF CONCENTRATION FOR SMALL DRAINAGE BASINS



OVERLAND FLOW

Δ Height = 53.37 ft

Length = 577.58 ft

$T_{Overland}$ = 3.0 min

STORM SEWER TRAVEL TIME

T_{storm}=Pipe Length (L) * Assumed Velocity (V)
L = 0 ft
V = 4.5 ft/s
T_{storm} = 0 ft / 4.5 ft/s / 60 sec/min =0 min

Total Time of Concentration = $T_{Overland}$ + T_{storm} = 3.0*0.4 + 0 = 1.20 → USE 1 min.

Appendix B

Basin Routing

-2 year Detention Routing
-15 year Detention Routing
-25 year Detention Routing
-100 year Detention Routing
-100 year Detention Routing LFB

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Subsection: Master Network Summary

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (min)	Peak Flow (ft³/s)
Watershed A	Post-Development 2 year	0	0.043	1.000	1.55
Watershed A	Post-Development 15 year	0	0.063	1.000	2.29
Watershed A	Post- Development 100 year	0	0.085	1.000	3.09
Watershed A	100 year LFB	0	0.085	1.000	3.09
Watershed A	Post-Development 25 year	0	0.074	1.000	2.70
Watershed A	Flooded Condiitons 2 Year	0	0.043	1.000	1.55
Watershed A	Flooded 15 Year	0	0.063	1.000	2.29
Watershed A	Flooded 25 Year	0	0.074	1.000	2.70
Watershed A	Flooded 100 Year	0	0.085	1.000	3.09
Watershed A	Flooded LFB	0	0.085	1.000	3.09

Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (min)	Peak Flow (ft³/s)
O-1	Post-Development 2 year	0	0.043	21.000	0.76
O-1	Post-Development 15 year	0	0.063	20.000	1.28
O-1	Post- Development 100 year	0	0.085	20.000	1.58
O-1	100 year LFB	0	0.085	20.000	3.09
O-1	Post-Development 25 year	0	0.074	20.000	1.45
O-1	Flooded Condiitons 2 Year	0	0.043	21.000	0.75
O-1	Flooded 15 Year	0	0.063	20.000	1.28
O-1	Flooded 25 Year	0	0.074	20.000	1.45
O-1	Flooded 100 Year	0	0.085	20.000	1.58
O-1	Flooded LFB	0	0.085	20.000	3.09

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (min)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Detention Basin (IN)	Post-Development 2 year	0	0.043	1.000	1.55	(N/A)	(N/A)

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (min)	Peak Flow (ft^3/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Detention Basin (OUT)	Post-Development 2 year	0	0.043	21.000	0.76	490.35	0.026
Detention Basin (IN)	Post-Development 15 year	0	0.063	1.000	2.29	(N/A)	(N/A)
Detention Basin (OUT)	Post-Development 15 year	0	0.063	20.000	1.28	490.88	0.041
Detention Basin (IN)	Post-Development 100 year	0	0.085	1.000	3.09	(N/A)	(N/A)
Detention Basin (OUT)	Post-Development 100 year	0	0.085	20.000	1.58	491.34	0.056
Detention Basin (IN)	100 year LFB	0	0.085	1.000	3.09	(N/A)	(N/A)
Detention Basin (OUT)	100 year LFB	0	0.085	20.000	3.09	492.79	0.123
Detention Basin (IN)	Post-Development 25 year	0	0.074	1.000	2.70	(N/A)	(N/A)
Detention Basin (OUT)	Post-Development 25 year	0	0.074	20.000	1.45	491.12	0.049
Detention Basin (IN)	Flooded Condiitons 2 Year	0	0.043	1.000	1.55	(N/A)	(N/A)
Detention Basin (OUT)	Flooded Condiitons 2 Year	0	0.043	21.000	0.75	490.35	0.026
Detention Basin (IN)	Flooded 15 Year	0	0.063	1.000	2.29	(N/A)	(N/A)
Detention Basin (OUT)	Flooded 15 Year	0	0.063	20.000	1.28	490.88	0.041
Detention Basin (IN)	Flooded 25 Year	0	0.074	1.000	2.70	(N/A)	(N/A)
Detention Basin (OUT)	Flooded 25 Year	0	0.074	20.000	1.45	491.12	0.049
Detention Basin (IN)	Flooded 100 Year	0	0.085	1.000	3.09	(N/A)	(N/A)
Detention Basin (OUT)	Flooded 100 Year	0	0.085	20.000	1.58	491.35	0.056
Detention Basin (IN)	Flooded LFB	0	0.085	1.000	3.09	(N/A)	(N/A)

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (min)	Peak Flow (ft^3/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Detention Basin (OUT)	Flooded LFB	0	0.085	20.000	3.09	492.79	0.123

Subsection: Read Hydrograph
Label: Watershed A
Scenario: Flooded Condiitons 2 Year

Return Event: 2 years
Storm Event:

Peak Discharge	1.55 ft³/s
Time to Peak	13.000 min
Hydrograph Volume	0.043 ac-ft

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 1.000 min
Time on left represents time for first value in each row.

Time (min)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
0.000	0.00	1.55	1.55	1.55	1.55
5.000	1.55	1.55	1.55	1.55	1.55
10.000	1.55	1.55	1.55	1.55	1.55
15.000	1.55	1.55	1.55	1.55	1.55
20.000	1.55	0.00	0.00	0.00	0.00
25.000	0.00	0.00	0.00	0.00	0.00
30.000	0.00	0.00	0.00	0.00	0.00
35.000	0.00	0.00	0.00	0.00	0.00
40.000	0.00	0.00	0.00	0.00	0.00
45.000	0.00	0.00	0.00	0.00	0.00
50.000	0.00	0.00	0.00	0.00	0.00
55.000	0.00	0.00	0.00	0.00	0.00
60.000	0.00	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Read Hydrograph
Label: Watershed A
Scenario: Post-Development 2 year

Return Event: 2 years
Storm Event:

Peak Discharge	1.55 ft³/s
Time to Peak	13.000 min
Hydrograph Volume	0.043 ac-ft

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 1.000 min
Time on left represents time for first value in each row.

Time (min)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
0.000	0.00	1.55	1.55	1.55	1.55
5.000	1.55	1.55	1.55	1.55	1.55
10.000	1.55	1.55	1.55	1.55	1.55
15.000	1.55	1.55	1.55	1.55	1.55
20.000	1.55	0.00	0.00	0.00	0.00
25.000	0.00	0.00	0.00	0.00	0.00
30.000	0.00	0.00	0.00	0.00	0.00
35.000	0.00	0.00	0.00	0.00	0.00
40.000	0.00	0.00	0.00	0.00	0.00
45.000	0.00	0.00	0.00	0.00	0.00
50.000	0.00	0.00	0.00	0.00	0.00
55.000	0.00	0.00	0.00	0.00	0.00
60.000	0.00	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Read Hydrograph
Label: Watershed A
Scenario: Flooded 15 Year

Return Event: 15 years
Storm Event:

Peak Discharge	2.29 ft³/s
Time to Peak	13.000 min
Hydrograph Volume	0.063 ac-ft

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 1.000 min
Time on left represents time for first value in each row.

Time (min)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
0.000	0.00	2.29	2.29	2.29	2.29
5.000	2.29	2.29	2.29	2.29	2.29
10.000	2.29	2.29	2.29	2.29	2.29
15.000	2.29	2.29	2.29	2.29	2.29
20.000	2.29	0.00	0.00	0.00	0.00
25.000	0.00	0.00	0.00	0.00	0.00
30.000	0.00	0.00	0.00	0.00	0.00
35.000	0.00	0.00	0.00	0.00	0.00
40.000	0.00	0.00	0.00	0.00	0.00
45.000	0.00	0.00	0.00	0.00	0.00
50.000	0.00	0.00	0.00	0.00	0.00
55.000	0.00	0.00	0.00	0.00	0.00
60.000	0.00	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Read Hydrograph
Label: Watershed A
Scenario: Post-Development 15 year

Return Event: 15 years
Storm Event:

Peak Discharge	2.29 ft³/s
Time to Peak	13.000 min
Hydrograph Volume	0.063 ac-ft

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 1.000 min
Time on left represents time for first value in each row.

Time (min)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
0.000	0.00	2.29	2.29	2.29	2.29
5.000	2.29	2.29	2.29	2.29	2.29
10.000	2.29	2.29	2.29	2.29	2.29
15.000	2.29	2.29	2.29	2.29	2.29
20.000	2.29	0.00	0.00	0.00	0.00
25.000	0.00	0.00	0.00	0.00	0.00
30.000	0.00	0.00	0.00	0.00	0.00
35.000	0.00	0.00	0.00	0.00	0.00
40.000	0.00	0.00	0.00	0.00	0.00
45.000	0.00	0.00	0.00	0.00	0.00
50.000	0.00	0.00	0.00	0.00	0.00
55.000	0.00	0.00	0.00	0.00	0.00
60.000	0.00	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Read Hydrograph
Label: Watershed A
Scenario: Flooded 25 Year

Return Event: 25 years
Storm Event:

Peak Discharge	2.70 ft³/s
Time to Peak	13.000 min
Hydrograph Volume	0.074 ac-ft

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 1.000 min
Time on left represents time for first value in each row.

Time (min)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
0.000	0.00	2.70	2.70	2.70	2.70
5.000	2.70	2.70	2.70	2.70	2.70
10.000	2.70	2.70	2.70	2.70	2.70
15.000	2.70	2.70	2.70	2.70	2.70
20.000	2.70	0.00	0.00	0.00	0.00
25.000	0.00	0.00	0.00	0.00	0.00
30.000	0.00	0.00	0.00	0.00	0.00
35.000	0.00	0.00	0.00	0.00	0.00
40.000	0.00	0.00	0.00	0.00	0.00
45.000	0.00	0.00	0.00	0.00	0.00
50.000	0.00	0.00	0.00	0.00	0.00
55.000	0.00	0.00	0.00	0.00	0.00
60.000	0.00	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Read Hydrograph
Label: Watershed A
Scenario: Post-Development 25 year

Return Event: 25 years
Storm Event:

Peak Discharge	2.70 ft³/s
Time to Peak	13.000 min
Hydrograph Volume	0.074 ac-ft

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 1.000 min
Time on left represents time for first value in each row.

Time (min)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
0.000	0.00	2.70	2.70	2.70	2.70
5.000	2.70	2.70	2.70	2.70	2.70
10.000	2.70	2.70	2.70	2.70	2.70
15.000	2.70	2.70	2.70	2.70	2.70
20.000	2.70	0.00	0.00	0.00	0.00
25.000	0.00	0.00	0.00	0.00	0.00
30.000	0.00	0.00	0.00	0.00	0.00
35.000	0.00	0.00	0.00	0.00	0.00
40.000	0.00	0.00	0.00	0.00	0.00
45.000	0.00	0.00	0.00	0.00	0.00
50.000	0.00	0.00	0.00	0.00	0.00
55.000	0.00	0.00	0.00	0.00	0.00
60.000	0.00	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Read Hydrograph
Label: Watershed A
Scenario: Flooded 100 Year

Return Event: 100 years
Storm Event:

Peak Discharge	3.09 ft³/s
Time to Peak	13.000 min
Hydrograph Volume	0.085 ac-ft

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 1.000 min
Time on left represents time for first value in each row.

Time (min)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
0.000	0.00	3.09	3.09	3.09	3.09
5.000	3.09	3.09	3.09	3.09	3.09
10.000	3.09	3.09	3.09	3.09	3.09
15.000	3.09	3.09	3.09	3.09	3.09
20.000	3.09	0.00	0.00	0.00	0.00
25.000	0.00	0.00	0.00	0.00	0.00
30.000	0.00	0.00	0.00	0.00	0.00
35.000	0.00	0.00	0.00	0.00	0.00
40.000	0.00	0.00	0.00	0.00	0.00
45.000	0.00	0.00	0.00	0.00	0.00
50.000	0.00	0.00	0.00	0.00	0.00
55.000	0.00	0.00	0.00	0.00	0.00
60.000	0.00	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Read Hydrograph
Label: Watershed A
Scenario: Post- Development 100 year

Return Event: 100 years
Storm Event:

Peak Discharge	3.09 ft³/s
Time to Peak	13.000 min
Hydrograph Volume	0.085 ac-ft

HYDROGRAPH ORDINATES (ft³/s)
Output Time Increment = 1.000 min
Time on left represents time for first value in each row.

Time (min)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)	Flow (ft³/s)
0.000	0.00	3.09	3.09	3.09	3.09
5.000	3.09	3.09	3.09	3.09	3.09
10.000	3.09	3.09	3.09	3.09	3.09
15.000	3.09	3.09	3.09	3.09	3.09
20.000	3.09	0.00	0.00	0.00	0.00
25.000	0.00	0.00	0.00	0.00	0.00
30.000	0.00	0.00	0.00	0.00	0.00
35.000	0.00	0.00	0.00	0.00	0.00
40.000	0.00	0.00	0.00	0.00	0.00
45.000	0.00	0.00	0.00	0.00	0.00
50.000	0.00	0.00	0.00	0.00	0.00
55.000	0.00	0.00	0.00	0.00	0.00
60.000	0.00	(N/A)	(N/A)	(N/A)	(N/A)

Subsection: Elevation-Area Volume Curve
Label: Detention Basin
Scenario: Flooded Condiitons 2 Year

Return Event: 2 years
Storm Event:

Elevation (ft)	Planimeter (ft²)	Area (ft²)	A1+A2+sqr (A1*A2) (ft²)	Volume (ac-ft)	Volume (Total) (ac-ft)
488.40	0.000	0.000	0.000	0.000	0.000
488.75	0.000	214.970	214.970	0.001	0.001
489.00	0.000	497.180	1,039.073	0.002	0.003
490.00	0.000	898.920	2,064.625	0.016	0.018
491.00	0.000	1,393.390	3,411.482	0.026	0.044
492.00	0.000	1,968.000	5,017.346	0.038	0.083
493.00	0.000	2,621.320	6,860.610	0.053	0.135
494.00	0.000	3,358.070	8,946.304	0.068	0.204

Pond Volume Equations
* Incremental volume computed by the Conic Method for Reservoir Volumes.

Volume = (1/3) * (EL2 - El1) * (Area1 + Area2 + sqr(Area1 * Area2))

where:	EL1, EL2	Lower and upper elevations of the increment
	Area1, Area2	Areas computed for EL1, EL2, respectively
	Volume	Incremental volume between EL1 and EL2

Subsection: Elevation-Area Volume Curve
Label: Detention Basin
Scenario: Post-Development 2 year

Return Event: 2 years
Storm Event:

Elevation (ft)	Planimeter (ft²)	Area (ft²)	A1+A2+sqr (A1*A2) (ft²)	Volume (ac-ft)	Volume (Total) (ac-ft)
488.50	0.000	38.000	0.000	0.000	0.000
488.75	0.000	215.000	343.388	0.001	0.001
489.00	0.000	497.000	1,038.887	0.002	0.003
490.00	0.000	899.000	2,064.433	0.016	0.018
491.00	0.000	1,393.000	3,411.065	0.026	0.045
492.00	0.000	1,968.000	5,016.725	0.038	0.083
493.00	0.000	2,621.000	6,860.151	0.053	0.135
494.00	0.000	3,358.000	8,945.702	0.068	0.204

Pond Volume Equations
* Incremental volume computed by the Conic Method for Reservoir Volumes.

Volume = (1/3) * (EL2 - El1) * (Area1 + Area2 + sqr(Area1 * Area2))

where:	EL1, EL2	Lower and upper elevations of the increment
	Area1, Area2	Areas computed for EL1, EL2, respectively
	Volume	Incremental volume between EL1 and EL2

Subsection: Outlet Input Data
Label: Flooded OS 2 LFB
Scenario: Flooded LFB

Return Event: 100 years
Storm Event:

Requested Pond Water Surface Elevations	
Minimum (Headwater)	488.50 ft
Increment (Headwater)	0.05 ft
Maximum (Headwater)	494.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Stand Pipe	Riser - 1	Forward + Reverse	Culvert - 1	492.60	494.00
Culvert-Circular	Culvert - 1	Forward + Reverse	TW	486.00	494.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: Flooded OS 2 LFB
Scenario: Flooded LFB

Return Event: 100 years
Storm Event:

Structure ID: Riser - 1 Structure Type: Stand Pipe	
Number of Openings	1
Elevation	492.60 ft
Diameter	48.0 in
Orifice Area	12.566 ft²
Orifice Coefficient	0.600
Weir Length	12.57 ft
Weir Coefficient	3.00 (ft^0.5)/s
K Reverse	1.000
Manning's n	0.000
Kev, Charged Riser	0.000
Weir Submergence	False
Orifice H to crest	False

Structure ID: Culvert - 1 Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	15.0 in
Length	67.08 ft
Length (Computed Barrel)	67.13 ft
Slope (Computed)	0.037 ft/ft

Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.023
Kr	0.500
Convergence Tolerance	0.00 ft

Inlet Control Data	
Equation Form	Form 1
K	0.0045
M	2.0000
C	0.0317
Y	0.6900
T1 ratio (HW/D)	1.077
T2 ratio (HW/D)	1.179
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.
Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control,
interpolate between flows at T1 & T2...

T1 Elevation	487.35 ft	T1 Flow	4.80 ft³/s
T2 Elevation	487.47 ft	T2 Flow	5.49 ft³/s

Subsection: Composite Rating Curve
Label: Flooded OS 2 LFB
Scenario: Flooded LFB

Return Event: 100 years
Storm Event:

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft³/s)	Tailwater Elevation (ft)	Convergence Error (ft)
488.40	0.00	487.96	0.00
488.45	0.00	487.96	0.00
488.50	0.00	487.96	0.00
488.55	0.00	487.96	0.00
488.60	0.00	487.96	0.00
488.65	0.00	487.96	0.00
488.70	0.00	487.96	0.00
488.75	0.00	487.96	0.00
488.80	0.00	487.96	0.00
488.85	0.00	487.96	0.00
488.90	0.00	487.96	0.00
488.95	0.00	487.96	0.00
489.00	0.00	487.96	0.00
489.05	0.00	487.96	0.00
489.10	0.00	487.96	0.00
489.15	0.00	487.96	0.00
489.20	0.00	487.96	0.00
489.25	0.00	487.96	0.00
489.30	0.00	487.96	0.00
489.35	0.00	487.96	0.00
489.40	0.00	487.96	0.00
489.45	0.00	487.96	0.00
489.50	0.00	487.96	0.00
489.55	0.00	487.96	0.00
489.60	0.00	487.96	0.00
489.65	0.00	487.96	0.00
489.70	0.00	487.96	0.00
489.75	0.00	487.96	0.00
489.80	0.00	487.96	0.00
489.85	0.00	487.96	0.00
489.90	0.00	487.96	0.00
489.95	0.00	487.96	0.00
490.00	0.00	487.96	0.00
490.05	0.00	487.96	0.00
490.10	0.00	487.96	0.00
490.15	0.00	487.96	0.00
490.20	0.00	487.96	0.00
490.25	0.00	487.96	0.00
490.30	0.00	487.96	0.00
490.35	0.00	487.96	0.00
490.40	0.00	487.96	0.00
490.45	0.00	487.96	0.00
490.50	0.00	487.96	0.00
490.55	0.00	487.96	0.00

Subsection: Composite Rating Curve
Label: Flooded OS 2 LFB
Scenario: Flooded LFB

Return Event: 100 years
Storm Event:

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft³/s)	Tailwater Elevation (ft)	Convergence Error (ft)
490.60	0.00	487.96	0.00
490.65	0.00	487.96	0.00
490.70	0.00	487.96	0.00
490.75	0.00	487.96	0.00
490.80	0.00	487.96	0.00
490.85	0.00	487.96	0.00
490.90	0.00	487.96	0.00
490.95	0.00	487.96	0.00
491.00	0.00	487.96	0.00
491.05	0.00	487.96	0.00
491.10	0.00	487.96	0.00
491.15	0.00	487.96	0.00
491.20	0.00	487.96	0.00
491.25	0.00	487.96	0.00
491.30	0.00	487.96	0.00
491.35	0.00	487.96	0.00
491.40	0.00	487.96	0.00
491.45	0.00	487.96	0.00
491.50	0.00	487.96	0.00
491.55	0.00	487.96	0.00
491.60	0.00	487.96	0.00
491.65	0.00	487.96	0.00
491.70	0.00	487.96	0.00
491.75	0.00	487.96	0.00
491.80	0.00	487.96	0.00
491.85	0.00	487.96	0.00
491.90	0.00	487.96	0.00
491.95	0.00	487.96	0.00
492.00	0.00	487.96	0.00
492.05	0.00	487.96	0.00
492.10	0.00	487.96	0.00
492.15	0.00	487.96	0.00
492.20	0.00	487.96	0.00
492.25	0.00	487.96	0.00
492.30	0.00	487.96	0.00
492.35	0.00	487.96	0.00
492.40	0.00	487.96	0.00
492.45	0.00	487.96	0.00
492.50	0.00	487.96	0.00
492.55	0.00	487.96	0.00
492.60	0.00	487.96	0.00
492.65	0.42	487.96	0.00
492.70	1.19	487.96	0.00
492.75	2.19	487.96	0.00

Subsection: Composite Rating Curve
Label: Flooded OS 2 LFB
Scenario: Flooded LFB

Return Event: 100 years
Storm Event:

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft³/s)	Tailwater Elevation (ft)	Convergence Error (ft)
492.80	3.37	487.96	0.00
492.85	4.71	487.96	0.00
492.90	6.20	487.96	0.00
492.95	7.81	487.96	0.00
493.00	9.54	487.96	0.00
493.05	11.38	487.96	0.00
493.10	13.32	487.96	0.00
493.15	13.50	487.96	0.00
493.20	13.57	487.96	0.00
493.25	13.63	487.96	0.00
493.30	13.69	487.96	0.00
493.35	13.76	487.96	0.00
493.40	13.82	487.96	0.00
493.45	13.89	487.96	0.00
493.50	13.95	487.96	0.00
493.55	14.01	487.96	0.00
493.60	14.08	487.96	0.00
493.65	14.14	487.96	0.00
493.70	14.20	487.96	0.00
493.75	14.26	487.96	0.00
493.80	14.32	487.96	0.00
493.85	14.38	487.96	0.00
493.90	14.44	487.96	0.00
493.95	14.50	487.96	0.00
494.00	14.57	487.96	0.00

Contributing Structures
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)

Subsection: Composite Rating Curve | Return Event: 100 years
Label: Flooded OS 2 LFB | Storm Event:
Scenario: Flooded LFB

Composite Outflow Summary

Contributing Structures
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)

Subsection: Composite Rating Curve
Label: Flooded OS 2 LFB
Scenario: Flooded LFB

Return Event: 100 years
Storm Event:

Composite Outflow Summary

Contributing Structures
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)

Subsection: Composite Rating Curve | Return Event: 100 years
Label: Flooded OS 2 LFB | Storm Event:
Scenario: Flooded LFB

Composite Outflow Summary

Contributing Structures
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)

Subsection: Composite Rating Curve
Label: Flooded OS 2 LFB
Scenario: Flooded LFB

Return Event: 100 years
Storm Event:

Composite Outflow Summary

Contributing Structures
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
Riser - 1,Culvert - 1
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Riser - 1,Culvert - 1
Riser - 1,Culvert - 1
Riser - 1,Culvert - 1
Riser - 1,Culvert - 1
Riser - 1,Culvert - 1

Subsection: Outlet Input Data
Label: Flooded OS2
Scenario: Flooded Condiitons 2 Year

Return Event: 2 years
Storm Event:

Requested Pond Water Surface Elevations	
Minimum (Headwater)	488.50 ft
Increment (Headwater)	0.05 ft
Maximum (Headwater)	494.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Low Slot	Forward + Reverse	Culvert - 1	488.50	489.00
Orifice-Area	Upper Orifice	Forward + Reverse	Culvert - 1	490.68	494.00
Rectangular Weir	Upper Slot	Forward + Reverse	Culvert - 1	490.35	490.68
Stand Pipe	Riser - 1	Forward + Reverse	Culvert - 1	492.60	494.00
Orifice-Area	Low Orifice	Forward + Reverse	Culvert - 1	489.00	494.00
Culvert-Circular	Culvert - 1	Forward + Reverse	TW	486.00	494.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: Flooded OS2
Scenario: Flooded Condiitons 2 Year

Return Event: 2 years
Storm Event:

Structure ID: Riser - 1 Structure Type: Stand Pipe	
Number of Openings	1
Elevation	492.60 ft
Diameter	48.0 in
Orifice Area	12.566 ft²
Orifice Coefficient	0.600
Weir Length	12.57 ft
Weir Coefficient	3.00 (ft^0.5)/s
K Reverse	1.000
Manning's n	0.000
Kev, Charged Riser	0.000
Weir Submergence	False
Orifice H to crest	False

Subsection: Outlet Input Data
Label: Flooded OS2
Scenario: Flooded Condiitons 2 Year

Return Event: 2 years
Storm Event:

Structure ID: Culvert - 1 Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	15.0 in
Length	67.08 ft
Length (Computed Barrel)	67.13 ft
Slope (Computed)	0.037 ft/ft

Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.023
Kr	0.500
Convergence Tolerance	0.00 ft

Inlet Control Data	
Equation Form	Form 1
K	0.0045
M	2.0000
C	0.0317
Y	0.6900
T1 ratio (HW/D)	1.077
T2 ratio (HW/D)	1.179
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.
Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control,
interpolate between flows at T1 & T2...

T1 Elevation	487.35 ft	T1 Flow	4.80 ft³/s
T2 Elevation	487.47 ft	T2 Flow	5.49 ft³/s

Structure ID: Low Slot Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	488.50 ft
Weir Length	0.25 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: Low Orifice Structure Type: Orifice-Area	
Number of Openings	1
Elevation	488.50 ft
Orifice Area	0.125 ft²
Top Elevation	489.00 ft
Datum Elevation	488.75 ft
Orifice Coefficient	0.600

Structure ID: Upper Slot Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	490.35 ft
Weir Length	0.42 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: Upper Orifice Structure Type: Orifice-Area	
Number of Openings	1
Elevation	490.35 ft
Orifice Area	0.140 ft²
Top Elevation	490.68 ft
Datum Elevation	490.52 ft
Orifice Coefficient	0.600

Subsection: Composite Rating Curve
Label: Flooded OS2
Scenario: Flooded Condiitons 2 Year

Return Event: 2 years
Storm Event:

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)
488.40	0.00	487.96	0.00
488.45	0.00	487.96	0.00
488.50	0.00	487.96	0.00
488.55	0.01	487.96	0.00
488.60	0.02	487.96	0.00
488.65	0.04	487.96	0.00
488.70	0.07	487.96	0.00
488.75	0.09	487.96	0.00
488.80	0.12	487.96	0.00
488.85	0.16	487.96	0.00
488.90	0.19	487.96	0.00
488.95	0.23	487.96	0.00
489.00	0.30	487.96	0.00
489.05	0.33	487.96	0.00
489.10	0.36	487.96	0.00
489.15	0.38	487.96	0.00
489.20	0.40	487.96	0.00
489.25	0.43	487.96	0.00
489.30	0.45	487.96	0.00
489.35	0.47	487.96	0.00
489.40	0.49	487.96	0.00
489.45	0.50	487.96	0.00
489.50	0.52	487.96	0.00
489.55	0.54	487.96	0.00
489.60	0.55	487.96	0.00
489.65	0.57	487.96	0.00
489.70	0.57	487.96	0.00
489.75	0.57	487.96	0.00
489.80	0.62	487.96	0.00
489.85	0.63	487.96	0.00
489.90	0.63	487.96	0.00
489.95	0.66	487.96	0.00
490.00	0.67	487.96	0.00
490.05	0.69	487.96	0.00
490.10	0.69	487.96	0.00
490.15	0.69	487.96	0.00
490.20	0.72	487.96	0.00
490.25	0.74	487.96	0.00
490.30	0.75	487.96	0.00
490.35	0.75	487.96	0.00
490.40	0.79	487.96	0.00
490.45	0.82	487.96	0.00
490.50	0.87	487.96	0.00
490.55	0.92	487.96	0.00

Subsection: Composite Rating Curve
Label: Flooded OS2
Scenario: Flooded Condiitons 2 Year

Return Event: 2 years
Storm Event:

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)
490.60	0.98	487.96	0.00
490.65	1.04	487.96	0.00
490.70	1.13	487.96	0.00
490.75	1.17	487.96	0.00
490.80	1.22	487.96	0.00
490.85	1.25	487.96	0.00
490.90	1.30	487.96	0.00
490.95	1.33	487.96	0.00
491.00	1.37	487.96	0.00
491.05	1.40	487.96	0.00
491.10	1.44	487.96	0.00
491.15	1.47	487.96	0.00
491.20	1.50	487.96	0.00
491.25	1.53	487.96	0.00
491.30	1.56	487.96	0.00
491.35	1.58	487.96	0.00
491.40	1.61	487.96	0.00
491.45	1.64	487.96	0.00
491.50	1.66	487.96	0.00
491.55	1.69	487.96	0.00
491.60	1.72	487.96	0.00
491.65	1.74	487.96	0.00
491.70	1.77	487.96	0.00
491.75	1.79	487.96	0.00
491.80	1.81	487.96	0.00
491.85	1.84	487.96	0.00
491.90	1.86	487.96	0.00
491.95	1.88	487.96	0.00
492.00	1.90	487.96	0.00
492.05	1.93	487.96	0.00
492.10	1.95	487.96	0.00
492.15	1.97	487.96	0.00
492.20	1.99	487.96	0.00
492.25	2.01	487.96	0.00
492.30	2.03	487.96	0.00
492.35	2.05	487.96	0.00
492.40	2.07	487.96	0.00
492.45	2.09	487.96	0.00
492.50	2.11	487.96	0.00
492.55	2.13	487.96	0.00
492.60	2.15	487.96	0.00
492.65	2.59	487.96	0.00
492.70	3.38	487.96	0.00
492.75	4.40	487.96	0.00

Subsection: Composite Rating Curve
Label: Flooded OS2
Scenario: Flooded Condiitons 2 Year

Return Event: 2 years
Storm Event:

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft³/s)	Tailwater Elevation (ft)	Convergence Error (ft)
492.80	5.58	487.96	0.00
492.85	6.87	487.96	0.00
492.90	8.27	487.96	0.00
492.95	9.73	487.96	0.00
493.00	11.10	487.96	0.00
493.05	12.44	487.96	0.00
493.10	13.43	487.96	0.00
493.15	13.50	487.96	0.00
493.20	13.57	487.96	0.00
493.25	13.63	487.96	0.00
493.30	13.69	487.96	0.00
493.35	13.76	487.96	0.00
493.40	13.82	487.96	0.00
493.45	13.89	487.96	0.00
493.50	13.95	487.96	0.00
493.55	14.01	487.96	0.00
493.60	14.08	487.96	0.00
493.65	14.14	487.96	0.00
493.70	14.20	487.96	0.00
493.75	14.26	487.96	0.00
493.80	14.32	487.96	0.00
493.85	14.38	487.96	0.00
493.90	14.44	487.96	0.00
493.95	14.50	487.96	0.00
494.00	14.57	487.96	0.00

Contributing Structures
(no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1,Low Orifice,Culvert - 1)
(no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1,Low Orifice,Culvert - 1)
(no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1,Low Orifice,Culvert - 1)
Low Slot,Culvert - 1 (no Q: Upper Orifice,Upper Slot,Riser - 1,Low Orifice)
Low Slot,Culvert - 1 (no Q: Upper Orifice,Upper Slot,Riser - 1,Low Orifice)
Low Slot,Culvert - 1 (no Q: Upper Orifice,Upper Slot,Riser - 1,Low Orifice)

Subsection: Composite Rating Curve
Label: Flooded OS2
Scenario: Flooded Condiitons 2 Year

Return Event: 2 years
Storm Event:

Composite Outflow Summary

Contributing Structures
Low Slot,Culvert - 1 (no Q: Upper Orifice,Upper Slot,Riser - 1,Low Orifice)
Low Slot,Culvert - 1 (no Q: Upper Orifice,Upper Slot,Riser - 1,Low Orifice)
Low Slot,Culvert - 1 (no Q: Upper Orifice,Upper Slot,Riser - 1,Low Orifice)
Low Slot,Culvert - 1 (no Q: Upper Orifice,Upper Slot,Riser - 1,Low Orifice)
Low Slot,Culvert - 1 (no Q: Upper Orifice,Upper Slot,Riser - 1,Low Orifice)
Low Slot,Culvert - 1 (no Q: Upper Orifice,Upper Slot,Riser - 1,Low Orifice)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)

Subsection: Composite Rating Curve
Label: Flooded OS2
Scenario: Flooded Condiitons 2 Year

Return Event: 2 years
Storm Event:

Composite Outflow Summary

Contributing Structures
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)

Composite Outflow Summary

Contributing Structures
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Upper Slot,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Riser - 1)
Upper Slot,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Riser - 1)
Upper Slot,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Riser - 1)
Upper Slot,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Riser - 1)

Composite Outflow Summary

Contributing Structures
Upper Slot,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Riser - 1)
Upper Slot,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)

Subsection: Composite Rating Curve
Label: Flooded OS2
Scenario: Flooded Condiitons 2 Year

Return Event: 2 years
Storm Event:

Composite Outflow Summary

Contributing Structures
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)

Composite Outflow Summary

Contributing Structures
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)

Subsection: Composite Rating Curve | Return Event: 2 years
Label: Flooded OS2 | Storm Event:
Scenario: Flooded Condiitons 2 Year

Composite Outflow Summary

Contributing Structures
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Riser - 1,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot)
Upper Orifice,Riser - 1,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot)
Upper Orifice,Riser - 1,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot)
Upper Orifice,Riser - 1,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot)
Upper Orifice,Riser - 1,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot)
Upper Orifice,Riser - 1,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot)
Upper Orifice,Riser - 1,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot)

Composite Outflow Summary

Contributing Structures
Upper Orifice,Riser - 1,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot)
Upper Orifice,Riser - 1,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot)
Upper Orifice,Riser - 1,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)

Subsection: Composite Rating Curve | Return Event: 2 years
Label: Flooded OS2 | Storm Event:
Scenario: Flooded Condiitons 2 Year

Composite Outflow Summary

Contributing Structures
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)

Requested Pond Water Surface Elevations	
Minimum (Headwater)	488.50 ft
Increment (Headwater)	0.05 ft
Maximum (Headwater)	494.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Low Slot	Forward	Culvert - 1	488.50	489.00
Orifice-Area	Upper Orifice	Forward	Culvert - 1	490.68	494.00
Rectangular Weir	Upper Slot	Forward	Culvert - 1	490.35	490.68
Stand Pipe	Riser - 1	Forward	Culvert - 1	492.60	494.00
Orifice-Area	Low Orifice	Forward	Culvert - 1	489.00	494.00
Culvert-Circular	Culvert - 1	Forward	TW	486.00	494.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Structure ID: Riser - 1 Structure Type: Stand Pipe	
Number of Openings	1
Elevation	492.60 ft
Diameter	48.0 in
Orifice Area	12.566 ft²
Orifice Coefficient	0.600
Weir Length	12.57 ft
Weir Coefficient	3.00 (ft^0.5)/s
K Reverse	1.000
Manning's n	0.000
Kev, Charged Riser	0.000
Weir Submergence	False
Orifice H to crest	False

Subsection: Outlet Input Data
Return Event: 2 years
Label: OS 2
Storm Event:
Scenario: Post-Development 2 year

Structure ID: Culvert - 1 Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	15.0 in
Length	67.08 ft
Length (Computed Barrel)	67.13 ft
Slope (Computed)	0.037 ft/ft

Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.023
Kr	0.500
Convergence Tolerance	0.00 ft

Inlet Control Data	
Equation Form	Form 1
K	0.0045
M	2.0000
C	0.0317
Y	0.6900
T1 ratio (HW/D)	1.077
T2 ratio (HW/D)	1.179
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.
Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control,
interpolate between flows at T1 & T2...

T1 Elevation	487.35 ft	T1 Flow	4.80 ft³/s
T2 Elevation	487.47 ft	T2 Flow	5.49 ft³/s

Structure ID: Low Slot Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	488.50 ft
Weir Length	0.25 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: Low Orifice Structure Type: Orifice-Area	
Number of Openings	1
Elevation	488.50 ft
Orifice Area	0.125 ft²
Top Elevation	489.00 ft
Datum Elevation	488.75 ft
Orifice Coefficient	0.600

Structure ID: Upper Slot Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	490.35 ft
Weir Length	0.42 ft
Weir Coefficient	3.00 (ft^0.5)/s

Structure ID: Upper Orifice Structure Type: Orifice-Area	
Number of Openings	1
Elevation	490.35 ft
Orifice Area	0.140 ft²
Top Elevation	490.68 ft
Datum Elevation	490.52 ft
Orifice Coefficient	0.600

Structure ID: TW Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft

Convergence Tolerances	
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

Subsection: Composite Rating Curve
Label: OS 2
Scenario: Post-Development 2 year

Return Event: 2 years
Storm Event:

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft³/s)	Tailwater Elevation (ft)	Convergence Error (ft)
488.50	0.00	(N/A)	0.00
488.55	0.01	(N/A)	0.00
488.60	0.02	(N/A)	0.00
488.65	0.04	(N/A)	0.00
488.70	0.07	(N/A)	0.00
488.75	0.09	(N/A)	0.00
488.80	0.12	(N/A)	0.00
488.85	0.16	(N/A)	0.00
488.90	0.19	(N/A)	0.00
488.95	0.23	(N/A)	0.00
489.00	0.30	(N/A)	0.00
489.05	0.33	(N/A)	0.00
489.10	0.36	(N/A)	0.00
489.15	0.38	(N/A)	0.00
489.20	0.40	(N/A)	0.00
489.25	0.43	(N/A)	0.00
489.30	0.45	(N/A)	0.00
489.35	0.47	(N/A)	0.00
489.40	0.48	(N/A)	0.00
489.45	0.50	(N/A)	0.00
489.50	0.52	(N/A)	0.00
489.55	0.54	(N/A)	0.00
489.60	0.55	(N/A)	0.00
489.65	0.57	(N/A)	0.00
489.70	0.59	(N/A)	0.00
489.75	0.60	(N/A)	0.00
489.80	0.62	(N/A)	0.00
489.85	0.63	(N/A)	0.00
489.90	0.65	(N/A)	0.00
489.95	0.66	(N/A)	0.00
490.00	0.67	(N/A)	0.00
490.05	0.69	(N/A)	0.00
490.10	0.70	(N/A)	0.00
490.15	0.71	(N/A)	0.00
490.20	0.72	(N/A)	0.00
490.25	0.74	(N/A)	0.00
490.30	0.75	(N/A)	0.00
490.35	0.76	(N/A)	0.00
490.40	0.79	(N/A)	0.00
490.45	0.82	(N/A)	0.00
490.50	0.87	(N/A)	0.00
490.55	0.92	(N/A)	0.00
490.60	0.98	(N/A)	0.00
490.65	1.04	(N/A)	0.00

Subsection: Composite Rating Curve
Label: OS 2
Scenario: Post-Development 2 year

Return Event: 2 years
Storm Event:

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft³/s)	Tailwater Elevation (ft)	Convergence Error (ft)
490.70	1.13	(N/A)	0.00
490.75	1.17	(N/A)	0.00
490.80	1.22	(N/A)	0.00
490.85	1.26	(N/A)	0.00
490.90	1.30	(N/A)	0.00
490.95	1.33	(N/A)	0.00
491.00	1.37	(N/A)	0.00
491.05	1.40	(N/A)	0.00
491.10	1.44	(N/A)	0.00
491.15	1.47	(N/A)	0.00
491.20	1.50	(N/A)	0.00
491.25	1.53	(N/A)	0.00
491.30	1.56	(N/A)	0.00
491.35	1.58	(N/A)	0.00
491.40	1.61	(N/A)	0.00
491.45	1.64	(N/A)	0.00
491.50	1.66	(N/A)	0.00
491.55	1.69	(N/A)	0.00
491.60	1.72	(N/A)	0.00
491.65	1.74	(N/A)	0.00
491.70	1.76	(N/A)	0.00
491.75	1.79	(N/A)	0.00
491.80	1.81	(N/A)	0.00
491.85	1.84	(N/A)	0.00
491.90	1.86	(N/A)	0.00
491.95	1.88	(N/A)	0.00
492.00	1.90	(N/A)	0.00
492.05	1.93	(N/A)	0.00
492.10	1.95	(N/A)	0.00
492.15	1.97	(N/A)	0.00
492.20	1.99	(N/A)	0.00
492.25	2.01	(N/A)	0.00
492.30	2.03	(N/A)	0.00
492.35	2.05	(N/A)	0.00
492.40	2.07	(N/A)	0.00
492.45	2.09	(N/A)	0.00
492.50	2.11	(N/A)	0.00
492.55	2.13	(N/A)	0.00
492.60	2.15	(N/A)	0.00
492.65	2.59	(N/A)	0.00
492.70	3.38	(N/A)	0.00
492.75	4.40	(N/A)	0.00
492.80	5.60	(N/A)	0.00
492.85	6.96	(N/A)	0.00

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft³/s)	Tailwater Elevation (ft)	Convergence Error (ft)
492.90	8.46	(N/A)	0.00
492.95	10.05	(N/A)	0.00
493.00	11.68	(N/A)	0.00
493.05	13.37	(N/A)	0.00
493.10	14.92	(N/A)	0.00
493.15	16.39	(N/A)	0.00
493.20	17.23	(N/A)	0.00
493.25	17.28	(N/A)	0.00
493.30	17.33	(N/A)	0.00
493.35	17.38	(N/A)	0.00
493.40	17.43	(N/A)	0.00
493.45	17.48	(N/A)	0.00
493.50	17.53	(N/A)	0.00
493.55	17.58	(N/A)	0.00
493.60	17.63	(N/A)	0.00
493.65	17.68	(N/A)	0.00
493.70	17.73	(N/A)	0.00
493.75	17.78	(N/A)	0.00
493.80	17.83	(N/A)	0.00
493.85	17.88	(N/A)	0.00
493.90	17.93	(N/A)	0.00
493.95	17.98	(N/A)	0.00
494.00	18.03	(N/A)	0.00

Contributing Structures
(no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1,Low Orifice,Culvert - 1)
Low Slot,Culvert - 1 (no Q: Upper Orifice,Upper Slot,Riser - 1,Low Orifice)
Low Slot,Culvert - 1 (no Q: Upper Orifice,Upper Slot,Riser - 1,Low Orifice)
Low Slot,Culvert - 1 (no Q: Upper Orifice,Upper Slot,Riser - 1,Low Orifice)
Low Slot,Culvert - 1 (no Q: Upper Orifice,Upper Slot,Riser - 1,Low Orifice)
Low Slot,Culvert - 1 (no Q: Upper Orifice,Upper Slot,Riser - 1,Low Orifice)
Low Slot,Culvert - 1 (no Q: Upper Orifice,Upper Slot,Riser - 1,Low Orifice)

Composite Outflow Summary

Contributing Structures
Low Slot,Culvert - 1 (no Q: Upper Orifice,Upper Slot,Riser - 1,Low Orifice)
Low Slot,Culvert - 1 (no Q: Upper Orifice,Upper Slot,Riser - 1,Low Orifice)
Low Slot,Culvert - 1 (no Q: Upper Orifice,Upper Slot,Riser - 1,Low Orifice)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)

Subsection: Composite Rating Curve
Label: OS 2
Scenario: Post-Development 2 year

Return Event: 2 years
Storm Event:

Composite Outflow Summary

Contributing Structures
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)

Composite Outflow Summary

Contributing Structures
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Riser - 1)
Upper Slot,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Riser - 1)
Upper Slot,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Riser - 1)
Upper Slot,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Riser - 1)
Upper Slot,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Riser - 1)
Upper Slot,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Riser - 1)
Upper Slot,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Orifice,Riser - 1)

Composite Outflow Summary

Contributing Structures
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)

Composite Outflow Summary

Contributing Structures
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)

Subsection: Composite Rating Curve | Return Event: 2 years
Label: OS 2 | Storm Event:
Scenario: Post-Development 2 year

Composite Outflow Summary

Contributing Structures
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)

Composite Outflow Summary

Contributing Structures
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot,Riser - 1)
Upper Orifice,Riser - 1,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot)
Upper Orifice,Riser - 1,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot)
Upper Orifice,Riser - 1,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot)
Upper Orifice,Riser - 1,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot)
Upper Orifice,Riser - 1,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot)
Upper Orifice,Riser - 1,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot)
Upper Orifice,Riser - 1,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot)
Upper Orifice,Riser - 1,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot)
Upper Orifice,Riser - 1,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot)

Subsection: Composite Rating Curve | Return Event: 2 years
Label: OS 2 | Storm Event:
Scenario: Post-Development 2 year

Composite Outflow Summary

Contributing Structures
Upper Orifice,Riser - 1,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot)
Upper Orifice,Riser - 1,Low Orifice,Culvert - 1 (no Q: Low Slot,Upper Slot)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)

Subsection: Composite Rating Curve | Return Event: 2 years
Label: OS 2 | Storm Event:
Scenario: Post-Development 2 year

Composite Outflow Summary

Contributing Structures
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)
Riser - 1,Culvert - 1 (no Q: Low Slot,Upper Orifice,Upper Slot,Low Orifice)

Subsection: Outlet Input Data
Label: OS 2 LFB
Scenario: 100 year LFB

Return Event: 100 years
Storm Event:

Requested Pond Water Surface Elevations	
Minimum (Headwater)	488.40 ft
Increment (Headwater)	0.05 ft
Maximum (Headwater)	494.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Stand Pipe	Riser - 1	Forward	Culvert - 1	492.60	494.00
Culvert-Circular	Culvert - 1	Forward	TW	486.00	494.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS 2 LFB
Scenario: 100 year LFB

Return Event: 100 years
Storm Event:

Structure ID: Riser - 1 Structure Type: Stand Pipe	
Number of Openings	1
Elevation	492.60 ft
Diameter	48.0 in
Orifice Area	12.566 ft²
Orifice Coefficient	0.600
Weir Length	12.57 ft
Weir Coefficient	3.00 (ft^0.5)/s
K Reverse	1.000
Manning's n	0.000
Kev, Charged Riser	0.000
Weir Submergence	False
Orifice H to crest	False

Structure ID: Culvert - 1 Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	15.0 in
Length	67.08 ft
Length (Computed Barrel)	67.13 ft
Slope (Computed)	0.037 ft/ft

Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.023
Kr	0.500
Convergence Tolerance	0.00 ft

Inlet Control Data	
Equation Form	Form 1
K	0.0045
M	2.0000
C	0.0317
Y	0.6900
T1 ratio (HW/D)	1.077
T2 ratio (HW/D)	1.179
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.
Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control,
interpolate between flows at T1 & T2...

T1 Elevation	487.35 ft	T1 Flow	4.80 ft³/s
T2 Elevation	487.47 ft	T2 Flow	5.49 ft³/s

Structure ID: TW
Structure Type: TW Setup, DS Channel

Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft^3/s
Flow Tolerance (Maximum)	10.000 ft^3/s

Subsection: Composite Rating Curve
Label: OS 2 LFB
Scenario: 100 year LFB

Return Event: 100 years
Storm Event:

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)
488.40	0.00	(N/A)	0.00
488.45	0.00	(N/A)	0.00
488.50	0.00	(N/A)	0.00
488.55	0.00	(N/A)	0.00
488.60	0.00	(N/A)	0.00
488.65	0.00	(N/A)	0.00
488.70	0.00	(N/A)	0.00
488.75	0.00	(N/A)	0.00
488.80	0.00	(N/A)	0.00
488.85	0.00	(N/A)	0.00
488.90	0.00	(N/A)	0.00
488.95	0.00	(N/A)	0.00
489.00	0.00	(N/A)	0.00
489.05	0.00	(N/A)	0.00
489.10	0.00	(N/A)	0.00
489.15	0.00	(N/A)	0.00
489.20	0.00	(N/A)	0.00
489.25	0.00	(N/A)	0.00
489.30	0.00	(N/A)	0.00
489.35	0.00	(N/A)	0.00
489.40	0.00	(N/A)	0.00
489.45	0.00	(N/A)	0.00
489.50	0.00	(N/A)	0.00
489.55	0.00	(N/A)	0.00
489.60	0.00	(N/A)	0.00
489.65	0.00	(N/A)	0.00
489.70	0.00	(N/A)	0.00
489.75	0.00	(N/A)	0.00
489.80	0.00	(N/A)	0.00
489.85	0.00	(N/A)	0.00
489.90	0.00	(N/A)	0.00
489.95	0.00	(N/A)	0.00
490.00	0.00	(N/A)	0.00
490.05	0.00	(N/A)	0.00
490.10	0.00	(N/A)	0.00
490.15	0.00	(N/A)	0.00
490.20	0.00	(N/A)	0.00
490.25	0.00	(N/A)	0.00
490.30	0.00	(N/A)	0.00
490.35	0.00	(N/A)	0.00
490.40	0.00	(N/A)	0.00
490.45	0.00	(N/A)	0.00
490.50	0.00	(N/A)	0.00
490.55	0.00	(N/A)	0.00

Subsection: Composite Rating Curve
Label: OS 2 LFB
Scenario: 100 year LFB

Return Event: 100 years
Storm Event:

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft³/s)	Tailwater Elevation (ft)	Convergence Error (ft)
490.60	0.00	(N/A)	0.00
490.65	0.00	(N/A)	0.00
490.70	0.00	(N/A)	0.00
490.75	0.00	(N/A)	0.00
490.80	0.00	(N/A)	0.00
490.85	0.00	(N/A)	0.00
490.90	0.00	(N/A)	0.00
490.95	0.00	(N/A)	0.00
491.00	0.00	(N/A)	0.00
491.05	0.00	(N/A)	0.00
491.10	0.00	(N/A)	0.00
491.15	0.00	(N/A)	0.00
491.20	0.00	(N/A)	0.00
491.25	0.00	(N/A)	0.00
491.30	0.00	(N/A)	0.00
491.35	0.00	(N/A)	0.00
491.40	0.00	(N/A)	0.00
491.45	0.00	(N/A)	0.00
491.50	0.00	(N/A)	0.00
491.55	0.00	(N/A)	0.00
491.60	0.00	(N/A)	0.00
491.65	0.00	(N/A)	0.00
491.70	0.00	(N/A)	0.00
491.75	0.00	(N/A)	0.00
491.80	0.00	(N/A)	0.00
491.85	0.00	(N/A)	0.00
491.90	0.00	(N/A)	0.00
491.95	0.00	(N/A)	0.00
492.00	0.00	(N/A)	0.00
492.05	0.00	(N/A)	0.00
492.10	0.00	(N/A)	0.00
492.15	0.00	(N/A)	0.00
492.20	0.00	(N/A)	0.00
492.25	0.00	(N/A)	0.00
492.30	0.00	(N/A)	0.00
492.35	0.00	(N/A)	0.00
492.40	0.00	(N/A)	0.00
492.45	0.00	(N/A)	0.00
492.50	0.00	(N/A)	0.00
492.55	0.00	(N/A)	0.00
492.60	0.00	(N/A)	0.00
492.65	0.42	(N/A)	0.00
492.70	1.19	(N/A)	0.00
492.75	2.19	(N/A)	0.00

Subsection: Composite Rating Curve
Label: OS 2 LFB
Scenario: 100 year LFB

Return Event: 100 years
Storm Event:

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)
492.80	3.37	(N/A)	0.00
492.85	4.71	(N/A)	0.00
492.90	6.19	(N/A)	0.00
492.95	7.81	(N/A)	0.00
493.00	9.54	(N/A)	0.00
493.05	11.38	(N/A)	0.00
493.10	13.33	(N/A)	0.00
493.15	15.38	(N/A)	0.00
493.20	17.23	(N/A)	0.00
493.25	17.28	(N/A)	0.00
493.30	17.33	(N/A)	0.00
493.35	17.38	(N/A)	0.00
493.40	17.43	(N/A)	0.00
493.45	17.48	(N/A)	0.00
493.50	17.53	(N/A)	0.00
493.55	17.58	(N/A)	0.00
493.60	17.63	(N/A)	0.00
493.65	17.68	(N/A)	0.00
493.70	17.73	(N/A)	0.00
493.75	17.78	(N/A)	0.00
493.80	17.83	(N/A)	0.00
493.85	17.88	(N/A)	0.00
493.90	17.93	(N/A)	0.00
493.95	17.98	(N/A)	0.00
494.00	18.03	(N/A)	0.00

Contributing Structures
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)

Subsection: Composite Rating Curve
Label: OS 2 LFB
Scenario: 100 year LFB

Return Event: 100 years
Storm Event:

Composite Outflow Summary

Contributing Structures
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
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(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
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(no Q: Riser - 1,Culvert - 1)
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(no Q: Riser - 1,Culvert - 1)
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(no Q: Riser - 1,Culvert - 1)

Subsection: Composite Rating Curve | Return Event: 100 years
Label: OS 2 LFB | Storm Event:
Scenario: 100 year LFB

Composite Outflow Summary

Contributing Structures
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
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Composite Outflow Summary

Contributing Structures
(no Q: Riser - 1,Culvert - 1)
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(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)

Subsection: Composite Rating Curve | Return Event: 100 years
Label: OS 2 LFB | Storm Event:
Scenario: 100 year LFB

Composite Outflow Summary

Contributing Structures
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
(no Q: Riser - 1,Culvert - 1)
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Riser - 1,Culvert - 1

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Flooded Condiitons 2 Year

Return Event: 2 years
Storm Event:

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	488.40 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.00 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.00 ft³/s
Time Increment	1.000 min

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
488.40	0.00	0.000	0.000	0.00	0.00	0.00
488.45	0.00	0.000	4.387	0.00	0.00	0.00
488.50	0.00	0.000	17.549	0.00	0.00	0.02
488.55	0.01	0.000	39.484	0.00	0.01	0.07
488.60	0.02	0.000	70.194	0.00	0.02	0.18
488.65	0.04	0.000	109.679	0.00	0.04	0.35
488.70	0.07	0.000	157.937	0.00	0.07	0.59
488.75	0.09	0.001	214.970	0.00	0.09	0.93
488.80	0.12	0.001	262.083	0.00	0.12	1.36
488.85	0.16	0.001	313.861	0.00	0.16	1.87
488.90	0.19	0.002	370.303	0.00	0.19	2.47
488.95	0.23	0.002	431.409	0.00	0.23	3.18
489.00	0.30	0.003	497.180	0.00	0.30	4.02
489.05	0.33	0.003	514.462	0.00	0.33	4.89
489.10	0.36	0.004	532.039	0.00	0.36	5.79
489.15	0.38	0.004	549.912	0.00	0.38	6.72
489.20	0.40	0.005	568.080	0.00	0.40	7.67
489.25	0.43	0.006	586.543	0.00	0.43	8.66
489.30	0.45	0.006	605.301	0.00	0.45	9.67
489.35	0.47	0.007	624.355	0.00	0.47	10.72
489.40	0.49	0.008	643.704	0.00	0.49	11.79
489.45	0.50	0.009	663.348	0.00	0.50	12.90
489.50	0.52	0.009	683.287	0.00	0.52	14.04
489.55	0.54	0.010	703.522	0.00	0.54	15.21
489.60	0.55	0.011	724.052	0.00	0.55	16.42
489.65	0.57	0.012	744.877	0.00	0.57	17.66
489.70	0.57	0.013	765.997	0.00	0.57	18.92
489.75	0.57	0.014	787.413	0.00	0.57	20.21
489.80	0.62	0.014	809.124	0.00	0.62	21.59
489.85	0.63	0.015	831.130	0.00	0.63	22.97

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Flooded Condiitons 2 Year

Return Event: 2 years
Storm Event:

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
489.90	0.63	0.016	853.431	0.00	0.63	24.37
489.95	0.66	0.017	876.028	0.00	0.66	25.84
490.00	0.67	0.018	898.920	0.00	0.67	27.34
490.05	0.69	0.019	921.080	0.00	0.69	28.87
490.10	0.69	0.020	943.510	0.00	0.69	30.42
490.15	0.69	0.022	966.210	0.00	0.69	32.01
490.20	0.72	0.023	989.179	0.00	0.72	33.68
490.25	0.74	0.024	1,012.419	0.00	0.74	35.36
490.30	0.75	0.025	1,035.928	0.00	0.75	37.08
490.35	0.75	0.026	1,059.707	0.00	0.75	38.82
490.40	0.79	0.027	1,083.756	0.00	0.79	40.65
490.45	0.82	0.029	1,108.075	0.00	0.82	42.51
490.50	0.87	0.030	1,132.664	0.00	0.87	44.42
490.55	0.92	0.031	1,157.522	0.00	0.92	46.38
490.60	0.98	0.033	1,182.650	0.00	0.98	48.39
490.65	1.04	0.034	1,208.048	0.00	1.04	50.44
490.70	1.13	0.035	1,233.716	0.00	1.13	52.57
490.75	1.17	0.037	1,259.654	0.00	1.17	54.69
490.80	1.22	0.038	1,285.861	0.00	1.22	56.86
490.85	1.25	0.040	1,312.339	0.00	1.25	59.06
490.90	1.30	0.041	1,339.086	0.00	1.30	61.31
490.95	1.33	0.043	1,366.103	0.00	1.33	63.60
491.00	1.37	0.044	1,393.390	0.00	1.37	65.94
491.05	1.40	0.046	1,419.770	0.00	1.40	68.32
491.10	1.44	0.048	1,446.398	0.00	1.44	70.74
491.15	1.47	0.049	1,473.273	0.00	1.47	73.20
491.20	1.50	0.051	1,500.396	0.00	1.50	75.71
491.25	1.53	0.053	1,527.766	0.00	1.53	78.26
491.30	1.56	0.055	1,555.383	0.00	1.56	80.86
491.35	1.58	0.056	1,583.247	0.00	1.58	83.50
491.40	1.61	0.058	1,611.359	0.00	1.61	86.19
491.45	1.64	0.060	1,639.719	0.00	1.64	88.93
491.50	1.66	0.062	1,668.326	0.00	1.66	91.71
491.55	1.69	0.064	1,697.180	0.00	1.69	94.54
491.60	1.72	0.066	1,726.281	0.00	1.72	97.42
491.65	1.74	0.068	1,755.630	0.00	1.74	100.35
491.70	1.77	0.070	1,785.227	0.00	1.77	103.32
491.75	1.79	0.072	1,815.071	0.00	1.79	106.35
491.80	1.81	0.074	1,845.162	0.00	1.81	109.42
491.85	1.84	0.076	1,875.500	0.00	1.84	112.54
491.90	1.86	0.078	1,906.086	0.00	1.86	115.72
491.95	1.88	0.081	1,936.919	0.00	1.88	118.94
492.00	1.90	0.083	1,968.000	0.00	1.90	122.22
492.05	1.93	0.085	1,998.446	0.00	1.93	125.55
492.10	1.95	0.087	2,029.125	0.00	1.95	128.93

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Flooded Condiitons 2 Year

Return Event: 2 years
Storm Event:

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
492.15	1.97	0.090	2,060.039	0.00	1.97	132.36
492.20	1.99	0.092	2,091.186	0.00	1.99	135.84
492.25	2.01	0.095	2,122.566	0.00	2.01	139.37
492.30	2.03	0.097	2,154.181	0.00	2.03	142.95
492.35	2.05	0.100	2,186.029	0.00	2.05	146.59
492.40	2.07	0.102	2,218.110	0.00	2.07	150.28
492.45	2.09	0.105	2,250.426	0.00	2.09	154.02
492.50	2.11	0.107	2,282.975	0.00	2.11	157.82
492.55	2.13	0.110	2,315.758	0.00	2.13	161.67
492.60	2.15	0.113	2,348.774	0.00	2.15	165.58
492.65	2.59	0.115	2,382.025	0.00	2.59	169.96
492.70	3.38	0.118	2,415.509	0.00	3.38	174.75
492.75	4.40	0.121	2,449.226	0.00	4.40	179.83
492.80	5.58	0.124	2,483.178	0.00	5.58	185.11
492.85	6.87	0.127	2,517.363	0.00	6.87	190.57
492.90	8.27	0.129	2,551.781	0.00	8.27	196.19
492.95	9.73	0.132	2,586.434	0.00	9.73	201.94
493.00	11.10	0.135	2,621.320	0.00	11.10	207.65
493.05	12.44	0.138	2,655.993	0.00	12.44	213.38
493.10	13.43	0.141	2,690.894	0.00	13.43	218.83
493.15	13.50	0.145	2,726.023	0.00	13.50	223.41
493.20	13.57	0.148	2,761.380	0.00	13.57	228.05
493.25	13.63	0.151	2,796.964	0.00	13.63	232.75
493.30	13.69	0.154	2,832.777	0.00	13.69	237.50
493.35	13.76	0.157	2,868.817	0.00	13.76	242.32
493.40	13.82	0.161	2,905.085	0.00	13.82	247.19
493.45	13.89	0.164	2,941.581	0.00	13.89	252.13
493.50	13.95	0.167	2,978.304	0.00	13.95	257.13
493.55	14.01	0.171	3,015.256	0.00	14.01	262.18
493.60	14.08	0.174	3,052.435	0.00	14.08	267.30
493.65	14.14	0.178	3,089.842	0.00	14.14	272.48
493.70	14.20	0.181	3,127.477	0.00	14.20	277.73
493.75	14.26	0.185	3,165.339	0.00	14.26	283.03
493.80	14.32	0.189	3,203.430	0.00	14.32	288.40
493.85	14.38	0.192	3,241.748	0.00	14.38	293.83
493.90	14.44	0.196	3,280.294	0.00	14.44	299.33
493.95	14.50	0.200	3,319.068	0.00	14.50	304.89
494.00	14.57	0.204	3,358.070	0.00	14.57	310.51

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Post-Development 2 year

Return Event: 2 years
Storm Event:

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	488.50 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.00 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.00 ft³/s
Time Increment	1.000 min

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
488.50	0.00	0.000	38.000	0.00	0.00	0.00
488.55	0.01	0.000	61.844	0.00	0.01	0.09
488.60	0.02	0.000	91.466	0.00	0.02	0.23
488.65	0.04	0.000	126.866	0.00	0.04	0.43
488.70	0.07	0.000	168.044	0.00	0.07	0.70
488.75	0.09	0.001	215.000	0.00	0.09	1.05
488.80	0.12	0.001	262.084	0.00	0.12	1.47
488.85	0.16	0.001	313.826	0.00	0.16	1.99
488.90	0.19	0.002	370.226	0.00	0.19	2.59
488.95	0.23	0.002	431.284	0.00	0.23	3.29
489.00	0.30	0.003	497.000	0.00	0.30	4.14
489.05	0.33	0.003	514.291	0.00	0.33	5.01
489.10	0.36	0.004	531.878	0.00	0.36	5.91
489.15	0.38	0.004	549.760	0.00	0.38	6.84
489.20	0.40	0.005	567.939	0.00	0.40	7.79
489.25	0.43	0.006	586.412	0.00	0.43	8.77
489.30	0.45	0.006	605.182	0.00	0.45	9.79
489.35	0.47	0.007	624.247	0.00	0.47	10.83
489.40	0.48	0.008	643.608	0.00	0.48	11.91
489.45	0.50	0.009	663.264	0.00	0.50	13.02
489.50	0.52	0.009	683.217	0.00	0.52	14.15
489.55	0.54	0.010	703.464	0.00	0.54	15.33
489.60	0.55	0.011	724.008	0.00	0.55	16.53
489.65	0.57	0.012	744.847	0.00	0.57	17.77
489.70	0.59	0.013	765.982	0.00	0.59	19.05
489.75	0.60	0.014	787.412	0.00	0.60	20.36
489.80	0.62	0.015	809.139	0.00	0.62	21.70
489.85	0.63	0.015	831.160	0.00	0.63	23.09
489.90	0.65	0.016	853.478	0.00	0.65	24.50
489.95	0.66	0.017	876.091	0.00	0.66	25.96

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Post-Development 2 year

Return Event: 2 years
Storm Event:

Elevation (ft)	Outflow (ft^3/s)	Storage (ac-ft)	Area (ft^2)	Infiltration (ft^3/s)	Flow (Total) (ft^3/s)	2S/t + O (ft^3/s)
490.00	0.67	0.018	899.000	0.00	0.67	27.45
490.05	0.69	0.019	921.141	0.00	0.69	28.98
490.10	0.70	0.021	943.552	0.00	0.70	30.55
490.15	0.71	0.022	966.232	0.00	0.71	32.15
490.20	0.72	0.023	989.181	0.00	0.72	33.79
490.25	0.74	0.024	1,012.399	0.00	0.74	35.47
490.30	0.75	0.025	1,035.887	0.00	0.75	37.19
490.35	0.76	0.026	1,059.645	0.00	0.76	38.95
490.40	0.79	0.028	1,083.671	0.00	0.79	40.76
490.45	0.82	0.029	1,107.967	0.00	0.82	42.63
490.50	0.87	0.030	1,132.533	0.00	0.87	44.54
490.55	0.92	0.031	1,157.367	0.00	0.92	46.50
490.60	0.98	0.033	1,182.471	0.00	0.98	48.50
490.65	1.04	0.034	1,207.845	0.00	1.04	50.56
490.70	1.13	0.036	1,233.487	0.00	1.13	52.68
490.75	1.17	0.037	1,259.399	0.00	1.17	54.80
490.80	1.22	0.038	1,285.581	0.00	1.22	56.97
490.85	1.26	0.040	1,312.032	0.00	1.26	59.18
490.90	1.30	0.041	1,338.752	0.00	1.30	61.42
490.95	1.33	0.043	1,365.741	0.00	1.33	63.71
491.00	1.37	0.045	1,393.000	0.00	1.37	66.05
491.05	1.40	0.046	1,419.396	0.00	1.40	68.43
491.10	1.44	0.048	1,446.040	0.00	1.44	70.85
491.15	1.47	0.049	1,472.932	0.00	1.47	73.31
491.20	1.50	0.051	1,500.072	0.00	1.50	75.82
491.25	1.53	0.053	1,527.459	0.00	1.53	78.37
491.30	1.56	0.055	1,555.094	0.00	1.56	80.97
491.35	1.58	0.056	1,582.977	0.00	1.58	83.61
491.40	1.61	0.058	1,611.108	0.00	1.61	86.30
491.45	1.64	0.060	1,639.486	0.00	1.64	89.04
491.50	1.66	0.062	1,668.112	0.00	1.66	91.82
491.55	1.69	0.064	1,696.986	0.00	1.69	94.65
491.60	1.72	0.066	1,726.108	0.00	1.72	97.53
491.65	1.74	0.068	1,755.477	0.00	1.74	100.45
491.70	1.76	0.070	1,785.094	0.00	1.76	103.43
491.75	1.79	0.072	1,814.959	0.00	1.79	106.45
491.80	1.81	0.074	1,845.072	0.00	1.81	109.52
491.85	1.84	0.076	1,875.432	0.00	1.84	112.65
491.90	1.86	0.078	1,906.040	0.00	1.86	115.82
491.95	1.88	0.081	1,936.896	0.00	1.88	119.05
492.00	1.90	0.083	1,968.000	0.00	1.90	122.32
492.05	1.93	0.085	1,998.432	0.00	1.93	125.65
492.10	1.95	0.088	2,029.097	0.00	1.95	129.03
492.15	1.97	0.090	2,059.996	0.00	1.97	132.46
492.20	1.99	0.092	2,091.128	0.00	1.99	135.94

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Post-Development 2 year

Return Event: 2 years
Storm Event:

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
492.25	2.01	0.095	2,122.494	0.00	2.01	139.47
492.30	2.03	0.097	2,154.094	0.00	2.03	143.05
492.35	2.05	0.100	2,185.926	0.00	2.05	146.69
492.40	2.07	0.102	2,217.993	0.00	2.07	150.38
492.45	2.09	0.105	2,250.292	0.00	2.09	154.13
492.50	2.11	0.107	2,282.826	0.00	2.11	157.92
492.55	2.13	0.110	2,315.592	0.00	2.13	161.78
492.60	2.15	0.113	2,348.593	0.00	2.15	165.68
492.65	2.59	0.115	2,381.826	0.00	2.59	170.06
492.70	3.38	0.118	2,415.294	0.00	3.38	174.85
492.75	4.40	0.121	2,448.994	0.00	4.40	179.92
492.80	5.60	0.124	2,482.928	0.00	5.60	185.23
492.85	6.96	0.127	2,517.096	0.00	6.96	190.76
492.90	8.46	0.129	2,551.497	0.00	8.46	196.48
492.95	10.05	0.132	2,586.132	0.00	10.05	202.35
493.00	11.68	0.135	2,621.000	0.00	11.68	208.33
493.05	13.37	0.138	2,655.684	0.00	13.37	214.41
493.10	14.92	0.142	2,690.596	0.00	14.92	220.42
493.15	16.39	0.145	2,725.736	0.00	16.39	226.40
493.20	17.23	0.148	2,761.104	0.00	17.23	231.81
493.25	17.28	0.151	2,796.701	0.00	17.28	236.50
493.30	17.33	0.154	2,832.525	0.00	17.33	241.24
493.35	17.38	0.157	2,868.577	0.00	17.38	246.04
493.40	17.43	0.161	2,904.857	0.00	17.43	250.90
493.45	17.48	0.164	2,941.365	0.00	17.48	255.82
493.50	17.53	0.168	2,978.101	0.00	17.53	260.80
493.55	17.58	0.171	3,015.065	0.00	17.58	265.85
493.60	17.63	0.174	3,052.257	0.00	17.63	270.95
493.65	17.68	0.178	3,089.677	0.00	17.68	276.12
493.70	17.73	0.182	3,127.325	0.00	17.73	281.35
493.75	17.78	0.185	3,165.201	0.00	17.78	286.65
493.80	17.83	0.189	3,203.304	0.00	17.83	292.00
493.85	17.88	0.193	3,241.636	0.00	17.88	297.42
493.90	17.93	0.196	3,280.196	0.00	17.93	302.91
493.95	17.98	0.200	3,318.984	0.00	17.98	308.45
494.00	18.03	0.204	3,358.000	0.00	18.03	314.07

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Flooded 15 Year

Return Event: 15 years
Storm Event:

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	488.40 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.00 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.00 ft³/s
Time Increment	1.000 min

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
488.40	0.00	0.000	0.000	0.00	0.00	0.00
488.45	0.00	0.000	4.387	0.00	0.00	0.00
488.50	0.00	0.000	17.549	0.00	0.00	0.02
488.55	0.01	0.000	39.484	0.00	0.01	0.07
488.60	0.02	0.000	70.194	0.00	0.02	0.18
488.65	0.04	0.000	109.679	0.00	0.04	0.35
488.70	0.07	0.000	157.937	0.00	0.07	0.59
488.75	0.09	0.001	214.970	0.00	0.09	0.93
488.80	0.12	0.001	262.083	0.00	0.12	1.36
488.85	0.16	0.001	313.861	0.00	0.16	1.87
488.90	0.19	0.002	370.303	0.00	0.19	2.47
488.95	0.23	0.002	431.409	0.00	0.23	3.18
489.00	0.30	0.003	497.180	0.00	0.30	4.02
489.05	0.33	0.003	514.462	0.00	0.33	4.89
489.10	0.36	0.004	532.039	0.00	0.36	5.79
489.15	0.38	0.004	549.912	0.00	0.38	6.72
489.20	0.40	0.005	568.080	0.00	0.40	7.67
489.25	0.43	0.006	586.543	0.00	0.43	8.66
489.30	0.45	0.006	605.301	0.00	0.45	9.67
489.35	0.47	0.007	624.355	0.00	0.47	10.72
489.40	0.49	0.008	643.704	0.00	0.49	11.79
489.45	0.50	0.009	663.348	0.00	0.50	12.90
489.50	0.52	0.009	683.287	0.00	0.52	14.04
489.55	0.54	0.010	703.522	0.00	0.54	15.21
489.60	0.55	0.011	724.052	0.00	0.55	16.42
489.65	0.57	0.012	744.877	0.00	0.57	17.66
489.70	0.57	0.013	765.997	0.00	0.57	18.92
489.75	0.57	0.014	787.413	0.00	0.57	20.21
489.80	0.62	0.014	809.124	0.00	0.62	21.59
489.85	0.63	0.015	831.130	0.00	0.63	22.97

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Flooded 15 Year

Return Event: 15 years
Storm Event:

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
489.90	0.63	0.016	853.431	0.00	0.63	24.37
489.95	0.66	0.017	876.028	0.00	0.66	25.84
490.00	0.67	0.018	898.920	0.00	0.67	27.34
490.05	0.69	0.019	921.080	0.00	0.69	28.87
490.10	0.69	0.020	943.510	0.00	0.69	30.42
490.15	0.69	0.022	966.210	0.00	0.69	32.01
490.20	0.72	0.023	989.179	0.00	0.72	33.68
490.25	0.74	0.024	1,012.419	0.00	0.74	35.36
490.30	0.75	0.025	1,035.928	0.00	0.75	37.08
490.35	0.75	0.026	1,059.707	0.00	0.75	38.82
490.40	0.79	0.027	1,083.756	0.00	0.79	40.65
490.45	0.82	0.029	1,108.075	0.00	0.82	42.51
490.50	0.87	0.030	1,132.664	0.00	0.87	44.42
490.55	0.92	0.031	1,157.522	0.00	0.92	46.38
490.60	0.98	0.033	1,182.650	0.00	0.98	48.39
490.65	1.04	0.034	1,208.048	0.00	1.04	50.44
490.70	1.13	0.035	1,233.716	0.00	1.13	52.57
490.75	1.17	0.037	1,259.654	0.00	1.17	54.69
490.80	1.22	0.038	1,285.861	0.00	1.22	56.86
490.85	1.25	0.040	1,312.339	0.00	1.25	59.06
490.90	1.30	0.041	1,339.086	0.00	1.30	61.31
490.95	1.33	0.043	1,366.103	0.00	1.33	63.60
491.00	1.37	0.044	1,393.390	0.00	1.37	65.94
491.05	1.40	0.046	1,419.770	0.00	1.40	68.32
491.10	1.44	0.048	1,446.398	0.00	1.44	70.74
491.15	1.47	0.049	1,473.273	0.00	1.47	73.20
491.20	1.50	0.051	1,500.396	0.00	1.50	75.71
491.25	1.53	0.053	1,527.766	0.00	1.53	78.26
491.30	1.56	0.055	1,555.383	0.00	1.56	80.86
491.35	1.58	0.056	1,583.247	0.00	1.58	83.50
491.40	1.61	0.058	1,611.359	0.00	1.61	86.19
491.45	1.64	0.060	1,639.719	0.00	1.64	88.93
491.50	1.66	0.062	1,668.326	0.00	1.66	91.71
491.55	1.69	0.064	1,697.180	0.00	1.69	94.54
491.60	1.72	0.066	1,726.281	0.00	1.72	97.42
491.65	1.74	0.068	1,755.630	0.00	1.74	100.35
491.70	1.77	0.070	1,785.227	0.00	1.77	103.32
491.75	1.79	0.072	1,815.071	0.00	1.79	106.35
491.80	1.81	0.074	1,845.162	0.00	1.81	109.42
491.85	1.84	0.076	1,875.500	0.00	1.84	112.54
491.90	1.86	0.078	1,906.086	0.00	1.86	115.72
491.95	1.88	0.081	1,936.919	0.00	1.88	118.94
492.00	1.90	0.083	1,968.000	0.00	1.90	122.22
492.05	1.93	0.085	1,998.446	0.00	1.93	125.55
492.10	1.95	0.087	2,029.125	0.00	1.95	128.93

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Flooded 15 Year

Return Event: 15 years
Storm Event:

Elevation (ft)	Outflow (ft^3/s)	Storage (ac-ft)	Area (ft^2)	Infiltration (ft^3/s)	Flow (Total) (ft^3/s)	2S/t + O (ft^3/s)
492.15	1.97	0.090	2,060.039	0.00	1.97	132.36
492.20	1.99	0.092	2,091.186	0.00	1.99	135.84
492.25	2.01	0.095	2,122.566	0.00	2.01	139.37
492.30	2.03	0.097	2,154.181	0.00	2.03	142.95
492.35	2.05	0.100	2,186.029	0.00	2.05	146.59
492.40	2.07	0.102	2,218.110	0.00	2.07	150.28
492.45	2.09	0.105	2,250.426	0.00	2.09	154.02
492.50	2.11	0.107	2,282.975	0.00	2.11	157.82
492.55	2.13	0.110	2,315.758	0.00	2.13	161.67
492.60	2.15	0.113	2,348.774	0.00	2.15	165.58
492.65	2.59	0.115	2,382.025	0.00	2.59	169.96
492.70	3.38	0.118	2,415.509	0.00	3.38	174.75
492.75	4.40	0.121	2,449.226	0.00	4.40	179.83
492.80	5.58	0.124	2,483.178	0.00	5.58	185.11
492.85	6.87	0.127	2,517.363	0.00	6.87	190.57
492.90	8.27	0.129	2,551.781	0.00	8.27	196.19
492.95	9.73	0.132	2,586.434	0.00	9.73	201.94
493.00	11.10	0.135	2,621.320	0.00	11.10	207.65
493.05	12.44	0.138	2,655.993	0.00	12.44	213.38
493.10	13.43	0.141	2,690.894	0.00	13.43	218.83
493.15	13.50	0.145	2,726.023	0.00	13.50	223.41
493.20	13.57	0.148	2,761.380	0.00	13.57	228.05
493.25	13.63	0.151	2,796.964	0.00	13.63	232.75
493.30	13.69	0.154	2,832.777	0.00	13.69	237.50
493.35	13.76	0.157	2,868.817	0.00	13.76	242.32
493.40	13.82	0.161	2,905.085	0.00	13.82	247.19
493.45	13.89	0.164	2,941.581	0.00	13.89	252.13
493.50	13.95	0.167	2,978.304	0.00	13.95	257.13
493.55	14.01	0.171	3,015.256	0.00	14.01	262.18
493.60	14.08	0.174	3,052.435	0.00	14.08	267.30
493.65	14.14	0.178	3,089.842	0.00	14.14	272.48
493.70	14.20	0.181	3,127.477	0.00	14.20	277.73
493.75	14.26	0.185	3,165.339	0.00	14.26	283.03
493.80	14.32	0.189	3,203.430	0.00	14.32	288.40
493.85	14.38	0.192	3,241.748	0.00	14.38	293.83
493.90	14.44	0.196	3,280.294	0.00	14.44	299.33
493.95	14.50	0.200	3,319.068	0.00	14.50	304.89
494.00	14.57	0.204	3,358.070	0.00	14.57	310.51

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Post-Development 15 year

Return Event: 15 years
Storm Event:

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	488.50 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.00 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.00 ft³/s
Time Increment	1.000 min

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
488.50	0.00	0.000	38.000	0.00	0.00	0.00
488.55	0.01	0.000	61.844	0.00	0.01	0.09
488.60	0.02	0.000	91.466	0.00	0.02	0.23
488.65	0.04	0.000	126.866	0.00	0.04	0.43
488.70	0.07	0.000	168.044	0.00	0.07	0.70
488.75	0.09	0.001	215.000	0.00	0.09	1.05
488.80	0.12	0.001	262.084	0.00	0.12	1.47
488.85	0.16	0.001	313.826	0.00	0.16	1.99
488.90	0.19	0.002	370.226	0.00	0.19	2.59
488.95	0.23	0.002	431.284	0.00	0.23	3.29
489.00	0.30	0.003	497.000	0.00	0.30	4.14
489.05	0.33	0.003	514.291	0.00	0.33	5.01
489.10	0.36	0.004	531.878	0.00	0.36	5.91
489.15	0.38	0.004	549.760	0.00	0.38	6.84
489.20	0.40	0.005	567.939	0.00	0.40	7.79
489.25	0.43	0.006	586.412	0.00	0.43	8.77
489.30	0.45	0.006	605.182	0.00	0.45	9.79
489.35	0.47	0.007	624.247	0.00	0.47	10.83
489.40	0.48	0.008	643.608	0.00	0.48	11.91
489.45	0.50	0.009	663.264	0.00	0.50	13.02
489.50	0.52	0.009	683.217	0.00	0.52	14.15
489.55	0.54	0.010	703.464	0.00	0.54	15.33
489.60	0.55	0.011	724.008	0.00	0.55	16.53
489.65	0.57	0.012	744.847	0.00	0.57	17.77
489.70	0.59	0.013	765.982	0.00	0.59	19.05
489.75	0.60	0.014	787.412	0.00	0.60	20.36
489.80	0.62	0.015	809.139	0.00	0.62	21.70
489.85	0.63	0.015	831.160	0.00	0.63	23.09
489.90	0.65	0.016	853.478	0.00	0.65	24.50
489.95	0.66	0.017	876.091	0.00	0.66	25.96

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Post-Development 15 year

Return Event: 15 years
Storm Event:

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
490.00	0.67	0.018	899.000	0.00	0.67	27.45
490.05	0.69	0.019	921.141	0.00	0.69	28.98
490.10	0.70	0.021	943.552	0.00	0.70	30.55
490.15	0.71	0.022	966.232	0.00	0.71	32.15
490.20	0.72	0.023	989.181	0.00	0.72	33.79
490.25	0.74	0.024	1,012.399	0.00	0.74	35.47
490.30	0.75	0.025	1,035.887	0.00	0.75	37.19
490.35	0.76	0.026	1,059.645	0.00	0.76	38.95
490.40	0.79	0.028	1,083.671	0.00	0.79	40.76
490.45	0.82	0.029	1,107.967	0.00	0.82	42.63
490.50	0.87	0.030	1,132.533	0.00	0.87	44.54
490.55	0.92	0.031	1,157.367	0.00	0.92	46.50
490.60	0.98	0.033	1,182.471	0.00	0.98	48.50
490.65	1.04	0.034	1,207.845	0.00	1.04	50.56
490.70	1.13	0.036	1,233.487	0.00	1.13	52.68
490.75	1.17	0.037	1,259.399	0.00	1.17	54.80
490.80	1.22	0.038	1,285.581	0.00	1.22	56.97
490.85	1.26	0.040	1,312.032	0.00	1.26	59.18
490.90	1.30	0.041	1,338.752	0.00	1.30	61.42
490.95	1.33	0.043	1,365.741	0.00	1.33	63.71
491.00	1.37	0.045	1,393.000	0.00	1.37	66.05
491.05	1.40	0.046	1,419.396	0.00	1.40	68.43
491.10	1.44	0.048	1,446.040	0.00	1.44	70.85
491.15	1.47	0.049	1,472.932	0.00	1.47	73.31
491.20	1.50	0.051	1,500.072	0.00	1.50	75.82
491.25	1.53	0.053	1,527.459	0.00	1.53	78.37
491.30	1.56	0.055	1,555.094	0.00	1.56	80.97
491.35	1.58	0.056	1,582.977	0.00	1.58	83.61
491.40	1.61	0.058	1,611.108	0.00	1.61	86.30
491.45	1.64	0.060	1,639.486	0.00	1.64	89.04
491.50	1.66	0.062	1,668.112	0.00	1.66	91.82
491.55	1.69	0.064	1,696.986	0.00	1.69	94.65
491.60	1.72	0.066	1,726.108	0.00	1.72	97.53
491.65	1.74	0.068	1,755.477	0.00	1.74	100.45
491.70	1.76	0.070	1,785.094	0.00	1.76	103.43
491.75	1.79	0.072	1,814.959	0.00	1.79	106.45
491.80	1.81	0.074	1,845.072	0.00	1.81	109.52
491.85	1.84	0.076	1,875.432	0.00	1.84	112.65
491.90	1.86	0.078	1,906.040	0.00	1.86	115.82
491.95	1.88	0.081	1,936.896	0.00	1.88	119.05
492.00	1.90	0.083	1,968.000	0.00	1.90	122.32
492.05	1.93	0.085	1,998.432	0.00	1.93	125.65
492.10	1.95	0.088	2,029.097	0.00	1.95	129.03
492.15	1.97	0.090	2,059.996	0.00	1.97	132.46
492.20	1.99	0.092	2,091.128	0.00	1.99	135.94

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Post-Development 15 year

Return Event: 15 years
Storm Event:

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
492.25	2.01	0.095	2,122.494	0.00	2.01	139.47
492.30	2.03	0.097	2,154.094	0.00	2.03	143.05
492.35	2.05	0.100	2,185.926	0.00	2.05	146.69
492.40	2.07	0.102	2,217.993	0.00	2.07	150.38
492.45	2.09	0.105	2,250.292	0.00	2.09	154.13
492.50	2.11	0.107	2,282.826	0.00	2.11	157.92
492.55	2.13	0.110	2,315.592	0.00	2.13	161.78
492.60	2.15	0.113	2,348.593	0.00	2.15	165.68
492.65	2.59	0.115	2,381.826	0.00	2.59	170.06
492.70	3.38	0.118	2,415.294	0.00	3.38	174.85
492.75	4.40	0.121	2,448.994	0.00	4.40	179.92
492.80	5.60	0.124	2,482.928	0.00	5.60	185.23
492.85	6.96	0.127	2,517.096	0.00	6.96	190.76
492.90	8.46	0.129	2,551.497	0.00	8.46	196.48
492.95	10.05	0.132	2,586.132	0.00	10.05	202.35
493.00	11.68	0.135	2,621.000	0.00	11.68	208.33
493.05	13.37	0.138	2,655.684	0.00	13.37	214.41
493.10	14.92	0.142	2,690.596	0.00	14.92	220.42
493.15	16.39	0.145	2,725.736	0.00	16.39	226.40
493.20	17.23	0.148	2,761.104	0.00	17.23	231.81
493.25	17.28	0.151	2,796.701	0.00	17.28	236.50
493.30	17.33	0.154	2,832.525	0.00	17.33	241.24
493.35	17.38	0.157	2,868.577	0.00	17.38	246.04
493.40	17.43	0.161	2,904.857	0.00	17.43	250.90
493.45	17.48	0.164	2,941.365	0.00	17.48	255.82
493.50	17.53	0.168	2,978.101	0.00	17.53	260.80
493.55	17.58	0.171	3,015.065	0.00	17.58	265.85
493.60	17.63	0.174	3,052.257	0.00	17.63	270.95
493.65	17.68	0.178	3,089.677	0.00	17.68	276.12
493.70	17.73	0.182	3,127.325	0.00	17.73	281.35
493.75	17.78	0.185	3,165.201	0.00	17.78	286.65
493.80	17.83	0.189	3,203.304	0.00	17.83	292.00
493.85	17.88	0.193	3,241.636	0.00	17.88	297.42
493.90	17.93	0.196	3,280.196	0.00	17.93	302.91
493.95	17.98	0.200	3,318.984	0.00	17.98	308.45
494.00	18.03	0.204	3,358.000	0.00	18.03	314.07

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Flooded 25 Year

Return Event: 25 years
Storm Event:

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	488.40 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.00 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.00 ft³/s
Time Increment	1.000 min

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
488.40	0.00	0.000	0.000	0.00	0.00	0.00
488.45	0.00	0.000	4.387	0.00	0.00	0.00
488.50	0.00	0.000	17.549	0.00	0.00	0.02
488.55	0.01	0.000	39.484	0.00	0.01	0.07
488.60	0.02	0.000	70.194	0.00	0.02	0.18
488.65	0.04	0.000	109.679	0.00	0.04	0.35
488.70	0.07	0.000	157.937	0.00	0.07	0.59
488.75	0.09	0.001	214.970	0.00	0.09	0.93
488.80	0.12	0.001	262.083	0.00	0.12	1.36
488.85	0.16	0.001	313.861	0.00	0.16	1.87
488.90	0.19	0.002	370.303	0.00	0.19	2.47
488.95	0.23	0.002	431.409	0.00	0.23	3.18
489.00	0.30	0.003	497.180	0.00	0.30	4.02
489.05	0.33	0.003	514.462	0.00	0.33	4.89
489.10	0.36	0.004	532.039	0.00	0.36	5.79
489.15	0.38	0.004	549.912	0.00	0.38	6.72
489.20	0.40	0.005	568.080	0.00	0.40	7.67
489.25	0.43	0.006	586.543	0.00	0.43	8.66
489.30	0.45	0.006	605.301	0.00	0.45	9.67
489.35	0.47	0.007	624.355	0.00	0.47	10.72
489.40	0.49	0.008	643.704	0.00	0.49	11.79
489.45	0.50	0.009	663.348	0.00	0.50	12.90
489.50	0.52	0.009	683.287	0.00	0.52	14.04
489.55	0.54	0.010	703.522	0.00	0.54	15.21
489.60	0.55	0.011	724.052	0.00	0.55	16.42
489.65	0.57	0.012	744.877	0.00	0.57	17.66
489.70	0.57	0.013	765.997	0.00	0.57	18.92
489.75	0.57	0.014	787.413	0.00	0.57	20.21
489.80	0.62	0.014	809.124	0.00	0.62	21.59
489.85	0.63	0.015	831.130	0.00	0.63	22.97

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Flooded 25 Year

Return Event: 25 years
Storm Event:

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
489.90	0.63	0.016	853.431	0.00	0.63	24.37
489.95	0.66	0.017	876.028	0.00	0.66	25.84
490.00	0.67	0.018	898.920	0.00	0.67	27.34
490.05	0.69	0.019	921.080	0.00	0.69	28.87
490.10	0.69	0.020	943.510	0.00	0.69	30.42
490.15	0.69	0.022	966.210	0.00	0.69	32.01
490.20	0.72	0.023	989.179	0.00	0.72	33.68
490.25	0.74	0.024	1,012.419	0.00	0.74	35.36
490.30	0.75	0.025	1,035.928	0.00	0.75	37.08
490.35	0.75	0.026	1,059.707	0.00	0.75	38.82
490.40	0.79	0.027	1,083.756	0.00	0.79	40.65
490.45	0.82	0.029	1,108.075	0.00	0.82	42.51
490.50	0.87	0.030	1,132.664	0.00	0.87	44.42
490.55	0.92	0.031	1,157.522	0.00	0.92	46.38
490.60	0.98	0.033	1,182.650	0.00	0.98	48.39
490.65	1.04	0.034	1,208.048	0.00	1.04	50.44
490.70	1.13	0.035	1,233.716	0.00	1.13	52.57
490.75	1.17	0.037	1,259.654	0.00	1.17	54.69
490.80	1.22	0.038	1,285.861	0.00	1.22	56.86
490.85	1.25	0.040	1,312.339	0.00	1.25	59.06
490.90	1.30	0.041	1,339.086	0.00	1.30	61.31
490.95	1.33	0.043	1,366.103	0.00	1.33	63.60
491.00	1.37	0.044	1,393.390	0.00	1.37	65.94
491.05	1.40	0.046	1,419.770	0.00	1.40	68.32
491.10	1.44	0.048	1,446.398	0.00	1.44	70.74
491.15	1.47	0.049	1,473.273	0.00	1.47	73.20
491.20	1.50	0.051	1,500.396	0.00	1.50	75.71
491.25	1.53	0.053	1,527.766	0.00	1.53	78.26
491.30	1.56	0.055	1,555.383	0.00	1.56	80.86
491.35	1.58	0.056	1,583.247	0.00	1.58	83.50
491.40	1.61	0.058	1,611.359	0.00	1.61	86.19
491.45	1.64	0.060	1,639.719	0.00	1.64	88.93
491.50	1.66	0.062	1,668.326	0.00	1.66	91.71
491.55	1.69	0.064	1,697.180	0.00	1.69	94.54
491.60	1.72	0.066	1,726.281	0.00	1.72	97.42
491.65	1.74	0.068	1,755.630	0.00	1.74	100.35
491.70	1.77	0.070	1,785.227	0.00	1.77	103.32
491.75	1.79	0.072	1,815.071	0.00	1.79	106.35
491.80	1.81	0.074	1,845.162	0.00	1.81	109.42
491.85	1.84	0.076	1,875.500	0.00	1.84	112.54
491.90	1.86	0.078	1,906.086	0.00	1.86	115.72
491.95	1.88	0.081	1,936.919	0.00	1.88	118.94
492.00	1.90	0.083	1,968.000	0.00	1.90	122.22
492.05	1.93	0.085	1,998.446	0.00	1.93	125.55
492.10	1.95	0.087	2,029.125	0.00	1.95	128.93

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Flooded 25 Year

Return Event: 25 years
Storm Event:

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
492.15	1.97	0.090	2,060.039	0.00	1.97	132.36
492.20	1.99	0.092	2,091.186	0.00	1.99	135.84
492.25	2.01	0.095	2,122.566	0.00	2.01	139.37
492.30	2.03	0.097	2,154.181	0.00	2.03	142.95
492.35	2.05	0.100	2,186.029	0.00	2.05	146.59
492.40	2.07	0.102	2,218.110	0.00	2.07	150.28
492.45	2.09	0.105	2,250.426	0.00	2.09	154.02
492.50	2.11	0.107	2,282.975	0.00	2.11	157.82
492.55	2.13	0.110	2,315.758	0.00	2.13	161.67
492.60	2.15	0.113	2,348.774	0.00	2.15	165.58
492.65	2.59	0.115	2,382.025	0.00	2.59	169.96
492.70	3.38	0.118	2,415.509	0.00	3.38	174.75
492.75	4.40	0.121	2,449.226	0.00	4.40	179.83
492.80	5.58	0.124	2,483.178	0.00	5.58	185.11
492.85	6.87	0.127	2,517.363	0.00	6.87	190.57
492.90	8.27	0.129	2,551.781	0.00	8.27	196.19
492.95	9.73	0.132	2,586.434	0.00	9.73	201.94
493.00	11.10	0.135	2,621.320	0.00	11.10	207.65
493.05	12.44	0.138	2,655.993	0.00	12.44	213.38
493.10	13.43	0.141	2,690.894	0.00	13.43	218.83
493.15	13.50	0.145	2,726.023	0.00	13.50	223.41
493.20	13.57	0.148	2,761.380	0.00	13.57	228.05
493.25	13.63	0.151	2,796.964	0.00	13.63	232.75
493.30	13.69	0.154	2,832.777	0.00	13.69	237.50
493.35	13.76	0.157	2,868.817	0.00	13.76	242.32
493.40	13.82	0.161	2,905.085	0.00	13.82	247.19
493.45	13.89	0.164	2,941.581	0.00	13.89	252.13
493.50	13.95	0.167	2,978.304	0.00	13.95	257.13
493.55	14.01	0.171	3,015.256	0.00	14.01	262.18
493.60	14.08	0.174	3,052.435	0.00	14.08	267.30
493.65	14.14	0.178	3,089.842	0.00	14.14	272.48
493.70	14.20	0.181	3,127.477	0.00	14.20	277.73
493.75	14.26	0.185	3,165.339	0.00	14.26	283.03
493.80	14.32	0.189	3,203.430	0.00	14.32	288.40
493.85	14.38	0.192	3,241.748	0.00	14.38	293.83
493.90	14.44	0.196	3,280.294	0.00	14.44	299.33
493.95	14.50	0.200	3,319.068	0.00	14.50	304.89
494.00	14.57	0.204	3,358.070	0.00	14.57	310.51

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Post-Development 25 year

Return Event: 25 years
Storm Event:

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	488.50 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.00 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.00 ft³/s
Time Increment	1.000 min

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
488.50	0.00	0.000	38.000	0.00	0.00	0.00
488.55	0.01	0.000	61.844	0.00	0.01	0.09
488.60	0.02	0.000	91.466	0.00	0.02	0.23
488.65	0.04	0.000	126.866	0.00	0.04	0.43
488.70	0.07	0.000	168.044	0.00	0.07	0.70
488.75	0.09	0.001	215.000	0.00	0.09	1.05
488.80	0.12	0.001	262.084	0.00	0.12	1.47
488.85	0.16	0.001	313.826	0.00	0.16	1.99
488.90	0.19	0.002	370.226	0.00	0.19	2.59
488.95	0.23	0.002	431.284	0.00	0.23	3.29
489.00	0.30	0.003	497.000	0.00	0.30	4.14
489.05	0.33	0.003	514.291	0.00	0.33	5.01
489.10	0.36	0.004	531.878	0.00	0.36	5.91
489.15	0.38	0.004	549.760	0.00	0.38	6.84
489.20	0.40	0.005	567.939	0.00	0.40	7.79
489.25	0.43	0.006	586.412	0.00	0.43	8.77
489.30	0.45	0.006	605.182	0.00	0.45	9.79
489.35	0.47	0.007	624.247	0.00	0.47	10.83
489.40	0.48	0.008	643.608	0.00	0.48	11.91
489.45	0.50	0.009	663.264	0.00	0.50	13.02
489.50	0.52	0.009	683.217	0.00	0.52	14.15
489.55	0.54	0.010	703.464	0.00	0.54	15.33
489.60	0.55	0.011	724.008	0.00	0.55	16.53
489.65	0.57	0.012	744.847	0.00	0.57	17.77
489.70	0.59	0.013	765.982	0.00	0.59	19.05
489.75	0.60	0.014	787.412	0.00	0.60	20.36
489.80	0.62	0.015	809.139	0.00	0.62	21.70
489.85	0.63	0.015	831.160	0.00	0.63	23.09
489.90	0.65	0.016	853.478	0.00	0.65	24.50
489.95	0.66	0.017	876.091	0.00	0.66	25.96

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Post-Development 25 year

Return Event: 25 years
Storm Event:

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
490.00	0.67	0.018	899.000	0.00	0.67	27.45
490.05	0.69	0.019	921.141	0.00	0.69	28.98
490.10	0.70	0.021	943.552	0.00	0.70	30.55
490.15	0.71	0.022	966.232	0.00	0.71	32.15
490.20	0.72	0.023	989.181	0.00	0.72	33.79
490.25	0.74	0.024	1,012.399	0.00	0.74	35.47
490.30	0.75	0.025	1,035.887	0.00	0.75	37.19
490.35	0.76	0.026	1,059.645	0.00	0.76	38.95
490.40	0.79	0.028	1,083.671	0.00	0.79	40.76
490.45	0.82	0.029	1,107.967	0.00	0.82	42.63
490.50	0.87	0.030	1,132.533	0.00	0.87	44.54
490.55	0.92	0.031	1,157.367	0.00	0.92	46.50
490.60	0.98	0.033	1,182.471	0.00	0.98	48.50
490.65	1.04	0.034	1,207.845	0.00	1.04	50.56
490.70	1.13	0.036	1,233.487	0.00	1.13	52.68
490.75	1.17	0.037	1,259.399	0.00	1.17	54.80
490.80	1.22	0.038	1,285.581	0.00	1.22	56.97
490.85	1.26	0.040	1,312.032	0.00	1.26	59.18
490.90	1.30	0.041	1,338.752	0.00	1.30	61.42
490.95	1.33	0.043	1,365.741	0.00	1.33	63.71
491.00	1.37	0.045	1,393.000	0.00	1.37	66.05
491.05	1.40	0.046	1,419.396	0.00	1.40	68.43
491.10	1.44	0.048	1,446.040	0.00	1.44	70.85
491.15	1.47	0.049	1,472.932	0.00	1.47	73.31
491.20	1.50	0.051	1,500.072	0.00	1.50	75.82
491.25	1.53	0.053	1,527.459	0.00	1.53	78.37
491.30	1.56	0.055	1,555.094	0.00	1.56	80.97
491.35	1.58	0.056	1,582.977	0.00	1.58	83.61
491.40	1.61	0.058	1,611.108	0.00	1.61	86.30
491.45	1.64	0.060	1,639.486	0.00	1.64	89.04
491.50	1.66	0.062	1,668.112	0.00	1.66	91.82
491.55	1.69	0.064	1,696.986	0.00	1.69	94.65
491.60	1.72	0.066	1,726.108	0.00	1.72	97.53
491.65	1.74	0.068	1,755.477	0.00	1.74	100.45
491.70	1.76	0.070	1,785.094	0.00	1.76	103.43
491.75	1.79	0.072	1,814.959	0.00	1.79	106.45
491.80	1.81	0.074	1,845.072	0.00	1.81	109.52
491.85	1.84	0.076	1,875.432	0.00	1.84	112.65
491.90	1.86	0.078	1,906.040	0.00	1.86	115.82
491.95	1.88	0.081	1,936.896	0.00	1.88	119.05
492.00	1.90	0.083	1,968.000	0.00	1.90	122.32
492.05	1.93	0.085	1,998.432	0.00	1.93	125.65
492.10	1.95	0.088	2,029.097	0.00	1.95	129.03
492.15	1.97	0.090	2,059.996	0.00	1.97	132.46
492.20	1.99	0.092	2,091.128	0.00	1.99	135.94

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Post-Development 25 year

Return Event: 25 years
Storm Event:

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
492.25	2.01	0.095	2,122.494	0.00	2.01	139.47
492.30	2.03	0.097	2,154.094	0.00	2.03	143.05
492.35	2.05	0.100	2,185.926	0.00	2.05	146.69
492.40	2.07	0.102	2,217.993	0.00	2.07	150.38
492.45	2.09	0.105	2,250.292	0.00	2.09	154.13
492.50	2.11	0.107	2,282.826	0.00	2.11	157.92
492.55	2.13	0.110	2,315.592	0.00	2.13	161.78
492.60	2.15	0.113	2,348.593	0.00	2.15	165.68
492.65	2.59	0.115	2,381.826	0.00	2.59	170.06
492.70	3.38	0.118	2,415.294	0.00	3.38	174.85
492.75	4.40	0.121	2,448.994	0.00	4.40	179.92
492.80	5.60	0.124	2,482.928	0.00	5.60	185.23
492.85	6.96	0.127	2,517.096	0.00	6.96	190.76
492.90	8.46	0.129	2,551.497	0.00	8.46	196.48
492.95	10.05	0.132	2,586.132	0.00	10.05	202.35
493.00	11.68	0.135	2,621.000	0.00	11.68	208.33
493.05	13.37	0.138	2,655.684	0.00	13.37	214.41
493.10	14.92	0.142	2,690.596	0.00	14.92	220.42
493.15	16.39	0.145	2,725.736	0.00	16.39	226.40
493.20	17.23	0.148	2,761.104	0.00	17.23	231.81
493.25	17.28	0.151	2,796.701	0.00	17.28	236.50
493.30	17.33	0.154	2,832.525	0.00	17.33	241.24
493.35	17.38	0.157	2,868.577	0.00	17.38	246.04
493.40	17.43	0.161	2,904.857	0.00	17.43	250.90
493.45	17.48	0.164	2,941.365	0.00	17.48	255.82
493.50	17.53	0.168	2,978.101	0.00	17.53	260.80
493.55	17.58	0.171	3,015.065	0.00	17.58	265.85
493.60	17.63	0.174	3,052.257	0.00	17.63	270.95
493.65	17.68	0.178	3,089.677	0.00	17.68	276.12
493.70	17.73	0.182	3,127.325	0.00	17.73	281.35
493.75	17.78	0.185	3,165.201	0.00	17.78	286.65
493.80	17.83	0.189	3,203.304	0.00	17.83	292.00
493.85	17.88	0.193	3,241.636	0.00	17.88	297.42
493.90	17.93	0.196	3,280.196	0.00	17.93	302.91
493.95	17.98	0.200	3,318.984	0.00	17.98	308.45
494.00	18.03	0.204	3,358.000	0.00	18.03	314.07

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: 100 year LFB

Return Event: 100 years
Storm Event:

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	492.60 ft
Volume (Initial)	0.113 ac-ft
Flow (Initial Outlet)	0.00 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.00 ft³/s
Time Increment	1.000 min

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
488.40	0.00	0.000	0.000	0.00	0.00	0.00
488.45	0.00	0.000	4.387	0.00	0.00	0.00
488.50	0.00	0.000	17.549	0.00	0.00	0.02
488.55	0.00	0.000	39.484	0.00	0.00	0.07
488.60	0.00	0.000	70.194	0.00	0.00	0.16
488.65	0.00	0.000	109.679	0.00	0.00	0.30
488.70	0.00	0.000	157.937	0.00	0.00	0.53
488.75	0.00	0.001	214.970	0.00	0.00	0.84
488.80	0.00	0.001	262.083	0.00	0.00	1.23
488.85	0.00	0.001	313.861	0.00	0.00	1.71
488.90	0.00	0.002	370.303	0.00	0.00	2.28
488.95	0.00	0.002	431.409	0.00	0.00	2.95
489.00	0.00	0.003	497.180	0.00	0.00	3.72
489.05	0.00	0.003	514.462	0.00	0.00	4.57
489.10	0.00	0.004	532.039	0.00	0.00	5.44
489.15	0.00	0.004	549.912	0.00	0.00	6.34
489.20	0.00	0.005	568.080	0.00	0.00	7.27
489.25	0.00	0.006	586.543	0.00	0.00	8.23
489.30	0.00	0.006	605.301	0.00	0.00	9.23
489.35	0.00	0.007	624.355	0.00	0.00	10.25
489.40	0.00	0.008	643.704	0.00	0.00	11.31
489.45	0.00	0.009	663.348	0.00	0.00	12.40
489.50	0.00	0.009	683.287	0.00	0.00	13.52
489.55	0.00	0.010	703.522	0.00	0.00	14.67
489.60	0.00	0.011	724.052	0.00	0.00	15.86
489.65	0.00	0.012	744.877	0.00	0.00	17.09
489.70	0.00	0.013	765.997	0.00	0.00	18.35
489.75	0.00	0.014	787.413	0.00	0.00	19.64
489.80	0.00	0.014	809.124	0.00	0.00	20.97
489.85	0.00	0.015	831.130	0.00	0.00	22.34

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: 100 year LFB

Return Event: 100 years
Storm Event:

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
489.90	0.00	0.016	853.431	0.00	0.00	23.74
489.95	0.00	0.017	876.028	0.00	0.00	25.18
490.00	0.00	0.018	898.920	0.00	0.00	26.66
490.05	0.00	0.019	921.080	0.00	0.00	28.18
490.10	0.00	0.020	943.510	0.00	0.00	29.73
490.15	0.00	0.022	966.210	0.00	0.00	31.32
490.20	0.00	0.023	989.179	0.00	0.00	32.95
490.25	0.00	0.024	1,012.419	0.00	0.00	34.62
490.30	0.00	0.025	1,035.928	0.00	0.00	36.33
490.35	0.00	0.026	1,059.707	0.00	0.00	38.08
490.40	0.00	0.027	1,083.756	0.00	0.00	39.86
490.45	0.00	0.029	1,108.075	0.00	0.00	41.69
490.50	0.00	0.030	1,132.664	0.00	0.00	43.55
490.55	0.00	0.031	1,157.522	0.00	0.00	45.46
490.60	0.00	0.033	1,182.650	0.00	0.00	47.41
490.65	0.00	0.034	1,208.048	0.00	0.00	49.41
490.70	0.00	0.035	1,233.716	0.00	0.00	51.44
490.75	0.00	0.037	1,259.654	0.00	0.00	53.52
490.80	0.00	0.038	1,285.861	0.00	0.00	55.64
490.85	0.00	0.040	1,312.339	0.00	0.00	57.80
490.90	0.00	0.041	1,339.086	0.00	0.00	60.01
490.95	0.00	0.043	1,366.103	0.00	0.00	62.27
491.00	0.00	0.044	1,393.390	0.00	0.00	64.57
491.05	0.00	0.046	1,419.770	0.00	0.00	66.91
491.10	0.00	0.048	1,446.398	0.00	0.00	69.30
491.15	0.00	0.049	1,473.273	0.00	0.00	71.73
491.20	0.00	0.051	1,500.396	0.00	0.00	74.21
491.25	0.00	0.053	1,527.766	0.00	0.00	76.74
491.30	0.00	0.055	1,555.383	0.00	0.00	79.30
491.35	0.00	0.056	1,583.247	0.00	0.00	81.92
491.40	0.00	0.058	1,611.359	0.00	0.00	84.58
491.45	0.00	0.060	1,639.719	0.00	0.00	87.29
491.50	0.00	0.062	1,668.326	0.00	0.00	90.05
491.55	0.00	0.064	1,697.180	0.00	0.00	92.85
491.60	0.00	0.066	1,726.281	0.00	0.00	95.71
491.65	0.00	0.068	1,755.630	0.00	0.00	98.61
491.70	0.00	0.070	1,785.227	0.00	0.00	101.56
491.75	0.00	0.072	1,815.071	0.00	0.00	104.56
491.80	0.00	0.074	1,845.162	0.00	0.00	107.61
491.85	0.00	0.076	1,875.500	0.00	0.00	110.71
491.90	0.00	0.078	1,906.086	0.00	0.00	113.86
491.95	0.00	0.081	1,936.919	0.00	0.00	117.06
492.00	0.00	0.083	1,968.000	0.00	0.00	120.32
492.05	0.00	0.085	1,998.446	0.00	0.00	123.62
492.10	0.00	0.087	2,029.125	0.00	0.00	126.98

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: 100 year LFB

Return Event: 100 years
Storm Event:

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
492.15	0.00	0.090	2,060.039	0.00	0.00	130.39
492.20	0.00	0.092	2,091.186	0.00	0.00	133.84
492.25	0.00	0.095	2,122.566	0.00	0.00	137.36
492.30	0.00	0.097	2,154.181	0.00	0.00	140.92
492.35	0.00	0.100	2,186.029	0.00	0.00	144.54
492.40	0.00	0.102	2,218.110	0.00	0.00	148.21
492.45	0.00	0.105	2,250.426	0.00	0.00	151.93
492.50	0.00	0.107	2,282.975	0.00	0.00	155.71
492.55	0.00	0.110	2,315.758	0.00	0.00	159.54
492.60	0.00	0.113	2,348.774	0.00	0.00	163.43
492.65	0.42	0.115	2,382.025	0.00	0.42	167.79
492.70	1.19	0.118	2,415.509	0.00	1.19	172.56
492.75	2.19	0.121	2,449.226	0.00	2.19	177.61
492.80	3.37	0.124	2,483.178	0.00	3.37	182.90
492.85	4.71	0.127	2,517.363	0.00	4.71	188.41
492.90	6.19	0.129	2,551.781	0.00	6.19	194.12
492.95	7.81	0.132	2,586.434	0.00	7.81	200.01
493.00	9.54	0.135	2,621.320	0.00	9.54	206.08
493.05	11.38	0.138	2,655.993	0.00	11.38	212.32
493.10	13.33	0.141	2,690.894	0.00	13.33	218.73
493.15	15.38	0.145	2,726.023	0.00	15.38	225.29
493.20	17.23	0.148	2,761.380	0.00	17.23	231.72
493.25	17.28	0.151	2,796.964	0.00	17.28	236.40
493.30	17.33	0.154	2,832.777	0.00	17.33	241.14
493.35	17.38	0.157	2,868.817	0.00	17.38	245.94
493.40	17.43	0.161	2,905.085	0.00	17.43	250.80
493.45	17.48	0.164	2,941.581	0.00	17.48	255.73
493.50	17.53	0.167	2,978.304	0.00	17.53	260.71
493.55	17.58	0.171	3,015.256	0.00	17.58	265.76
493.60	17.63	0.174	3,052.435	0.00	17.63	270.86
493.65	17.68	0.178	3,089.842	0.00	17.68	276.03
493.70	17.73	0.181	3,127.477	0.00	17.73	281.26
493.75	17.78	0.185	3,165.339	0.00	17.78	286.55
493.80	17.83	0.189	3,203.430	0.00	17.83	291.91
493.85	17.88	0.192	3,241.748	0.00	17.88	297.33
493.90	17.93	0.196	3,280.294	0.00	17.93	302.81
493.95	17.98	0.200	3,319.068	0.00	17.98	308.36
494.00	18.03	0.204	3,358.070	0.00	18.03	313.98

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Flooded 100 Year

Return Event: 100 years
Storm Event:

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	488.40 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.00 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.00 ft³/s
Time Increment	1.000 min

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
488.40	0.00	0.000	0.000	0.00	0.00	0.00
488.45	0.00	0.000	4.387	0.00	0.00	0.00
488.50	0.00	0.000	17.549	0.00	0.00	0.02
488.55	0.01	0.000	39.484	0.00	0.01	0.07
488.60	0.02	0.000	70.194	0.00	0.02	0.18
488.65	0.04	0.000	109.679	0.00	0.04	0.35
488.70	0.07	0.000	157.937	0.00	0.07	0.59
488.75	0.09	0.001	214.970	0.00	0.09	0.93
488.80	0.12	0.001	262.083	0.00	0.12	1.36
488.85	0.16	0.001	313.861	0.00	0.16	1.87
488.90	0.19	0.002	370.303	0.00	0.19	2.47
488.95	0.23	0.002	431.409	0.00	0.23	3.18
489.00	0.30	0.003	497.180	0.00	0.30	4.02
489.05	0.33	0.003	514.462	0.00	0.33	4.89
489.10	0.36	0.004	532.039	0.00	0.36	5.79
489.15	0.38	0.004	549.912	0.00	0.38	6.72
489.20	0.40	0.005	568.080	0.00	0.40	7.67
489.25	0.43	0.006	586.543	0.00	0.43	8.66
489.30	0.45	0.006	605.301	0.00	0.45	9.67
489.35	0.47	0.007	624.355	0.00	0.47	10.72
489.40	0.49	0.008	643.704	0.00	0.49	11.79
489.45	0.50	0.009	663.348	0.00	0.50	12.90
489.50	0.52	0.009	683.287	0.00	0.52	14.04
489.55	0.54	0.010	703.522	0.00	0.54	15.21
489.60	0.55	0.011	724.052	0.00	0.55	16.42
489.65	0.57	0.012	744.877	0.00	0.57	17.66
489.70	0.57	0.013	765.997	0.00	0.57	18.92
489.75	0.57	0.014	787.413	0.00	0.57	20.21
489.80	0.62	0.014	809.124	0.00	0.62	21.59
489.85	0.63	0.015	831.130	0.00	0.63	22.97

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Flooded 100 Year

Return Event: 100 years
Storm Event:

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
489.90	0.63	0.016	853.431	0.00	0.63	24.37
489.95	0.66	0.017	876.028	0.00	0.66	25.84
490.00	0.67	0.018	898.920	0.00	0.67	27.34
490.05	0.69	0.019	921.080	0.00	0.69	28.87
490.10	0.69	0.020	943.510	0.00	0.69	30.42
490.15	0.69	0.022	966.210	0.00	0.69	32.01
490.20	0.72	0.023	989.179	0.00	0.72	33.68
490.25	0.74	0.024	1,012.419	0.00	0.74	35.36
490.30	0.75	0.025	1,035.928	0.00	0.75	37.08
490.35	0.75	0.026	1,059.707	0.00	0.75	38.82
490.40	0.79	0.027	1,083.756	0.00	0.79	40.65
490.45	0.82	0.029	1,108.075	0.00	0.82	42.51
490.50	0.87	0.030	1,132.664	0.00	0.87	44.42
490.55	0.92	0.031	1,157.522	0.00	0.92	46.38
490.60	0.98	0.033	1,182.650	0.00	0.98	48.39
490.65	1.04	0.034	1,208.048	0.00	1.04	50.44
490.70	1.13	0.035	1,233.716	0.00	1.13	52.57
490.75	1.17	0.037	1,259.654	0.00	1.17	54.69
490.80	1.22	0.038	1,285.861	0.00	1.22	56.86
490.85	1.25	0.040	1,312.339	0.00	1.25	59.06
490.90	1.30	0.041	1,339.086	0.00	1.30	61.31
490.95	1.33	0.043	1,366.103	0.00	1.33	63.60
491.00	1.37	0.044	1,393.390	0.00	1.37	65.94
491.05	1.40	0.046	1,419.770	0.00	1.40	68.32
491.10	1.44	0.048	1,446.398	0.00	1.44	70.74
491.15	1.47	0.049	1,473.273	0.00	1.47	73.20
491.20	1.50	0.051	1,500.396	0.00	1.50	75.71
491.25	1.53	0.053	1,527.766	0.00	1.53	78.26
491.30	1.56	0.055	1,555.383	0.00	1.56	80.86
491.35	1.58	0.056	1,583.247	0.00	1.58	83.50
491.40	1.61	0.058	1,611.359	0.00	1.61	86.19
491.45	1.64	0.060	1,639.719	0.00	1.64	88.93
491.50	1.66	0.062	1,668.326	0.00	1.66	91.71
491.55	1.69	0.064	1,697.180	0.00	1.69	94.54
491.60	1.72	0.066	1,726.281	0.00	1.72	97.42
491.65	1.74	0.068	1,755.630	0.00	1.74	100.35
491.70	1.77	0.070	1,785.227	0.00	1.77	103.32
491.75	1.79	0.072	1,815.071	0.00	1.79	106.35
491.80	1.81	0.074	1,845.162	0.00	1.81	109.42
491.85	1.84	0.076	1,875.500	0.00	1.84	112.54
491.90	1.86	0.078	1,906.086	0.00	1.86	115.72
491.95	1.88	0.081	1,936.919	0.00	1.88	118.94
492.00	1.90	0.083	1,968.000	0.00	1.90	122.22
492.05	1.93	0.085	1,998.446	0.00	1.93	125.55
492.10	1.95	0.087	2,029.125	0.00	1.95	128.93

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Flooded 100 Year

Return Event: 100 years
Storm Event:

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
492.15	1.97	0.090	2,060.039	0.00	1.97	132.36
492.20	1.99	0.092	2,091.186	0.00	1.99	135.84
492.25	2.01	0.095	2,122.566	0.00	2.01	139.37
492.30	2.03	0.097	2,154.181	0.00	2.03	142.95
492.35	2.05	0.100	2,186.029	0.00	2.05	146.59
492.40	2.07	0.102	2,218.110	0.00	2.07	150.28
492.45	2.09	0.105	2,250.426	0.00	2.09	154.02
492.50	2.11	0.107	2,282.975	0.00	2.11	157.82
492.55	2.13	0.110	2,315.758	0.00	2.13	161.67
492.60	2.15	0.113	2,348.774	0.00	2.15	165.58
492.65	2.59	0.115	2,382.025	0.00	2.59	169.96
492.70	3.38	0.118	2,415.509	0.00	3.38	174.75
492.75	4.40	0.121	2,449.226	0.00	4.40	179.83
492.80	5.58	0.124	2,483.178	0.00	5.58	185.11
492.85	6.87	0.127	2,517.363	0.00	6.87	190.57
492.90	8.27	0.129	2,551.781	0.00	8.27	196.19
492.95	9.73	0.132	2,586.434	0.00	9.73	201.94
493.00	11.10	0.135	2,621.320	0.00	11.10	207.65
493.05	12.44	0.138	2,655.993	0.00	12.44	213.38
493.10	13.43	0.141	2,690.894	0.00	13.43	218.83
493.15	13.50	0.145	2,726.023	0.00	13.50	223.41
493.20	13.57	0.148	2,761.380	0.00	13.57	228.05
493.25	13.63	0.151	2,796.964	0.00	13.63	232.75
493.30	13.69	0.154	2,832.777	0.00	13.69	237.50
493.35	13.76	0.157	2,868.817	0.00	13.76	242.32
493.40	13.82	0.161	2,905.085	0.00	13.82	247.19
493.45	13.89	0.164	2,941.581	0.00	13.89	252.13
493.50	13.95	0.167	2,978.304	0.00	13.95	257.13
493.55	14.01	0.171	3,015.256	0.00	14.01	262.18
493.60	14.08	0.174	3,052.435	0.00	14.08	267.30
493.65	14.14	0.178	3,089.842	0.00	14.14	272.48
493.70	14.20	0.181	3,127.477	0.00	14.20	277.73
493.75	14.26	0.185	3,165.339	0.00	14.26	283.03
493.80	14.32	0.189	3,203.430	0.00	14.32	288.40
493.85	14.38	0.192	3,241.748	0.00	14.38	293.83
493.90	14.44	0.196	3,280.294	0.00	14.44	299.33
493.95	14.50	0.200	3,319.068	0.00	14.50	304.89
494.00	14.57	0.204	3,358.070	0.00	14.57	310.51

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Flooded LFB

Return Event: 100 years
Storm Event:

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	492.60 ft
Volume (Initial)	0.113 ac-ft
Flow (Initial Outlet)	0.00 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.00 ft³/s
Time Increment	1.000 min

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
488.40	0.00	0.000	0.000	0.00	0.00	0.00
488.45	0.00	0.000	4.387	0.00	0.00	0.00
488.50	0.00	0.000	17.549	0.00	0.00	0.02
488.55	0.00	0.000	39.484	0.00	0.00	0.07
488.60	0.00	0.000	70.194	0.00	0.00	0.16
488.65	0.00	0.000	109.679	0.00	0.00	0.30
488.70	0.00	0.000	157.937	0.00	0.00	0.53
488.75	0.00	0.001	214.970	0.00	0.00	0.84
488.80	0.00	0.001	262.083	0.00	0.00	1.23
488.85	0.00	0.001	313.861	0.00	0.00	1.71
488.90	0.00	0.002	370.303	0.00	0.00	2.28
488.95	0.00	0.002	431.409	0.00	0.00	2.95
489.00	0.00	0.003	497.180	0.00	0.00	3.72
489.05	0.00	0.003	514.462	0.00	0.00	4.57
489.10	0.00	0.004	532.039	0.00	0.00	5.44
489.15	0.00	0.004	549.912	0.00	0.00	6.34
489.20	0.00	0.005	568.080	0.00	0.00	7.27
489.25	0.00	0.006	586.543	0.00	0.00	8.23
489.30	0.00	0.006	605.301	0.00	0.00	9.23
489.35	0.00	0.007	624.355	0.00	0.00	10.25
489.40	0.00	0.008	643.704	0.00	0.00	11.31
489.45	0.00	0.009	663.348	0.00	0.00	12.40
489.50	0.00	0.009	683.287	0.00	0.00	13.52
489.55	0.00	0.010	703.522	0.00	0.00	14.67
489.60	0.00	0.011	724.052	0.00	0.00	15.86
489.65	0.00	0.012	744.877	0.00	0.00	17.09
489.70	0.00	0.013	765.997	0.00	0.00	18.35
489.75	0.00	0.014	787.413	0.00	0.00	19.64
489.80	0.00	0.014	809.124	0.00	0.00	20.97
489.85	0.00	0.015	831.130	0.00	0.00	22.34

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Flooded LFB

Return Event: 100 years
Storm Event:

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
489.90	0.00	0.016	853.431	0.00	0.00	23.74
489.95	0.00	0.017	876.028	0.00	0.00	25.18
490.00	0.00	0.018	898.920	0.00	0.00	26.66
490.05	0.00	0.019	921.080	0.00	0.00	28.18
490.10	0.00	0.020	943.510	0.00	0.00	29.73
490.15	0.00	0.022	966.210	0.00	0.00	31.32
490.20	0.00	0.023	989.179	0.00	0.00	32.95
490.25	0.00	0.024	1,012.419	0.00	0.00	34.62
490.30	0.00	0.025	1,035.928	0.00	0.00	36.33
490.35	0.00	0.026	1,059.707	0.00	0.00	38.08
490.40	0.00	0.027	1,083.756	0.00	0.00	39.86
490.45	0.00	0.029	1,108.075	0.00	0.00	41.69
490.50	0.00	0.030	1,132.664	0.00	0.00	43.55
490.55	0.00	0.031	1,157.522	0.00	0.00	45.46
490.60	0.00	0.033	1,182.650	0.00	0.00	47.41
490.65	0.00	0.034	1,208.048	0.00	0.00	49.41
490.70	0.00	0.035	1,233.716	0.00	0.00	51.44
490.75	0.00	0.037	1,259.654	0.00	0.00	53.52
490.80	0.00	0.038	1,285.861	0.00	0.00	55.64
490.85	0.00	0.040	1,312.339	0.00	0.00	57.80
490.90	0.00	0.041	1,339.086	0.00	0.00	60.01
490.95	0.00	0.043	1,366.103	0.00	0.00	62.27
491.00	0.00	0.044	1,393.390	0.00	0.00	64.57
491.05	0.00	0.046	1,419.770	0.00	0.00	66.91
491.10	0.00	0.048	1,446.398	0.00	0.00	69.30
491.15	0.00	0.049	1,473.273	0.00	0.00	71.73
491.20	0.00	0.051	1,500.396	0.00	0.00	74.21
491.25	0.00	0.053	1,527.766	0.00	0.00	76.74
491.30	0.00	0.055	1,555.383	0.00	0.00	79.30
491.35	0.00	0.056	1,583.247	0.00	0.00	81.92
491.40	0.00	0.058	1,611.359	0.00	0.00	84.58
491.45	0.00	0.060	1,639.719	0.00	0.00	87.29
491.50	0.00	0.062	1,668.326	0.00	0.00	90.05
491.55	0.00	0.064	1,697.180	0.00	0.00	92.85
491.60	0.00	0.066	1,726.281	0.00	0.00	95.71
491.65	0.00	0.068	1,755.630	0.00	0.00	98.61
491.70	0.00	0.070	1,785.227	0.00	0.00	101.56
491.75	0.00	0.072	1,815.071	0.00	0.00	104.56
491.80	0.00	0.074	1,845.162	0.00	0.00	107.61
491.85	0.00	0.076	1,875.500	0.00	0.00	110.71
491.90	0.00	0.078	1,906.086	0.00	0.00	113.86
491.95	0.00	0.081	1,936.919	0.00	0.00	117.06
492.00	0.00	0.083	1,968.000	0.00	0.00	120.32
492.05	0.00	0.085	1,998.446	0.00	0.00	123.62
492.10	0.00	0.087	2,029.125	0.00	0.00	126.98

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Flooded LFB

Return Event: 100 years
Storm Event:

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
492.15	0.00	0.090	2,060.039	0.00	0.00	130.39
492.20	0.00	0.092	2,091.186	0.00	0.00	133.84
492.25	0.00	0.095	2,122.566	0.00	0.00	137.36
492.30	0.00	0.097	2,154.181	0.00	0.00	140.92
492.35	0.00	0.100	2,186.029	0.00	0.00	144.54
492.40	0.00	0.102	2,218.110	0.00	0.00	148.21
492.45	0.00	0.105	2,250.426	0.00	0.00	151.93
492.50	0.00	0.107	2,282.975	0.00	0.00	155.71
492.55	0.00	0.110	2,315.758	0.00	0.00	159.54
492.60	0.00	0.113	2,348.774	0.00	0.00	163.43
492.65	0.42	0.115	2,382.025	0.00	0.42	167.79
492.70	1.19	0.118	2,415.509	0.00	1.19	172.56
492.75	2.19	0.121	2,449.226	0.00	2.19	177.61
492.80	3.37	0.124	2,483.178	0.00	3.37	182.91
492.85	4.71	0.127	2,517.363	0.00	4.71	188.41
492.90	6.20	0.129	2,551.781	0.00	6.20	194.12
492.95	7.81	0.132	2,586.434	0.00	7.81	200.01
493.00	9.54	0.135	2,621.320	0.00	9.54	206.08
493.05	11.38	0.138	2,655.993	0.00	11.38	212.32
493.10	13.32	0.141	2,690.894	0.00	13.32	218.72
493.15	13.50	0.145	2,726.023	0.00	13.50	223.41
493.20	13.57	0.148	2,761.380	0.00	13.57	228.05
493.25	13.63	0.151	2,796.964	0.00	13.63	232.75
493.30	13.69	0.154	2,832.777	0.00	13.69	237.50
493.35	13.76	0.157	2,868.817	0.00	13.76	242.32
493.40	13.82	0.161	2,905.085	0.00	13.82	247.19
493.45	13.89	0.164	2,941.581	0.00	13.89	252.13
493.50	13.95	0.167	2,978.304	0.00	13.95	257.13
493.55	14.01	0.171	3,015.256	0.00	14.01	262.18
493.60	14.08	0.174	3,052.435	0.00	14.08	267.30
493.65	14.14	0.178	3,089.842	0.00	14.14	272.48
493.70	14.20	0.181	3,127.477	0.00	14.20	277.73
493.75	14.26	0.185	3,165.339	0.00	14.26	283.03
493.80	14.32	0.189	3,203.430	0.00	14.32	288.40
493.85	14.38	0.192	3,241.748	0.00	14.38	293.83
493.90	14.44	0.196	3,280.294	0.00	14.44	299.33
493.95	14.50	0.200	3,319.068	0.00	14.50	304.89
494.00	14.57	0.204	3,358.070	0.00	14.57	310.51

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Post- Development 100 year

Return Event: 100 years
Storm Event:

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	488.50 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.00 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.00 ft³/s
Time Increment	1.000 min

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
488.50	0.00	0.000	38.000	0.00	0.00	0.00
488.55	0.01	0.000	61.844	0.00	0.01	0.09
488.60	0.02	0.000	91.466	0.00	0.02	0.23
488.65	0.04	0.000	126.866	0.00	0.04	0.43
488.70	0.07	0.000	168.044	0.00	0.07	0.70
488.75	0.09	0.001	215.000	0.00	0.09	1.05
488.80	0.12	0.001	262.084	0.00	0.12	1.47
488.85	0.16	0.001	313.826	0.00	0.16	1.99
488.90	0.19	0.002	370.226	0.00	0.19	2.59
488.95	0.23	0.002	431.284	0.00	0.23	3.29
489.00	0.30	0.003	497.000	0.00	0.30	4.14
489.05	0.33	0.003	514.291	0.00	0.33	5.01
489.10	0.36	0.004	531.878	0.00	0.36	5.91
489.15	0.38	0.004	549.760	0.00	0.38	6.84
489.20	0.40	0.005	567.939	0.00	0.40	7.79
489.25	0.43	0.006	586.412	0.00	0.43	8.77
489.30	0.45	0.006	605.182	0.00	0.45	9.79
489.35	0.47	0.007	624.247	0.00	0.47	10.83
489.40	0.48	0.008	643.608	0.00	0.48	11.91
489.45	0.50	0.009	663.264	0.00	0.50	13.02
489.50	0.52	0.009	683.217	0.00	0.52	14.15
489.55	0.54	0.010	703.464	0.00	0.54	15.33
489.60	0.55	0.011	724.008	0.00	0.55	16.53
489.65	0.57	0.012	744.847	0.00	0.57	17.77
489.70	0.59	0.013	765.982	0.00	0.59	19.05
489.75	0.60	0.014	787.412	0.00	0.60	20.36
489.80	0.62	0.015	809.139	0.00	0.62	21.70
489.85	0.63	0.015	831.160	0.00	0.63	23.09
489.90	0.65	0.016	853.478	0.00	0.65	24.50
489.95	0.66	0.017	876.091	0.00	0.66	25.96

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Post- Development 100 year

Return Event: 100 years
Storm Event:

Elevation (ft)	Outflow (ft^3/s)	Storage (ac-ft)	Area (ft^2)	Infiltration (ft^3/s)	Flow (Total) (ft^3/s)	2S/t + O (ft^3/s)
490.00	0.67	0.018	899.000	0.00	0.67	27.45
490.05	0.69	0.019	921.141	0.00	0.69	28.98
490.10	0.70	0.021	943.552	0.00	0.70	30.55
490.15	0.71	0.022	966.232	0.00	0.71	32.15
490.20	0.72	0.023	989.181	0.00	0.72	33.79
490.25	0.74	0.024	1,012.399	0.00	0.74	35.47
490.30	0.75	0.025	1,035.887	0.00	0.75	37.19
490.35	0.76	0.026	1,059.645	0.00	0.76	38.95
490.40	0.79	0.028	1,083.671	0.00	0.79	40.76
490.45	0.82	0.029	1,107.967	0.00	0.82	42.63
490.50	0.87	0.030	1,132.533	0.00	0.87	44.54
490.55	0.92	0.031	1,157.367	0.00	0.92	46.50
490.60	0.98	0.033	1,182.471	0.00	0.98	48.50
490.65	1.04	0.034	1,207.845	0.00	1.04	50.56
490.70	1.13	0.036	1,233.487	0.00	1.13	52.68
490.75	1.17	0.037	1,259.399	0.00	1.17	54.80
490.80	1.22	0.038	1,285.581	0.00	1.22	56.97
490.85	1.26	0.040	1,312.032	0.00	1.26	59.18
490.90	1.30	0.041	1,338.752	0.00	1.30	61.42
490.95	1.33	0.043	1,365.741	0.00	1.33	63.71
491.00	1.37	0.045	1,393.000	0.00	1.37	66.05
491.05	1.40	0.046	1,419.396	0.00	1.40	68.43
491.10	1.44	0.048	1,446.040	0.00	1.44	70.85
491.15	1.47	0.049	1,472.932	0.00	1.47	73.31
491.20	1.50	0.051	1,500.072	0.00	1.50	75.82
491.25	1.53	0.053	1,527.459	0.00	1.53	78.37
491.30	1.56	0.055	1,555.094	0.00	1.56	80.97
491.35	1.58	0.056	1,582.977	0.00	1.58	83.61
491.40	1.61	0.058	1,611.108	0.00	1.61	86.30
491.45	1.64	0.060	1,639.486	0.00	1.64	89.04
491.50	1.66	0.062	1,668.112	0.00	1.66	91.82
491.55	1.69	0.064	1,696.986	0.00	1.69	94.65
491.60	1.72	0.066	1,726.108	0.00	1.72	97.53
491.65	1.74	0.068	1,755.477	0.00	1.74	100.45
491.70	1.76	0.070	1,785.094	0.00	1.76	103.43
491.75	1.79	0.072	1,814.959	0.00	1.79	106.45
491.80	1.81	0.074	1,845.072	0.00	1.81	109.52
491.85	1.84	0.076	1,875.432	0.00	1.84	112.65
491.90	1.86	0.078	1,906.040	0.00	1.86	115.82
491.95	1.88	0.081	1,936.896	0.00	1.88	119.05
492.00	1.90	0.083	1,968.000	0.00	1.90	122.32
492.05	1.93	0.085	1,998.432	0.00	1.93	125.65
492.10	1.95	0.088	2,029.097	0.00	1.95	129.03
492.15	1.97	0.090	2,059.996	0.00	1.97	132.46
492.20	1.99	0.092	2,091.128	0.00	1.99	135.94

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Detention Basin
Scenario: Post- Development 100 year

Return Event: 100 years
Storm Event:

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (ft²)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
492.25	2.01	0.095	2,122.494	0.00	2.01	139.47
492.30	2.03	0.097	2,154.094	0.00	2.03	143.05
492.35	2.05	0.100	2,185.926	0.00	2.05	146.69
492.40	2.07	0.102	2,217.993	0.00	2.07	150.38
492.45	2.09	0.105	2,250.292	0.00	2.09	154.13
492.50	2.11	0.107	2,282.826	0.00	2.11	157.92
492.55	2.13	0.110	2,315.592	0.00	2.13	161.78
492.60	2.15	0.113	2,348.593	0.00	2.15	165.68
492.65	2.59	0.115	2,381.826	0.00	2.59	170.06
492.70	3.38	0.118	2,415.294	0.00	3.38	174.85
492.75	4.40	0.121	2,448.994	0.00	4.40	179.92
492.80	5.60	0.124	2,482.928	0.00	5.60	185.23
492.85	6.96	0.127	2,517.096	0.00	6.96	190.76
492.90	8.46	0.129	2,551.497	0.00	8.46	196.48
492.95	10.05	0.132	2,586.132	0.00	10.05	202.35
493.00	11.68	0.135	2,621.000	0.00	11.68	208.33
493.05	13.37	0.138	2,655.684	0.00	13.37	214.41
493.10	14.92	0.142	2,690.596	0.00	14.92	220.42
493.15	16.39	0.145	2,725.736	0.00	16.39	226.40
493.20	17.23	0.148	2,761.104	0.00	17.23	231.81
493.25	17.28	0.151	2,796.701	0.00	17.28	236.50
493.30	17.33	0.154	2,832.525	0.00	17.33	241.24
493.35	17.38	0.157	2,868.577	0.00	17.38	246.04
493.40	17.43	0.161	2,904.857	0.00	17.43	250.90
493.45	17.48	0.164	2,941.365	0.00	17.48	255.82
493.50	17.53	0.168	2,978.101	0.00	17.53	260.80
493.55	17.58	0.171	3,015.065	0.00	17.58	265.85
493.60	17.63	0.174	3,052.257	0.00	17.63	270.95
493.65	17.68	0.178	3,089.677	0.00	17.68	276.12
493.70	17.73	0.182	3,127.325	0.00	17.73	281.35
493.75	17.78	0.185	3,165.201	0.00	17.78	286.65
493.80	17.83	0.189	3,203.304	0.00	17.83	292.00
493.85	17.88	0.193	3,241.636	0.00	17.88	297.42
493.90	17.93	0.196	3,280.196	0.00	17.93	302.91
493.95	17.98	0.200	3,318.984	0.00	17.98	308.45
494.00	18.03	0.204	3,358.000	0.00	18.03	314.07

Subsection: Level Pool Pond Routing Summary
Label: Detention Basin (IN)
Scenario: Flooded Condiitons 2 Year

Return Event: 2 years
Storm Event:

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	488.40 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.00 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.00 ft³/s
Time Increment	1.000 min

Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	1.55 ft³/s	Time to Peak (Flow, In)	1.000 min
Flow (Peak Outlet)	0.75 ft³/s	Time to Peak (Flow, Outlet)	21.000 min

Elevation (Water Surface, Peak)	490.35 ft
Volume (Peak)	0.026 ac-ft

Mass Balance (ac-ft)	
Volume (Initial)	0.000 ac-ft
Volume (Total Inflow)	0.043 ac-ft
Volume (Total Infiltration)	0.000 ac-ft
Volume (Total Outlet Outflow)	0.043 ac-ft
Volume (Retained)	0.000 ac-ft
Volume (Unrouted)	0.000 ac-ft
Error (Mass Balance)	0.0 %

Subsection: Level Pool Pond Routing Summary
Label: Detention Basin (IN)
Scenario: Post-Development 2 year

Return Event: 2 years
Storm Event:

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	488.50 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.00 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.00 ft³/s
Time Increment	1.000 min

Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	1.55 ft³/s	Time to Peak (Flow, In)	1.000 min
Flow (Peak Outlet)	0.76 ft³/s	Time to Peak (Flow, Outlet)	21.000 min

Elevation (Water Surface, Peak)	490.35 ft
Volume (Peak)	0.026 ac-ft

Mass Balance (ac-ft)	
Volume (Initial)	0.000 ac-ft
Volume (Total Inflow)	0.043 ac-ft
Volume (Total Infiltration)	0.000 ac-ft
Volume (Total Outlet Outflow)	0.043 ac-ft
Volume (Retained)	0.000 ac-ft
Volume (Unrouted)	0.000 ac-ft
Error (Mass Balance)	0.0 %

Subsection: Level Pool Pond Routing Summary
Label: Detention Basin (IN)
Scenario: Flooded 15 Year

Return Event: 15 years
Storm Event:

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	488.40 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.00 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.00 ft³/s
Time Increment	1.000 min

Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	2.29 ft³/s	Time to Peak (Flow, In)	1.000 min
Flow (Peak Outlet)	1.28 ft³/s	Time to Peak (Flow, Outlet)	20.000 min

Elevation (Water Surface, Peak)	490.88 ft
Volume (Peak)	0.041 ac-ft

Mass Balance (ac-ft)	
Volume (Initial)	0.000 ac-ft
Volume (Total Inflow)	0.063 ac-ft
Volume (Total Infiltration)	0.000 ac-ft
Volume (Total Outlet Outflow)	0.063 ac-ft
Volume (Retained)	0.000 ac-ft
Volume (Unrouted)	0.000 ac-ft
Error (Mass Balance)	0.0 %

Subsection: Level Pool Pond Routing Summary
Label: Detention Basin (IN)
Scenario: Post-Development 15 year

Return Event: 15 years
Storm Event:

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	488.50 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.00 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.00 ft³/s
Time Increment	1.000 min

Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	2.29 ft³/s	Time to Peak (Flow, In)	1.000 min
Flow (Peak Outlet)	1.28 ft³/s	Time to Peak (Flow, Outlet)	20.000 min

Elevation (Water Surface, Peak)	490.88 ft
Volume (Peak)	0.041 ac-ft

Mass Balance (ac-ft)	
Volume (Initial)	0.000 ac-ft
Volume (Total Inflow)	0.063 ac-ft
Volume (Total Infiltration)	0.000 ac-ft
Volume (Total Outlet Outflow)	0.063 ac-ft
Volume (Retained)	0.000 ac-ft
Volume (Unrouted)	0.000 ac-ft
Error (Mass Balance)	0.0 %

Subsection: Level Pool Pond Routing Summary
Label: Detention Basin (IN)
Scenario: Flooded 25 Year

Return Event: 25 years
Storm Event:

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	488.40 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.00 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.00 ft³/s
Time Increment	1.000 min

Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	2.70 ft³/s	Time to Peak (Flow, In)	1.000 min
Flow (Peak Outlet)	1.45 ft³/s	Time to Peak (Flow, Outlet)	20.000 min

Elevation (Water Surface, Peak)	491.12 ft
Volume (Peak)	0.049 ac-ft

Mass Balance (ac-ft)	
Volume (Initial)	0.000 ac-ft
Volume (Total Inflow)	0.074 ac-ft
Volume (Total Infiltration)	0.000 ac-ft
Volume (Total Outlet Outflow)	0.074 ac-ft
Volume (Retained)	0.000 ac-ft
Volume (Unrouted)	0.000 ac-ft
Error (Mass Balance)	0.0 %

Subsection: Level Pool Pond Routing Summary
Label: Detention Basin (IN)
Scenario: Post-Development 25 year

Return Event: 25 years
Storm Event:

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	488.50 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.00 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.00 ft³/s
Time Increment	1.000 min

Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	2.70 ft³/s	Time to Peak (Flow, In)	1.000 min
Flow (Peak Outlet)	1.45 ft³/s	Time to Peak (Flow, Outlet)	20.000 min

Elevation (Water Surface, Peak)	491.12 ft
Volume (Peak)	0.049 ac-ft

Mass Balance (ac-ft)	
Volume (Initial)	0.000 ac-ft
Volume (Total Inflow)	0.074 ac-ft
Volume (Total Infiltration)	0.000 ac-ft
Volume (Total Outlet Outflow)	0.074 ac-ft
Volume (Retained)	0.000 ac-ft
Volume (Unrouted)	0.000 ac-ft
Error (Mass Balance)	0.0 %

Subsection: Level Pool Pond Routing Summary
Label: Detention Basin (IN)
Scenario: 100 year LFB

Return Event: 100 years
Storm Event:

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	492.60 ft
Volume (Initial)	0.113 ac-ft
Flow (Initial Outlet)	0.00 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.00 ft³/s
Time Increment	1.000 min

Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	3.09 ft³/s	Time to Peak (Flow, In)	1.000 min
Flow (Peak Outlet)	3.09 ft³/s	Time to Peak (Flow, Outlet)	20.000 min

Elevation (Water Surface, Peak)	492.79 ft
Volume (Peak)	0.123 ac-ft

Mass Balance (ac-ft)	
Volume (Initial)	0.113 ac-ft
Volume (Total Inflow)	0.085 ac-ft
Volume (Total Infiltration)	0.000 ac-ft
Volume (Total Outlet Outflow)	0.085 ac-ft
Volume (Retained)	0.113 ac-ft
Volume (Unrouted)	0.000 ac-ft
Error (Mass Balance)	0.0 %

Subsection: Level Pool Pond Routing Summary
Label: Detention Basin (IN)
Scenario: Flooded 100 Year

Return Event: 100 years
Storm Event:

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	488.40 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.00 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.00 ft³/s
Time Increment	1.000 min

Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	3.09 ft³/s	Time to Peak (Flow, In)	1.000 min
Flow (Peak Outlet)	1.58 ft³/s	Time to Peak (Flow, Outlet)	20.000 min

Elevation (Water Surface, Peak)	491.35 ft
Volume (Peak)	0.056 ac-ft

Mass Balance (ac-ft)	
Volume (Initial)	0.000 ac-ft
Volume (Total Inflow)	0.085 ac-ft
Volume (Total Infiltration)	0.000 ac-ft
Volume (Total Outlet Outflow)	0.085 ac-ft
Volume (Retained)	0.000 ac-ft
Volume (Unrouted)	0.000 ac-ft
Error (Mass Balance)	0.0 %

Subsection: Level Pool Pond Routing Summary
Label: Detention Basin (IN)
Scenario: Flooded LFB

Return Event: 100 years
Storm Event:

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	492.60 ft
Volume (Initial)	0.113 ac-ft
Flow (Initial Outlet)	0.00 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.00 ft³/s
Time Increment	1.000 min

Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	3.09 ft³/s	Time to Peak (Flow, In)	1.000 min
Flow (Peak Outlet)	3.09 ft³/s	Time to Peak (Flow, Outlet)	20.000 min

Elevation (Water Surface, Peak)	492.79 ft
Volume (Peak)	0.123 ac-ft

Mass Balance (ac-ft)	
Volume (Initial)	0.113 ac-ft
Volume (Total Inflow)	0.085 ac-ft
Volume (Total Infiltration)	0.000 ac-ft
Volume (Total Outlet Outflow)	0.085 ac-ft
Volume (Retained)	0.113 ac-ft
Volume (Unrouted)	0.000 ac-ft
Error (Mass Balance)	0.0 %

Subsection: Level Pool Pond Routing Summary
Label: Detention Basin (IN)
Scenario: Post- Development 100 year

Return Event: 100 years
Storm Event:

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	488.50 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.00 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.00 ft³/s
Time Increment	1.000 min

Inflow/Outflow Hydrograph Summary			
Flow (Peak In)	3.09 ft³/s	Time to Peak (Flow, In)	1.000 min
Flow (Peak Outlet)	1.58 ft³/s	Time to Peak (Flow, Outlet)	20.000 min

Elevation (Water Surface, Peak)	491.34 ft
Volume (Peak)	0.056 ac-ft

Mass Balance (ac-ft)	
Volume (Initial)	0.000 ac-ft
Volume (Total Inflow)	0.085 ac-ft
Volume (Total Infiltration)	0.000 ac-ft
Volume (Total Outlet Outflow)	0.085 ac-ft
Volume (Retained)	0.000 ac-ft
Volume (Unrouted)	0.000 ac-ft
Error (Mass Balance)	0.0 %

Summary for Hydrograph Addition at 'Detention Basin'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	Watershed A

Node Inflows

Inflow Type	Element	Volume (ac-ft)	Time to Peak (min)	Flow (Peak) (ft³/s)
Flow (From)	Watershed A	0.043	1.000	1.55
Flow (In)	Detention Basin	0.043	1.000	1.55

Summary for Hydrograph Addition at 'Detention Basin'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	Watershed A

Node Inflows

Inflow Type	Element	Volume (ac-ft)	Time to Peak (min)	Flow (Peak) (ft³/s)
Flow (From)	Watershed A	0.043	1.000	1.55
Flow (In)	Detention Basin	0.043	1.000	1.55

Summary for Hydrograph Addition at 'Detention Basin'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	Watershed A

Node Inflows

Inflow Type	Element	Volume (ac-ft)	Time to Peak (min)	Flow (Peak) (ft³/s)
Flow (From)	Watershed A	0.063	1.000	2.29
Flow (In)	Detention Basin	0.063	1.000	2.29

Summary for Hydrograph Addition at 'Detention Basin'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	Watershed A

Node Inflows

Inflow Type	Element	Volume (ac-ft)	Time to Peak (min)	Flow (Peak) (ft³/s)
Flow (From)	Watershed A	0.063	1.000	2.29
Flow (In)	Detention Basin	0.063	1.000	2.29

Summary for Hydrograph Addition at 'Detention Basin'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	Watershed A

Node Inflows

Inflow Type	Element	Volume (ac-ft)	Time to Peak (min)	Flow (Peak) (ft³/s)
Flow (From)	Watershed A	0.074	1.000	2.70
Flow (In)	Detention Basin	0.074	1.000	2.70

Summary for Hydrograph Addition at 'Detention Basin'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	Watershed A

Node Inflows

Inflow Type	Element	Volume (ac-ft)	Time to Peak (min)	Flow (Peak) (ft³/s)
Flow (From)	Watershed A	0.074	1.000	2.70
Flow (In)	Detention Basin	0.074	1.000	2.70

Summary for Hydrograph Addition at 'Detention Basin'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	Watershed A

Node Inflows

Inflow Type	Element	Volume (ac-ft)	Time to Peak (min)	Flow (Peak) (ft³/s)
Flow (From)	Watershed A	0.085	1.000	3.09
Flow (In)	Detention Basin	0.085	1.000	3.09

Summary for Hydrograph Addition at 'Detention Basin'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	Watershed A

Node Inflows

Inflow Type	Element	Volume (ac-ft)	Time to Peak (min)	Flow (Peak) (ft³/s)
Flow (From)	Watershed A	0.085	1.000	3.09
Flow (In)	Detention Basin	0.085	1.000	3.09

Subsection: Pond Inflow Summary
Label: Detention Basin (IN)
Scenario: Flooded LFB

Return Event: 100 years
Storm Event:

Summary for Hydrograph Addition at 'Detention Basin'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	Watershed A

Node Inflows

Inflow Type	Element	Volume (ac-ft)	Time to Peak (min)	Flow (Peak) (ft³/s)
Flow (From)	Watershed A	0.085	1.000	3.09
Flow (In)	Detention Basin	0.085	1.000	3.09

Subsection: Pond Inflow Summary
Label: Detention Basin (IN)
Scenario: Post- Development 100 year

Return Event: 100 years
Storm Event:

Summary for Hydrograph Addition at 'Detention Basin'

Upstream Link	Upstream Node
<Catchment to Outflow Node>	Watershed A

Node Inflows

Inflow Type	Element	Volume (ac-ft)	Time to Peak (min)	Flow (Peak) (ft³/s)
Flow (From)	Watershed A	0.085	1.000	3.09
Flow (In)	Detention Basin	0.085	1.000	3.09

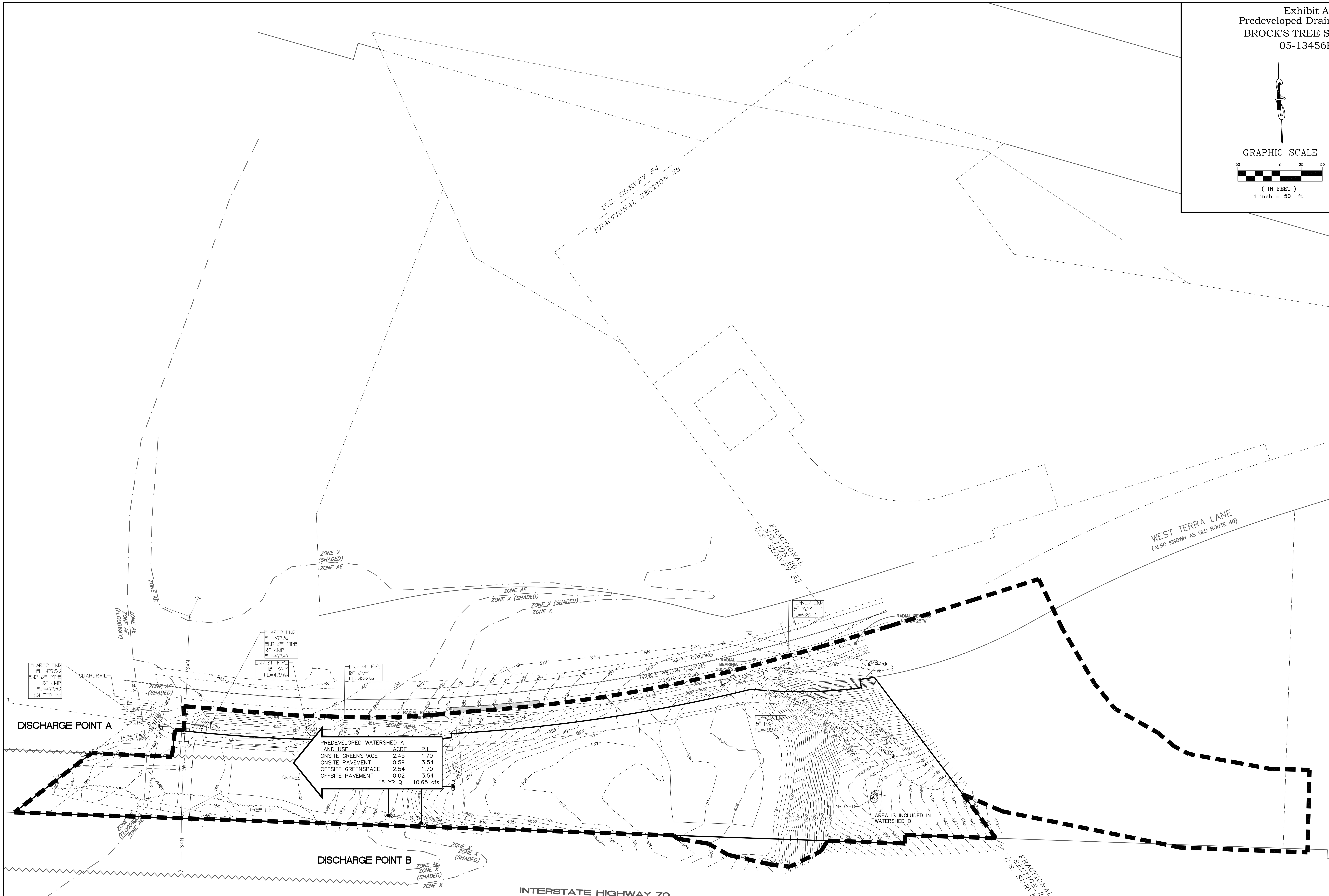
Index

Appendix C
Basin Volume

Dry Basin Volume				
Contour Elevation	Contour Area	A1 + A2 + SQRT(A1*A2)	Incremental Volume	Total Volume
(ft)	(ft^2)	(ft)	(ft^3)	(ft^3)
488.50	38	0.00	0.00	0.00
488.75	215	343	29	29
489.00	497	1,039	87	115
490.00	899	2,065	688	803
491.00	1,393	3,411	1,137	1,941
492.00	1,968	5,017	1,672	3,613
493.00	2,621	6,861	2,287	5,900
494.00	3,358	8,946	2,982	8,882

Appendix D
Drainage Maps

Exhibit A
Predeveloped Drainage Map
BROCK'S TREE SERVICE
05-13456B



GRAPHIC SCALE
50 0 25 50
(IN FEET)
1 inch = 50 ft.

ENGINEERING
PLANNING
SURVEYING
221 Point West Blvd.
St. Charles, MO 63301
636-928-5552
FAX 928-1718

PREDEVELOPED WATERSHED A		
LAND USE	ACRE	P.I.
ONSITE GREENSPACE	2.45	1.70
ONSITE PAVEMENT	0.59	3.54
OFFSITE GREENSPACE	2.54	1.70
OFFSITE PAVEMENT	0.02	3.54
	15 YR Q = 10.65 cfs	

UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE THEIR LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION OF THE LOCATION OF ALL UNDERGROUND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL BE LOCATED PRIOR TO ANY GRADING OR CONSTRUCTION OF THE IMPROVEMENTS.

Todd C. Flauaus
Civil Engineer
2005000982

Exhibit B
Postdeveloped Drainage Map
BROCK'S TREE SERVICE
05-13456B

GRAPHIC SCALE

50 0 25 50

(IN FEET)
1 inch = 50 ft.

ENGINEERING
PLANNING
SURVEYING

221 Point West Blvd.
St. Charles, MO 63301
636-928-5552
FAX 928-1718

PROPERTY N/F OF
THE DORIS M. PATTON
REVOCABLE LIVING TRUST
DATED MARCH 26TH, 2008
D.B. 4962 PG. 804

SURVEY BY
EDGAR RAPP, JR. DATED
10-29-1949

PROPERTY N/F OF
THE WABASH WESTERN
RAILROAD COMPANY
D.B. 48 PG. 555
DATED 01-01-1889
1.7 AC (SUR & REC)
ALSO REFERENCED AS
"PERIQUE QUARRY" ON
SURVEY BY RAPP
DATED 10-29-1949

U.S. SURVEY 54
FRACTIONAL SECTION 26

LOT 1
"ROCK HILL"
P.B. 50 PGS. 131-132

NEW PARCEL A
"O'FALLON GATEWAY BOBCAT
BOUNDARY ADJUSTMENT PLAT"
P.B. 39 PG. 181

LEASE AGREEMENT WITH
NEW CINGULAR WIRELESS PCS, LLC
D.B. 5646 PG. 251
(4,900 SQ. FT.)

LOT 2
"ROCK HILL"
P.B. 50 PGS. 131-132

FRACTIONAL
SECTION 26
U.S. SURVEY 54

WEST TERRA LANE
(ALSO KNOWN AS OLD ROUTE 40)

ZONE X
(SHADED)
ZONE AE

ZONE AE
ZONE X (SHADED)
ZONE X (SHADED)
ZONE X

ZONE AE
(FLOODWAY)

FLARED END
FL=477.96
END OF PIPE
18" CMP
FL=477.47

END OF PIPE
18" CMP
FL=479.66

END OF PIPE
18" CMP
FL=482.56

FLARED END
FL=477.80
END OF PIPE
18" CMP
FL=477.50
(SLTED IN)

GUARDRAIL

POSTDEVELOPED WATERSHED A

LAND USE	ACRE	P.I.
ONSITE GREENSPACE	1.89	1.70
ONSITE PAVEMENT	1.14	3.54
OFFSITE GREENSPACE	2.54	1.70
OFFSITE PAVEMENT	0.02	3.54

15 YR Q = 11.64 cfs

DISCHARGE POINT A

TREE LINE

PROPERTY N/F
BARTHELMAS FARM, LLC
D.B. 2829 PG. 2021

GRAVEL

TREE LINE

DISCHARGE POINT B

SAN MANHOLE

SAN

SAN
SAN
SAN
SAN

WHITE STRIPING
DOUBLE YELLOW STRIPING
WHITE STRIPING

FLARED END
18" RCP
FL=492.17

FLARED END
18" RCP
FL=492.01

LOT 2
"DRI-PORT MARINE"
P.B. 48 PGS. 54-55
PROPERTY N/F
DRI-PORT MARINE, INC
D.B. 4065 PG. 159

BILLBOARD

AREA IS INCLUDED IN
WATERSHED B

INTERSTATE HIGHWAY 70

UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE THEIR LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION OF THE LOCATION OF ALL UNDERGROUND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL BE LOCATED PRIOR TO ANY GRADING OR CONSTRUCTION OF THE IMPROVEMENTS.

Todd C. Flauaus
Civil Engineer
2005000982
2021

BAX PROJECT NO. 05-13456B
09/08/2023
AKS

Exhibit C
Basin Inflow Drainage Map
BROCK'S TREE SERVICE
05-13456B

GRAPHIC SCALE

50 0 25 50

(IN FEET)
1 inch = 50 ft.

ENGINEERING
PLANNING
SURVEYING

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FRACTIONAL SECTION 26

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P.B. 50 PGS. 131-132

FRACTIONAL
SECTION 26
U.S. SURVEY 54

WEST TERRA LANE
(ALSO KNOWN AS OLD ROUTE 40)

ZONE X
(SHADED)
ZONE AE

ZONE AE
ZONE X (SHADED)
ZONE X (SHADED)
ZONE X

ZONE AE
(FLOODWAY)

FLARED END
FL=477.96
END OF PIPE
18" CMP
FL=477.47

END OF PIPE
18" CMP
FL=473.96

END OF PIPE
18" CMP
FL=472.56

FLARED END
18" RCP
FL=472.17

FLARED END
FL=477.80
END OF PIPE
18" CMP
FL=477.50
(SLTED IN)

GUARDRAIL

SAN

WHITE STRIPING

DOUBLE YELLOW STRIPING

TREE LINE

GRAVEL

POSTDEVELOPED WATERSHED A
(DIRECT RUNOFF)

LAND USE	ACRE	P.I.
ONSITE GREENSPACE	1.79	1.70
ONSITE PAVEMENT	0.54	3.54
OFFSITE GREENSPACE	2.54	1.70
OFFSITE PAVEMENT	0.02	3.54

15 YR Q = 9.34 cfs

POSTDEVELOPED WATERSHED A
(BASIN INFLOW)

LAND USE	ACRE	P.I.
ONSITE GREENSPACE	0.10	1.70
ONSITE PAVEMENT	0.60	3.54

15 YR Q = 2.29 cfs

PROPERTY N/F
BARTHELMAS FARM, LLC
D.B. 2829 PG. 2021

LOT 2
"DRI-PORT MARINE"
P.B. 48 PGS. 54-55
PROPERTY N/F
DRI-PORT MARINE, INC
D.B. 4065 PG. 159

BILLBOARD

AREA IS INCLUDED IN
WATERSHED B

INTERSTATE HIGHWAY 70

UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE THEIR LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION OF THE LOCATION OF ALL UNDERGROUND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THESE PLANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL BE LOCATED PRIOR TO ANY GRADING OR CONSTRUCTION OF THE IMPROVEMENTS.

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