Stormwater Management Report

for

THE ESTATES AT HURSTMONT

VOLUME II

BLOCK 27 LOT 2

Harding Township

Morris County, New Jersey

PREPARED BY:

GLADSTONE DESIGN, INC.

Consulting Engineers | Land Surveyors | Landscape Architects | Land Planners

265 Main Street, P.O. Box 400
Gladstone, New Jersey 07934

May 26, 2023

Ronald A. Kennedy, P.E.
NJ PROFESSIONAL ENGINEER
LICENSE No. GE33453

EXISTING AND PROPOSED TR-55 RUNOFF CALCULATIONS – APPENDIX A

EXISTING AND PROPOSED TR-55 RUNOFF CALCULATIONS – APPENDIX A-1
EXISTING CONDITIONS

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: **PRESENT** DEVELOPED D.A. # 1

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
B	Open Space	61			1.39	84.8
B	Woods	55			2.90	159.5
D	Woods	77			0.11	8.5
B	Brush	48			0.29	13.9
			TOTALS=		4.69	266.7

CN= TOTAL PRODUCT / TOTAL AREA = **57**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: **PRESENT** DEVELOPED D.A. #1

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

	SHEET FLOW		SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Woods		
2	MANNINGS ROUGHNESS COEFF., n				0.4		
3	LAND SLOPE, s			ft/ft	0.23		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	100		
5	TWO YEAR 24 HOUR RAINFALL (NOAA			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.13		0.13

	SHALLOW CONCENTRATED FLOW		SEGMENT ID		BC	CD	
7	SURFACE DESCRIPTION				Forest with heavy ground litter and hay meadows	Grassed Waterways	
8	FLOW LENGTH, L			ft	635	68	
9	WATERCOURSE SLOPE, s			ft/ft	0.22	0.15	
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	1.2	6.25	
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.15	0.00	0.15

	CHANNEL FLOW		SEGMENT ID		DE		
12	CROSS SECTIONAL FLOW AREA, a			ft^2	0.33		
13	WETTED PERIMITER, Pw			ft	3.63		
14	HYDRAULIC RADIUS, r=a/Pw			ft	0.090		
15	CHANNEL SLOPE, S			ft/ft	0.11		
16	MANNINGS ROUGHNESS COEFF., n				0.035		
17	VELOCITY, V (EQ 15-10)			ft/s	2.35		
18	FLOW LENGTH, L			ft	104		
19	Tt=L/3600V (EQ 15-1)			hr	0.01		0.01
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)				hr		0.29
					min		17.4

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: **PRESENT** DEVELOPED D.A. # 1 - IMP

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
	Motor Vehicle Surface	98			0.01	1.0
	Non-Motor Vehicle Surface	98			0.01	1.0
			TOTALS=		0.02	2.0

CN= TOTAL PRODUCT / TOTAL AREA = **98**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: **PRESENT** DEVELOPED D.A. #1-IMP

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Smooth surface		
2	MANNINGS ROUGHNESS COEFF., n				0.011		
3	LAND SLOPE, s			ft/ft	0.11		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	22		
5	TWO YEAR 24 HOUR RAINFALL (NOAA			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.01		0.01
SHALLOW CONCENTRATED FLOW			SEGMENT ID				
7	SURFACE DESCRIPTION						
8	FLOW LENGTH, L			ft			
9	WATERCOURSE SLOPE, s			ft/ft			
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s			
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.			0.00
CHANNEL FLOW			SEGMENT ID				
12	CROSS SECTIONAL FLOW AREA, a			ft^2			
13	WETTED PERIMITER, Pw			ft			
14	HYDRAULIC RADIUS, r=a/Pw			ft			
15	CHANNEL SLOPE, S			ft/ft			
16	MANNINGS ROUGHNESS COEFF., n						
17	VELOCITY, V (EQ 15-10)			ft/s			
18	FLOW LENGTH, L			ft			
19	Tt=L/3600V (EQ 15-1)			hr			0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)					hr	0.01
						min	0.6

(210-VI-NEH, MAY 2010)

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: **PRESENT** DEVELOPED D.A. # 1 - DIRT

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
B	Dirt	82			0.06	4.9
			TOTALS=		0.06	4.9

CN= TOTAL PRODUCT / TOTAL AREA = **82**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: **PRESENT** DEVELOPED D.A. #1-DIRT

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Smooth surface		
2	MANNINGS ROUGHNESS COEFF., n				0.011		
3	LAND SLOPE, s			ft/ft	0.17		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	42		
5	TWO YEAR 24 HOUR RAINFALL (NOAA			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.01		0.01
SHALLOW CONCENTRATED FLOW			SEGMENT ID				
7	SURFACE DESCRIPTION						
8	FLOW LENGTH, L			ft			
9	WATERCOURSE SLOPE, s			ft/ft			
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s			
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.			0.00
CHANNEL FLOW			SEGMENT ID				
12	CROSS SECTIONAL FLOW AREA, a			ft^2			
13	WETTED PERIMITER, Pw			ft			
14	HYDRAULIC RADIUS, r=a/Pw			ft			
15	CHANNEL SLOPE, S			ft/ft			
16	MANNINGS ROUGHNESS COEFF., n						
17	VELOCITY, V (EQ 15-10)			ft/s			
18	FLOW LENGTH, L			ft			
19	Tt=L/3600V (EQ 15-1)			hr			0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)					hr	0.01
						min	0.6

(210-VI-NEH, MAY 2010)

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: **PRESENT** DEVELOPED D.A. # 2

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
B	Open Space	61			2.66	162.3
B	Woods	55			1.62	89.1
D	Woods	77			0.02	1.5
B	Brush	48			0.23	11.0
			TOTALS=		4.53	263.9

CN= TOTAL PRODUCT / TOTAL AREA = **58**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: **PRESENT** DEVELOPED D.A. #2

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

	SHEET FLOW		SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Woods		
2	MANNINGS ROUGHNESS COEFF., n				0.4		
3	LAND SLOPE, s			ft/ft	0.23		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	100		
5	TWO YEAR 24 HOUR RAINFALL (NOAA			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.13		0.13

	SHALLOW CONCENTRATED FLOW		SEGMENT ID		BC	CD	
7	SURFACE DESCRIPTION				Forest with heavy ground litter and hay meadows	Grassed Waterways	
8	FLOW LENGTH, L			ft	636	493	
9	WATERCOURSE SLOPE, s			ft/ft	0.22	0.17	
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	1.15	6.6	
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.15	0.02	0.17

	CHANNEL FLOW		SEGMENT ID				
12	CROSS SECTIONAL FLOW AREA, a			ft^2			
13	WETTED PERIMITER, Pw			ft			
14	HYDRAULIC RADIUS, r=a/Pw			ft			
15	CHANNEL SLOPE, S			ft/ft			
16	MANNINGS ROUGHNESS COEFF., n						
17	VELOCITY, V (EQ 15-10)			ft/s			
18	FLOW LENGTH, L			ft			
19	Tt=L/3600V (EQ 15-1)			hr			0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)				hr		0.30
					min		18.0

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: **PRESENT** DEVELOPED D.A. # 2 - IMP

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
	Motor Vehicle Surface	98			0.01	1.0
	Non-Motor Vehicle Surface	98			0.31	30.4
			TOTALS=		0.32	31.4

CN= TOTAL PRODUCT / TOTAL AREA = **98**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: **PRESENT** DEVELOPED D.A. #2-IMP

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

				SEGMENT ID			
SHEET FLOW					AB		
1	SURFACE DESCRIPTION				Smooth surface		
2	MANNINGS ROUGHNESS COEFF., n				0.011		
3	LAND SLOPE, s			ft/ft	0.12		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	26		
5	TWO YEAR 24 HOUR RAINFALL (NOAA			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.01		0.01
SHALLOW CONCENTRATED FLOW				SEGMENT ID			
7	SURFACE DESCRIPTION						
8	FLOW LENGTH, L			ft			
9	WATERCOURSE SLOPE, s			ft/ft			
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s			
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.			0.00
CHANNEL FLOW				SEGMENT ID			
12	CROSS SECTIONAL FLOW AREA, a			ft^2			
13	WETTED PERIMITER, Pw			ft			
14	HYDRAULIC RADIUS, r=a/Pw			ft			
15	CHANNEL SLOPE, S			ft/ft			
16	MANNINGS ROUGHNESS COEFF., n						
17	VELOCITY, V (EQ 15-10)			ft/s			
18	FLOW LENGTH, L			ft			
19	Tt=L/3600V (EQ 15-1)			hr			0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)				hr		0.01
					min		0.6

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: **PRESENT** DEVELOPED D.A. # 2 - DIRT

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
B	Dirt	82			0.17	13.9
			TOTALS=		0.17	13.9

CN= TOTAL PRODUCT / TOTAL AREA = **82**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: **PRESENT** DEVELOPED D.A. #2-DIRT

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Smooth surface		
2	MANNINGS ROUGHNESS COEFF., n				0.011		
3	LAND SLOPE, s			ft/ft	0.06		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	71		
5	TWO YEAR 24 HOUR RAINFALL (NOAA			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.01		0.01
SHALLOW CONCENTRATED FLOW			SEGMENT ID				
7	SURFACE DESCRIPTION						
8	FLOW LENGTH, L			ft			
9	WATERCOURSE SLOPE, s			ft/ft			
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s			
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.			0.00
CHANNEL FLOW			SEGMENT ID				
12	CROSS SECTIONAL FLOW AREA, a			ft^2			
13	WETTED PERIMITER, Pw			ft			
14	HYDRAULIC RADIUS, r=a/Pw			ft			
15	CHANNEL SLOPE, S			ft/ft			
16	MANNINGS ROUGHNESS COEFF., n						
17	VELOCITY, V (EQ 15-10)			ft/s			
18	FLOW LENGTH, L			ft			
19	Tt=L/3600V (EQ 15-1)			hr			0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)					hr	0.01
						min	0.6

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: **PRESENT** DEVELOPED D.A. # 3

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
B	Open Space	61			3.49	212.9
C	Open Space	74			0.03	2.2
D	Open Space	80			0.11	8.8
B	Woods	55			4.75	261.3
C	Woods	70			0.07	4.9
D	Woods	77			0.32	24.6
B	Brush	48			1.41	67.7
			TOTALS=		10.18	582.4

CN= TOTAL PRODUCT / TOTAL AREA = **57**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: **PRESENT** DEVELOPED D.A. #3

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB			
1	SURFACE DESCRIPTION				Woods			
2	MANNINGS ROUGHNESS COEFF., n				0.4			
3	LAND SLOPE, s			ft/ft	0.27			
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	100			
5	TWO YEAR 24 HOUR RAINFALL (NOAA			in	3.49			
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.12			0.12
SHALLOW CONCENTRATED FLOW			SEGMENT ID		BC			
7	SURFACE DESCRIPTION				Forest with heavy ground litter and hay meadows			
8	FLOW LENGTH, L			ft	552			
9	WATERCOURSE SLOPE, s			ft/ft	0.24			
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	1.2			
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.13			0.13
CHANNEL FLOW			SEGMENT ID		CD	DE	EF	
12	CROSS SECTIONAL FLOW AREA, a			ft^2	0.53	0.83	0.63	
13	WETTED PERIMITER, Pw			ft	5.63	8.63	6.63	
14	HYDRAULIC RADIUS, r=a/Pw			ft	0.094	0.100	0.090	
15	CHANNEL SLOPE, S			ft/ft	0.13	0.12	0.06	
16	MANNINGS ROUGHNESS COEFF., n				0.04	0.011	0.035	
17	VELOCITY, V (EQ 15-10)			ft/s	2.77	9.82	2.16	
18	FLOW LENGTH, L			ft	519	39	863	
19	Tt=L/3600V (EQ 15-1)			hr	0.05	0.01	0.11	0.17
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)							hr 0.42
								min 25.2

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: **PRESENT** DEVELOPED D.A. # 3 - IMP

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
	Motor Vehicle Surface	98			0.70	68.6
	Non-Motor Vehicle Surface	98			0.32	31.4
			TOTALS=		1.02	100.0

CN= TOTAL PRODUCT / TOTAL AREA = **98**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: **PRESENT** DEVELOPED D.A. #3-IMP

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB			
1	SURFACE DESCRIPTION				Smooth surface			
2	MANNINGS ROUGHNESS COEFF., n				0.011			
3	LAND SLOPE, s			ft/ft	0.16			
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	95			
5	TWO YEAR 24 HOUR RAINFALL (NOAA			in	3.49			
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.01			0.01
SHALLOW CONCENTRATED FLOW			SEGMENT ID					
7	SURFACE DESCRIPTION							
8	FLOW LENGTH, L			ft				
9	WATERCOURSE SLOPE, s			ft/ft				
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s				
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.				0.00
CHANNEL FLOW			SEGMENT ID					
12	CROSS SECTIONAL FLOW AREA, a			ft^2				
13	WETTED PERIMITER, Pw			ft				
14	HYDRAULIC RADIUS, r=a/Pw			ft				
15	CHANNEL SLOPE, S			ft/ft				
16	MANNINGS ROUGHNESS COEFF., n							
17	VELOCITY, V (EQ 15-10)			ft/s				
18	FLOW LENGTH, L			ft				
19	Tt=L/3600V (EQ 15-1)			hr				0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)				hr			0.01
					min			0.6

(210-VI-NEH, MAY 2010)

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: **PRESENT** DEVELOPED D.A. # 3 - DIRT

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
B	Dirt	82			0.17	13.9
C	Dirt	87			0.01	0.9
D	Dirt	89			0.02	1.8
			TOTALS=		0.20	16.6

CN= TOTAL PRODUCT / TOTAL AREA = **83**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: **PRESENT** DEVELOPED D.A. #3-DIRT

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID					
1	SURFACE DESCRIPTION							
2	MANNINGS ROUGHNESS COEFF., n							
3	LAND SLOPE, s			ft/ft				
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft				
5	TWO YEAR 24 HOUR RAINFALL (NOAA			in				
6	Tt (EQ 15-8)	COMPUTE Tt		hr.				0.00
SHALLOW CONCENTRATED FLOW			SEGMENT ID					
7	SURFACE DESCRIPTION							
8	FLOW LENGTH, L			ft				
9	WATERCOURSE SLOPE, s			ft/ft				
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s				
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.				0.00
CHANNEL FLOW			SEGMENT ID		AB			
12	CROSS SECTIONAL FLOW AREA, a			ft^2	0.53			
13	WETTED PERIMITER, Pw			ft	5.63			
14	HYDRAULIC RADIUS, r=a/Pw			ft	0.090			
15	CHANNEL SLOPE, S			ft/ft	0.12			
16	MANNINGS ROUGHNESS COEFF., n				0.011			
17	VELOCITY, V (EQ 15-10)			ft/s	9.68			
18	FLOW LENGTH, L			ft	144			
19	Tt=L/3600V (EQ 15-1)			hr	0.01			0.01
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)							0.01
								0.6

(210-VI-NEH, MAY 2010)

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: **PRESENT** DEVELOPED D.A. # 4

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
B	Open Space	61			0.03	1.8
B	Woods	55			4.46	245.3
D	Woods	77			0.24	18.5
B	Brush	48			0.40	19.2
			TOTALS=		5.13	284.8

CN= TOTAL PRODUCT / TOTAL AREA = **56**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: **PRESENT** DEVELOPED D.A. #4

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
	SURFACE DESCRIPTION						
1					Woods		
2	MANNINGS ROUGHNESS COEFF., n				0.4		
3	LAND SLOPE, s			ft/ft	0.20		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	100		
5	TWO YEAR 24 HOUR RAINFALL (NOAA			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.14		0.14
SHALLOW CONCENTRATED FLOW			SEGMENT ID		BC		
7	SURFACE DESCRIPTION				Forest with heavy ground litter and hay meadows		
8	FLOW LENGTH, L			ft	939		
9	WATERCOURSE SLOPE, s			ft/ft	0.21		
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	1.2		
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.21		0.21
CHANNEL FLOW			SEGMENT ID				
12	CROSS SECTIONAL FLOW AREA, a			ft^2			
13	WETTED PERIMITER, Pw			ft			
14	HYDRAULIC RADIUS, r=a/Pw			ft			
15	CHANNEL SLOPE, S			ft/ft			
16	MANNINGS ROUGHNESS COEFF., n						
17	VELOCITY, V (EQ 15-10)			ft/s			
18	FLOW LENGTH, L			ft			
19	Tt=L/3600V (EQ 15-1)			hr			0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)				hr		0.35
					min		21.0

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: **PRESENT** DEVELOPED D.A. # 4 - IMP

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
	Motor Vehicle Surface	98			0.03	2.9
			TOTALS=		0.03	2.9

CN= TOTAL PRODUCT / TOTAL AREA = **98**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: **PRESENT** DEVELOPED D.A. #4-IMP

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Smooth surface		
2	MANNINGS ROUGHNESS COEFF., n				0.011		
3	LAND SLOPE, s			ft/ft	0.10		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	100		
5	TWO YEAR 24 HOUR RAINFALL (NOAA			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.01		0.01
SHALLOW CONCENTRATED FLOW			SEGMENT ID				
7	SURFACE DESCRIPTION						
8	FLOW LENGTH, L			ft			
9	WATERCOURSE SLOPE, s			ft/ft			
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s			
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.			0.00
CHANNEL FLOW			SEGMENT ID		BC		
12	CROSS SECTIONAL FLOW AREA, a			ft^2	0.83		
13	WETTED PERIMITER, Pw			ft	8.63		
14	HYDRAULIC RADIUS, r=a/Pw			ft	0.100		
15	CHANNEL SLOPE, S			ft/ft	0.00		
16	MANNINGS ROUGHNESS COEFF., n				0.011		
17	VELOCITY, V (EQ 15-10)			ft/s	2		
18	FLOW LENGTH, L			ft	17		
19	Tt=L/3600V (EQ 15-1)			hr	0.01		0.01
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)				hr		0.02
					min		1.2

EXISTING AND PROPOSED TR-55 RUNOFF CALCULATIONS – APPENDIX A-2
PROPOSED CONDITIONS

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 1

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
B	Open Space	61			0.26	15.9
B	Woods	55			1.59	87.5
D	Woods	77			0.11	8.5
B	Brush	48			0.07	3.4
			TOTALS=		2.03	115.1

CN= TOTAL PRODUCT / TOTAL AREA = **57**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #1

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Woods		
2	MANNINGS ROUGHNESS COEFF., n				0.4		
3	LAND SLOPE, s			ft/ft	0.23		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	100		
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.13		0.13
SHALLOW CONCENTRATED FLOW			SEGMENT ID		BC		
7	SURFACE DESCRIPTION				Forest with heavy ground litter and hay meadows		
8	FLOW LENGTH, L			ft	456		
9	WATERCOURSE SLOPE, s			ft/ft	0.20		
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	1.2		
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.11		0.11
CHANNEL FLOW			SEGMENT ID		CD		
12	CROSS SECTIONAL FLOW AREA, a			ft^2	1.20		
13	WETTED PERIMITER, Pw			ft	3.90		
14	HYDRAULIC RADIUS, r=a/Pw			ft	0.31		
15	CHANNEL SLOPE, S			ft/ft	0.18		
16	MANNINGS ROUGHNESS COEFF., n				0.013		
17	VELOCITY, V (EQ 15-10)			ft/s	22.33		
18	FLOW LENGTH, L			ft	352		
19	Tt=L/3600V (EQ 15-1)			hr	0.00		0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)				hr		0.24
					min		14.4

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 1 - IMP

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
	Non-Motor Vehicle Surface	98			0.01	1.0
			TOTALS=		0.01	1.0

CN= TOTAL PRODUCT / TOTAL AREA = **98**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #1-IMP.

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Smooth Surface		
2	MANNINGS ROUGHNESS COEFF., n				0.011		
3	LAND SLOPE, s			ft/ft	0.24		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	74		
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.01		0.01
SHALLOW CONCENTRATED FLOW			SEGMENT ID				
7	SURFACE DESCRIPTION						
8	FLOW LENGTH, L			ft			
9	WATERCOURSE SLOPE, s			ft/ft			
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s			
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.			0.00
CHANNEL FLOW			SEGMENT ID				
12	CROSS SECTIONAL FLOW AREA, a			ft^2			
13	WETTED PERIMITER, Pw			ft			
14	HYDRAULIC RADIUS, r=a/Pw			ft			
15	CHANNEL SLOPE, S			ft/ft			
16	MANNINGS ROUGHNESS COEFF., n						
17	VELOCITY, V (EQ 15-10)			ft/s			
18	FLOW LENGTH, L			ft			
19	Tt=L/3600V (EQ 15-1)			hr			0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)				hr		0.01
					min		0.6

(210-VI-NEH, MAY 2010)

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 2

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
B	Open Space	61			0.93	56.7
B	Woods	55			0.37	20.4
B	Brush	48			0.01	0.5
			TOTALS=		1.31	77.6

CN= TOTAL PRODUCT / TOTAL AREA = **59**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #2

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Open Space		
2	MANNINGS ROUGHNESS COEFF., n				0.24		
3	LAND SLOPE, s			ft/ft	0.05		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	93		
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.15		0.15
SHALLOW CONCENTRATED FLOW			SEGMENT ID		BC		
7	SURFACE DESCRIPTION				Grassed waterways		
8	FLOW LENGTH, L			ft	104		
9	WATERCOURSE SLOPE, s			ft/ft	0.11		
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	5.2		
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.01		0.01
CHANNEL FLOW			SEGMENT ID				
12	CROSS SECTIONAL FLOW AREA, a			ft^2			
13	WETTED PERIMITER, Pw			ft			
14	HYDRAULIC RADIUS, r=a/Pw			ft			
15	CHANNEL SLOPE, S			ft/ft			
16	MANNINGS ROUGHNESS COEFF., n						
17	VELOCITY, V (EQ 15-10)			ft/s			
18	FLOW LENGTH, L			ft			
19	Tt=L/3600V (EQ 15-1)			hr			0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)					hr	0.16
						min	9.6

(210-VI-NEH, MAY 2010)

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 2Z

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
B	Woods	55			0.24	13.2
D	Woods	77			0.02	1.5
B	Brush	48			0.03	1.4
B	Open Space	61			0.00	0.0
			TOTALS=		0.29	16.2

CN= TOTAL PRODUCT / TOTAL AREA = **56**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #2Z

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Woods		
2	MANNINGS ROUGHNESS COEFF., n				0.4		
3	LAND SLOPE, s			ft/ft	0.22		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	100		
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.13		0.13
SHALLOW CONCENTRATED FLOW			SEGMENT ID		BC		
7	SURFACE DESCRIPTION				Forest with heavy ground litter and hay meadows		
8	FLOW LENGTH, L			ft	401		
9	WATERCOURSE SLOPE, s			ft/ft	0.22		
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	1.2		
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.09		0.09
CHANNEL FLOW			SEGMENT ID				
12	CROSS SECTIONAL FLOW AREA, a			ft^2			
13	WETTED PERIMITER, Pw			ft			
14	HYDRAULIC RADIUS, r=a/Pw			ft			
15	CHANNEL SLOPE, S			ft/ft			
16	MANNINGS ROUGHNESS COEFF., n						
17	VELOCITY, V (EQ 15-10)			ft/s			
18	FLOW LENGTH, L			ft			
19	Tt=L/3600V (EQ 15-1)			hr			0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)				hr		0.22
					min		13.2

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 3

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
B	Open Space	61			0.64	39.0
C	Open Space	74			0.03	2.2
D	Open Space	80			0.07	5.6
B	Woods	55			0.29	16.0
C	Woods	70			0.07	4.9
D	Woods	77			0.04	3.1
			TOTALS=		1.14	70.8

CN= TOTAL PRODUCT / TOTAL AREA = **62**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #3

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Open Space		
2	MANNINGS ROUGHNESS COEFF., n				0.24		
3	LAND SLOPE, s			ft/ft	0.09		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	81		
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.11		0.11
SHALLOW CONCENTRATED FLOW			SEGMENT ID		BC		
7	SURFACE DESCRIPTION				Pavement and Small Upland Gullies		
8	FLOW LENGTH, L			ft	803		
9	WATERCOURSE SLOPE, s			ft/ft	0.04		
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	4		
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.06		0.06
CHANNEL FLOW			SEGMENT ID				
12	CROSS SECTIONAL FLOW AREA, a			ft^2			
13	WETTED PERIMITER, Pw			ft			
14	HYDRAULIC RADIUS, r=a/Pw			ft			
15	CHANNEL SLOPE, S			ft/ft			
16	MANNINGS ROUGHNESS COEFF., n						
17	VELOCITY, V (EQ 15-10)			ft/s			
18	FLOW LENGTH, L			ft			
19	Tt=L/3600V (EQ 15-1)			hr			0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)				hr		0.17
					min		10.2

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 3 - IMP

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
	Motor Vehicle Surface	98			0.41	40.2
			TOTALS=		0.41	40.2

CN= TOTAL PRODUCT / TOTAL AREA = **98**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #3 IMP.

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Smooth Surface		
2	MANNINGS ROUGHNESS COEFF., n				0.011		
3	LAND SLOPE, s			ft/ft	0.07		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	100		
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.01		0.01
SHALLOW CONCENTRATED FLOW			SEGMENT ID		BC		
7	SURFACE DESCRIPTION				Pavement and Small Upland Gullies		
8	FLOW LENGTH, L			ft	842		
9	WATERCOURSE SLOPE, s			ft/ft	0.04		
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	4		
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.06		0.06
CHANNEL FLOW			SEGMENT ID				
12	CROSS SECTIONAL FLOW AREA, a			ft^2			
13	WETTED PERIMITER, Pw			ft			
14	HYDRAULIC RADIUS, r=a/Pw			ft			
15	CHANNEL SLOPE, S			ft/ft			
16	MANNINGS ROUGHNESS COEFF., n						
17	VELOCITY, V (EQ 15-10)			ft/s			
18	FLOW LENGTH, L			ft			
19	Tt=L/3600V (EQ 15-1)			hr			0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)					hr	0.07
						min	4.2

(210-VI-NEH, MAY 2010)

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 3Z

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
B	Open Space	61			0.05	3.1
B	Woods	55			2.22	122.1
D	Woods	77			0.23	17.7
B	Brush	48			0.67	32.2
			TOTALS=		3.17	175.0

CN= TOTAL PRODUCT / TOTAL AREA = **55**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #3Z

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Woods		
2	MANNINGS ROUGHNESS COEFF., n				0.4		
3	LAND SLOPE, s			ft/ft	0.14		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	94		
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.15		0.15
SHALLOW CONCENTRATED FLOW			SEGMENT ID		BC		
7	SURFACE DESCRIPTION				Forest with heavy ground litter and hay meadows		
8	FLOW LENGTH, L			ft	458		
9	WATERCOURSE SLOPE, s			ft/ft	0.27		
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	1.3		
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.10		0.10
CHANNEL FLOW			SEGMENT ID				
12	CROSS SECTIONAL FLOW AREA, a			ft^2			
13	WETTED PERIMITER, Pw			ft			
14	HYDRAULIC RADIUS, r=a/Pw			ft			
15	CHANNEL SLOPE, S			ft/ft			
16	MANNINGS ROUGHNESS COEFF., n						
17	VELOCITY, V (EQ 15-10)			ft/s			
18	FLOW LENGTH, L			ft			
19	Tt=L/3600V (EQ 15-1)			hr			0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)				hr		0.25
					min		15.0

RCP

(210-VI-NEH, MAY 2010)

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 4

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
B	Open Space	61			0.32	19.5
B	Woods	55			3.30	181.5
D	Woods	77			0.24	18.5
B	Brush	48			0.40	19.2
			TOTALS=		4.26	238.7

CN= TOTAL PRODUCT / TOTAL AREA = **56**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #4

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Woods		
2	MANNINGS ROUGHNESS COEFF., n				0.4		
3	LAND SLOPE, s			ft/ft	0.20		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	100		
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.14		0.14
SHALLOW CONCENTRATED FLOW			SEGMENT ID		BC		
7	SURFACE DESCRIPTION				Forest with heavy ground litter and hay meadows		
8	FLOW LENGTH, L			ft	515		
9	WATERCOURSE SLOPE, s			ft/ft	0.23		
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	1.1		
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.13		0.13
CHANNEL FLOW			SEGMENT ID		CD		
12	CROSS SECTIONAL FLOW AREA, a			ft^2	1.20		
13	WETTED PERIMITER, Pw			ft	3.90		
14	HYDRAULIC RADIUS, r=a/Pw			ft	0.31		
15	CHANNEL SLOPE, S			ft/ft	0.02		
16	MANNINGS ROUGHNESS COEFF., n				0.013		
17	VELOCITY, V (EQ 15-10)			ft/s	5.26		
18	FLOW LENGTH, L			ft	752		
19	Tt=L/3600V (EQ 15-1)			hr	0.04		0.04
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)				hr		0.31
					min		18.6

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 4 - IMP

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
	Motor Vehicle Surface	98			0.02	2.0
			TOTALS=		0.02	2.0

CN= TOTAL PRODUCT / TOTAL AREA = **98**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #4 IMP.

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Smooth Surface		
2	MANNINGS ROUGHNESS COEFF., n				0.011		
3	LAND SLOPE, s			ft/ft	0.01		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	40		
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.02		0.02
SHALLOW CONCENTRATED FLOW			SEGMENT ID				
7	SURFACE DESCRIPTION						
8	FLOW LENGTH, L			ft			
9	WATERCOURSE SLOPE, s			ft/ft			
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s			
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.			0.00
CHANNEL FLOW			SEGMENT ID				
12	CROSS SECTIONAL FLOW AREA, a			ft^2			
13	WETTED PERIMITER, Pw			ft			
14	HYDRAULIC RADIUS, r=a/Pw			ft			
15	CHANNEL SLOPE, S			ft/ft			
16	MANNINGS ROUGHNESS COEFF., n						
17	VELOCITY, V (EQ 15-10)			ft/s			
18	FLOW LENGTH, L			ft			
19	Tt=L/3600V (EQ 15-1)			hr			0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)					hr	0.02
						min	1.2

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 5

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
B	Open Space	61			1.26	76.9
			TOTALS=		1.26	76.9

CN= TOTAL PRODUCT / TOTAL AREA = **61**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #5

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Open Space		
2	MANNINGS ROUGHNESS COEFF., n				0.24		
3	LAND SLOPE, s			ft/ft	0.02		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	59		
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.15		0.15
SHALLOW CONCENTRATED FLOW			SEGMENT ID		BC		
7	SURFACE DESCRIPTION				Grassed Waterways		
8	FLOW LENGTH, L			ft	82		
9	WATERCOURSE SLOPE, s			ft/ft	0.01		
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	1.6		
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.01		0.01
CHANNEL FLOW			SEGMENT ID		CD		
12	CROSS SECTIONAL FLOW AREA, a			ft^2	1.20		
13	WETTED PERIMITER, Pw			ft	3.90		
14	HYDRAULIC RADIUS, r=a/Pw			ft	0.31		
15	CHANNEL SLOPE, S			ft/ft	0.09		
16	MANNINGS ROUGHNESS COEFF., n				0.013		
17	VELOCITY, V (EQ 15-10)			ft/s	15.79		
18	FLOW LENGTH, L			ft	1090		
19	Tt=L/3600V (EQ 15-1)			hr	0.02		0.02
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)				hr		0.18
					min		10.8

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 5 - IMP

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
	Motor Vehicle Surface	98			0.60	58.8
	Non-Motor Vehicle Surface	98			0.61	59.8
			TOTALS=		1.21	118.6

CN= TOTAL PRODUCT / TOTAL AREA = **98**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #5 IMP.

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Smooth Surface		
2	MANNINGS ROUGHNESS COEFF., n				0.011		
3	LAND SLOPE, s			ft/ft	0.08		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	100		
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.01		0.01
SHALLOW CONCENTRATED FLOW			SEGMENT ID		BC		
7	SURFACE DESCRIPTION				Pavement and Small Upland Gullies		
8	FLOW LENGTH, L			ft	88		
9	WATERCOURSE SLOPE, s			ft/ft	0.07		
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	5.2		
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.00		0.00
CHANNEL FLOW			SEGMENT ID				
12	CROSS SECTIONAL FLOW AREA, a			ft^2			
13	WETTED PERIMITER, Pw			ft			
14	HYDRAULIC RADIUS, r=a/Pw			ft			
15	CHANNEL SLOPE, S			ft/ft			
16	MANNINGS ROUGHNESS COEFF., n						
17	VELOCITY, V (EQ 15-10)			ft/s			
18	FLOW LENGTH, L			ft			
19	Tt=L/3600V (EQ 15-1)			hr			0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)					hr	0.01
						min	0.6

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 6

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
B	Open Space	61			0.66	40.3
			TOTALS=		0.66	40.3

CN= TOTAL PRODUCT / TOTAL AREA = **61**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #6

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Open Space		
2	MANNINGS ROUGHNESS COEFF., n				0.24		
3	LAND SLOPE, s			ft/ft	0.08		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	100		
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.13		0.13
SHALLOW CONCENTRATED FLOW			SEGMENT ID		BC		
7	SURFACE DESCRIPTION				Grassed Waterways		
8	FLOW LENGTH, L			ft	13		
9	WATERCOURSE SLOPE, s			ft/ft	0.02		
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	2.2		
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.00		0.00
CHANNEL FLOW			SEGMENT ID		CD		
12	CROSS SECTIONAL FLOW AREA, a			ft^2	1.20		
13	WETTED PERIMITER, Pw			ft	3.90		
14	HYDRAULIC RADIUS, r=a/Pw			ft	0.31		
15	CHANNEL SLOPE, S			ft/ft	0.10		
16	MANNINGS ROUGHNESS COEFF., n				0.013		
17	VELOCITY, V (EQ 15-10)			ft/s	1.66		
18	FLOW LENGTH, L			ft	322		
19	Tt=L/3600V (EQ 15-1)			hr	0.05		0.05
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)				hr		0.18
					min		10.8

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 6 - IMP

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
	Motor Vehicle Surface	98			0.21	20.6
	Non-Motor Vehicle Surface	98			0.07	6.9
			TOTALS=		0.28	27.4

CN= TOTAL PRODUCT / TOTAL AREA = **98**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #6 IMP.

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Smooth Surface		
2	MANNINGS ROUGHNESS COEFF., n				0.011		
3	LAND SLOPE, s			ft/ft	0.03		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	100		
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.02		0.02
SHALLOW CONCENTRATED FLOW			SEGMENT ID		BC		
7	SURFACE DESCRIPTION				Pavement and Small Upland Gullies		
8	FLOW LENGTH, L			ft	75		
9	WATERCOURSE SLOPE, s			ft/ft	0.08		
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	5.5		
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.00		0.00
CHANNEL FLOW			SEGMENT ID				
12	CROSS SECTIONAL FLOW AREA, a			ft^2			
13	WETTED PERIMITER, Pw			ft			
14	HYDRAULIC RADIUS, r=a/Pw			ft			
15	CHANNEL SLOPE, S			ft/ft			
16	MANNINGS ROUGHNESS COEFF., n						
17	VELOCITY, V (EQ 15-10)			ft/s			
18	FLOW LENGTH, L			ft			
19	Tt=L/3600V (EQ 15-1)			hr			0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)					hr	0.02
						min	1.2

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 7

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
B	Open Space	61			0.23	14.0
			TOTALS=		0.23	14.0

CN= TOTAL PRODUCT / TOTAL AREA = **61**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #7

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Open Space	Smooth Surface	
2	MANNINGS ROUGHNESS COEFF., n				0.24	0.011	
3	LAND SLOPE, s			ft/ft	0.03	0.01	
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	77	25	
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49	3.49	
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.15	0.01	0.16
SHALLOW CONCENTRATED FLOW			SEGMENT ID				
7	SURFACE DESCRIPTION						
8	FLOW LENGTH, L			ft			
9	WATERCOURSE SLOPE, s			ft/ft			
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s			
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.			0.00
CHANNEL FLOW			SEGMENT ID		DE		
12	CROSS SECTIONAL FLOW AREA, a			ft^2	1.20		
13	WETTED PERIMITER, Pw			ft	3.90		
14	HYDRAULIC RADIUS, r=a/Pw			ft	0.31		
15	CHANNEL SLOPE, S			ft/ft	0.01		
16	MANNINGS ROUGHNESS COEFF., n				0.013		
17	VELOCITY, V (EQ 15-10)			ft/s	5.26		
18	FLOW LENGTH, L			ft	9		
19	Tt=L/3600V (EQ 15-1)			hr	0.00		0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)						hr 0.16
							min 9.6

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 7 - IMP

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
	Motor Vehicle Surface	98			0.15	14.7
	Non-Motor Vehicle Surface	98			0.06	5.9
			TOTALS=		0.21	20.6

CN= TOTAL PRODUCT / TOTAL AREA = **98**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #7 IMP.

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Smooth Surface		
2	MANNINGS ROUGHNESS COEFF., n				0.011		
3	LAND SLOPE, s			ft/ft	0.03		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	100		
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.02		0.02
SHALLOW CONCENTRATED FLOW			SEGMENT ID		BC		
7	SURFACE DESCRIPTION				Pavement and Small Upland Gullies		
8	FLOW LENGTH, L			ft	13		
9	WATERCOURSE SLOPE, s			ft/ft	0.02		
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	2.8		
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.00		0.00
CHANNEL FLOW			SEGMENT ID				
12	CROSS SECTIONAL FLOW AREA, a			ft^2			
13	WETTED PERIMITER, Pw			ft			
14	HYDRAULIC RADIUS, r=a/Pw			ft			
15	CHANNEL SLOPE, S			ft/ft			
16	MANNINGS ROUGHNESS COEFF., n						
17	VELOCITY, V (EQ 15-10)			ft/s			
18	FLOW LENGTH, L			ft			
19	Tt=L/3600V (EQ 15-1)			hr			0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)					hr	0.02
						min	1.2

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 8 - IMP

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
	Non-Motor Vehicle Surface	98			0.90	88.2
			TOTALS=		0.90	88.2

CN= TOTAL PRODUCT / TOTAL AREA = **98**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #8-IMP

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Smooth Surface		
2	MANNINGS ROUGHNESS COEFF., n				0.011		
3	LAND SLOPE, s			ft/ft	0.01		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	100		
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.03		0.03
SHALLOW CONCENTRATED FLOW			SEGMENT ID		BC		
7	SURFACE DESCRIPTION				Pavement and Small Upland Gullies		
8	FLOW LENGTH, L			ft	84		
9	WATERCOURSE SLOPE, s			ft/ft	0.01		
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	2		
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.01		0.01
CHANNEL FLOW			SEGMENT ID				
12	CROSS SECTIONAL FLOW AREA, a			ft^2			
13	WETTED PERIMITER, Pw			ft			
14	HYDRAULIC RADIUS, r=a/Pw			ft			
15	CHANNEL SLOPE, S			ft/ft			
16	MANNINGS ROUGHNESS COEFF., n						
17	VELOCITY, V (EQ 15-10)			ft/s			
18	FLOW LENGTH, L			ft			
19	Tt=L/3600V (EQ 15-1)			hr			0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)					hr	0.04
						min	2.4

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 9 - IMP

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
	Non-Motor Vehicle Surface	98			0.95	93.1
			TOTALS=		0.95	93.1

CN= TOTAL PRODUCT / TOTAL AREA = **98**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #9-IMP

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Smooth Surface		
2	MANNINGS ROUGHNESS COEFF., n				0.011		
3	LAND SLOPE, s			ft/ft	0.01		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	100		
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.03		0.03
SHALLOW CONCENTRATED FLOW			SEGMENT ID		BC		
7	SURFACE DESCRIPTION				Pavement and Small Upland Gullies		
8	FLOW LENGTH, L			ft	37		
9	WATERCOURSE SLOPE, s			ft/ft	0.01		
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	2		
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.01		0.01
CHANNEL FLOW			SEGMENT ID				
12	CROSS SECTIONAL FLOW AREA, a			ft^2			
13	WETTED PERIMITER, Pw			ft			
14	HYDRAULIC RADIUS, r=a/Pw			ft			
15	CHANNEL SLOPE, S			ft/ft			
16	MANNINGS ROUGHNESS COEFF., n						
17	VELOCITY, V (EQ 15-10)			ft/s			
18	FLOW LENGTH, L			ft			
19	Tt=L/3600V (EQ 15-1)			hr			0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)					hr	0.04
						min	2.4

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 10

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
B	Open Space	61			0.91	55.5
C	Open Space	74			0.00	0.0
D	Open Space	80			0.12	9.6
			TOTALS=		1.03	65.1

CN= TOTAL PRODUCT / TOTAL AREA = **63**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #10

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

	SHEET FLOW		SEGMENT ID	AB	BC	
1	SURFACE DESCRIPTION			Open Space	Smooth Surface	
2	MANNINGS ROUGHNESS COEFF., n			0.24	0.011	
3	LAND SLOPE, s		ft/ft	0.41	0.09	
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)	ft	55	45	
5	TWO YEAR 24 HOUR RAINFALL (NOAA)		in	3.49	3.49	
6	Tt (EQ 15-8)	COMPUTE Tt	hr.	0.04	0.01	0.05

	SHALLOW CONCENTRATED FLOW		SEGMENT ID	CD		
7	SURFACE DESCRIPTION			Pavement and Small Upland Gullies		
8	FLOW LENGTH, L		ft	95		
9	WATERCOURSE SLOPE, s		ft/ft	0.05		
10	AVERAGE VELOCITY, V (FIG. 15-4)		ft/s	4.5		
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt	hr.	0.01		0.01

	CHANNEL FLOW	SEGMENT ID	DE		
12	CROSS SECTIONAL FLOW AREA, a	ft^2	1.20		
13	WETTED PERIMITER, Pw	ft	3.90		
14	HYDRAULIC RADIUS, r=a/Pw	ft	0.31		
15	CHANNEL SLOPE, S	ft/ft	0.10		
16	MANNINGS ROUGHNESS COEFF., n		0.013		
17	VELOCITY, V (EQ 15-10)	ft/s	16.65		
18	FLOW LENGTH, L	ft	240		
19	Tt=L/3600V (EQ 15-1)	hr	0.00		0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)		hr			0.06
			min			3.6

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 10 - IMP

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
	Motor Vehicle Surface	98			1.00	98.0
	Non-Motor Vehicle Surface	98			0.30	29.4
			TOTALS=		1.30	127.4

CN= TOTAL PRODUCT / TOTAL AREA = **98**
TOTAL AREA

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #10 IMP.

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

	SHEET FLOW		SEGMENT ID		AB	BC	
1	SURFACE DESCRIPTION				Smooth Surface		
2	MANNINGS ROUGHNESS COEFF., n				0.011		
3	LAND SLOPE, s			ft/ft	0.05		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	100		
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.01		0.01

	SHALLOW CONCENTRATED FLOW		SEGMENT ID		BC		
7	SURFACE DESCRIPTION				Pavement and Small Upland Gullies		
8	FLOW LENGTH, L			ft	226		
9	WATERCOURSE SLOPE, s			ft/ft	0.12		
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	6.5		
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.01		0.01

	CHANNEL FLOW		SEGMENT ID				
12	CROSS SECTIONAL FLOW AREA, a			ft^2			
13	WETTED PERIMITER, Pw			ft			
14	HYDRAULIC RADIUS, r=a/Pw			ft			
15	CHANNEL SLOPE, S			ft/ft			
16	MANNINGS ROUGHNESS COEFF., n						
17	VELOCITY, V (EQ 15-10)			ft/s			
18	FLOW LENGTH, L			ft			
19	Tt=L/3600V (EQ 15-1)			hr			0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)					hr	0.02
						min	1.2

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 11

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
B	Open Space	61			0.34	20.7
C	Open Space	74			0.01	0.7
			TOTALS=		0.35	21.5

CN= TOTAL PRODUCT / TOTAL AREA = **61**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #11

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Open Space		
2	MANNINGS ROUGHNESS COEFF., n				0.24		
3	LAND SLOPE, s			ft/ft	0.09		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	100		
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.12		0.12
SHALLOW CONCENTRATED FLOW			SEGMENT ID		BC		
7	SURFACE DESCRIPTION				Grassed Waterways		
8	FLOW LENGTH, L			ft	122		
9	WATERCOURSE SLOPE, s			ft/ft	0.13		
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	5.5		
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.01		0.01
CHANNEL FLOW			SEGMENT ID				
12	CROSS SECTIONAL FLOW AREA, a			ft^2			
13	WETTED PERIMITER, Pw			ft			
14	HYDRAULIC RADIUS, r=a/Pw			ft			
15	CHANNEL SLOPE, S			ft/ft			
16	MANNINGS ROUGHNESS COEFF., n						
17	VELOCITY, V (EQ 15-10)			ft/s			
18	FLOW LENGTH, L			ft			
19	Tt=L/3600V (EQ 15-1)			hr			0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)				hr		0.13
					min		7.8

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 11 - IMP

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
	Non-Motor Vehicle Surface	98			0.37	36.3
			TOTALS=		0.37	36.3

CN= TOTAL PRODUCT / TOTAL AREA = **98**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #11-IMP

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Smooth Surface		
2	MANNINGS ROUGHNESS COEFF., n				0.011		
3	LAND SLOPE, s			ft/ft	0.01		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	78		
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.02		0.02
SHALLOW CONCENTRATED FLOW			SEGMENT ID				
7	SURFACE DESCRIPTION						
8	FLOW LENGTH, L			ft			
9	WATERCOURSE SLOPE, s			ft/ft			
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s			
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.			0.00
CHANNEL FLOW			SEGMENT ID				
12	CROSS SECTIONAL FLOW AREA, a			ft^2			
13	WETTED PERIMITER, Pw			ft			
14	HYDRAULIC RADIUS, r=a/Pw			ft			
15	CHANNEL SLOPE, S			ft/ft			
16	MANNINGS ROUGHNESS COEFF., n						
17	VELOCITY, V (EQ 15-10)			ft/s			
18	FLOW LENGTH, L			ft			
19	Tt=L/3600V (EQ 15-1)			hr			0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)					hr	0.02
						min	1.2

(210-VI-NEH, MAY 2010)

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 11A

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
B	Open Space	61			0.86	52.5
			TOTALS=		0.86	52.5

CN= TOTAL PRODUCT / TOTAL AREA = **61**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #11A

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

	SHEET FLOW		SEGMENT ID	AB		
1	SURFACE DESCRIPTION			Open Space		
2	MANNINGS ROUGHNESS COEFF., n			0.24		
3	LAND SLOPE, s		ft/ft	0.13		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)	ft	100		
5	TWO YEAR 24 HOUR RAINFALL (NOAA)		in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt	hr.	0.11		0.11

	SHALLOW CONCENTRATED FLOW		SEGMENT ID	BC	CD	
7	SURFACE DESCRIPTION			Grassed Waterways	Pavement and Small Upland Gullies	
8	FLOW LENGTH, L		ft	10	190	
9	WATERCOURSE SLOPE, s		ft/ft	0.05	0.06	
10	AVERAGE VELOCITY, V (FIG. 15-4)		ft/s	3.6	4.9	
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt	hr.	0.00	0.01	0.01

	CHANNEL FLOW	SEGMENT ID	DE		
12	CROSS SECTIONAL FLOW AREA, a	ft^2	1.20		
13	WETTED PERIMITER, Pw	ft	3.90		
14	HYDRAULIC RADIUS, r=a/Pw	ft	0.31		
15	CHANNEL SLOPE, S	ft/ft	0.08		
16	MANNINGS ROUGHNESS COEFF., n		0.013		
17	VELOCITY, V (EQ 15-10)	ft/s	14.89		
18	FLOW LENGTH, L	ft	563		
19	Tt=L/3600V (EQ 15-1)	hr	0.01		0.01
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)		hr		0.13
			min		7.8

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 11A - IMP

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
	Motor Vehicle Surface	98			0.36	35.3
	Non-Motor Vehicle Surface	98			0.50	49.0
			TOTALS=		0.86	84.3

CN= TOTAL PRODUCT / TOTAL AREA = **98**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #11A IMP.

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Smooth Surface		
2	MANNINGS ROUGHNESS COEFF., n				0.011		
3	LAND SLOPE, s			ft/ft	0.09		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	100		
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.01		0.01
SHALLOW CONCENTRATED FLOW			SEGMENT ID		BC		
7	SURFACE DESCRIPTION				Pavement and Small Upland Gullies		
8	FLOW LENGTH, L			ft	156		
9	WATERCOURSE SLOPE, s			ft/ft	0.05		
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	4.5		
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.01		0.01
CHANNEL FLOW			SEGMENT ID				
12	CROSS SECTIONAL FLOW AREA, a			ft^2			
13	WETTED PERIMITER, Pw			ft			
14	HYDRAULIC RADIUS, r=a/Pw			ft			
15	CHANNEL SLOPE, S			ft/ft			
16	MANNINGS ROUGHNESS COEFF., n						
17	VELOCITY, V (EQ 15-10)			ft/s			
18	FLOW LENGTH, L			ft			
19	Tt=L/3600V (EQ 15-1)			hr			0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)					hr	0.02
						min	1.2

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 12

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
B	Open Space	61			0.35	21.4
			TOTALS=		0.35	21.4

CN= TOTAL PRODUCT / TOTAL AREA = **61**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #12

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Open Space		
2	MANNINGS ROUGHNESS COEFF., n				0.24		
3	LAND SLOPE, s			ft/ft	0.07		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	100		
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.14		0.14
SHALLOW CONCENTRATED FLOW			SEGMENT ID		BC		
7	SURFACE DESCRIPTION				Grassed Waterways		
8	FLOW LENGTH, L			ft	68		
9	WATERCOURSE SLOPE, s			ft/ft	0.06		
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	4		
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.00		0.00
CHANNEL FLOW			SEGMENT ID				
12	CROSS SECTIONAL FLOW AREA, a			ft^2	1.20		
13	WETTED PERIMITER, Pw			ft	3.90		
14	HYDRAULIC RADIUS, r=a/Pw			ft	0.31		
15	CHANNEL SLOPE, S			ft/ft	0.87		
16	MANNINGS ROUGHNESS COEFF., n				0.013		
17	VELOCITY, V (EQ 15-10)			ft/s	49.1		
18	FLOW LENGTH, L			ft	38		
19	Tt=L/3600V (EQ 15-1)			hr	0.00		0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)					hr	0.14
						min	8.4

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 12A

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
B	Open Space	61			1.12	68.3
			TOTALS=		1.12	68.3

CN= TOTAL PRODUCT / TOTAL AREA = **61**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #12A

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB	BC	
1	SURFACE DESCRIPTION				Open Space	Smooth Surface	
2	MANNINGS ROUGHNESS COEFF., n				0.24	0.011	
3	LAND SLOPE, s			ft/ft	0.09	0.03	
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	69	31	
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49	3.49	
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.09	0.01	0.10
SHALLOW CONCENTRATED FLOW			SEGMENT ID		CD		
7	SURFACE DESCRIPTION				Pavement and Small Upland Gullies		
8	FLOW LENGTH, L			ft	10		
9	WATERCOURSE SLOPE, s			ft/ft	0.05		
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	4.5		
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.00		0.00
CHANNEL FLOW			SEGMENT ID		DE		
12	CROSS SECTIONAL FLOW AREA, a			ft^2	1.20		
13	WETTED PERIMITER, Pw			ft	3.90		
14	HYDRAULIC RADIUS, r=a/Pw			ft	0.31		
15	CHANNEL SLOPE, S			ft/ft	0.11		
16	MANNINGS ROUGHNESS COEFF., n				0.013		
17	VELOCITY, V (EQ 15-10)			ft/s	17.46		
18	FLOW LENGTH, L			ft	650		
19	Tt=L/3600V (EQ 15-1)			hr	0.01		0.01
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)						hr 0.11
							min 6.6

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 12A - IMP

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
	Motor Vehicle Surface	98			0.45	44.1
	Non-Motor Vehicle Surface	98			0.87	85.3
			TOTALS=		1.32	129.4

CN= TOTAL PRODUCT / TOTAL AREA = **98**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #12A IMP.

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Smooth Surface		
2	MANNINGS ROUGHNESS COEFF., n				0.011		
3	LAND SLOPE, s			ft/ft	0.03		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	100		
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.02		0.02
SHALLOW CONCENTRATED FLOW			SEGMENT ID		BC		
7	SURFACE DESCRIPTION				Pavement and Small Upland Gullies		
8	FLOW LENGTH, L			ft	122		
9	WATERCOURSE SLOPE, s			ft/ft	0.05		
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	4.8		
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.01		0.01
CHANNEL FLOW			SEGMENT ID				
12	CROSS SECTIONAL FLOW AREA, a			ft^2			
13	WETTED PERIMITER, Pw			ft			
14	HYDRAULIC RADIUS, r=a/Pw			ft			
15	CHANNEL SLOPE, S			ft/ft			
16	MANNINGS ROUGHNESS COEFF., n						
17	VELOCITY, V (EQ 15-10)			ft/s			
18	FLOW LENGTH, L			ft			
19	Tt=L/3600V (EQ 15-1)			hr			0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)					hr	0.03
						min	1.8

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 13

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
B	Open Space	61			0.26	15.9
			TOTALS=		0.26	15.9

CN= TOTAL PRODUCT / TOTAL AREA = **61**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #13

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Open Space		
2	MANNINGS ROUGHNESS COEFF., n				0.24		
3	LAND SLOPE, s			ft/ft	0.13		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	100		
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.11		0.11
SHALLOW CONCENTRATED FLOW			SEGMENT ID		BC		
7	SURFACE DESCRIPTION				Grassed Waterways		
8	FLOW LENGTH, L			ft	96		
9	WATERCOURSE SLOPE, s			ft/ft	0.07		
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	4.2		
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.01		0.01
CHANNEL FLOW			SEGMENT ID		CD		
12	CROSS SECTIONAL FLOW AREA, a			ft^2	1.20		
13	WETTED PERIMITER, Pw			ft	3.90		
14	HYDRAULIC RADIUS, r=a/Pw			ft	0.31		
15	CHANNEL SLOPE, S			ft/ft	0.14		
16	MANNINGS ROUGHNESS COEFF., n				0.013		
17	VELOCITY, V (EQ 15-10)			ft/s	19.69		
18	FLOW LENGTH, L			ft	59		
19	Tt=L/3600V (EQ 15-1)			hr	0.00		0.01
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)					hr	0.13
						min	7.8

WORKSHEET 2:RUNOFF CURVE NUMBER AND RUNOFF

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **REV DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. # 13 - IMP

SOIL NAME AND HYDROLOGIC GROUP	COVER DESCRIPTION	CN			AREA IN ACRES	PRODUCT OF CN x AREA
		TABLE 2-2	FIG 2-3	FIG 2-4		
	Motor Vehicle Surface	98			0.11	10.8
	Non-Motor Vehicle Surface	98			0.08	7.8
			TOTALS=		0.19	18.6

CN= TOTAL PRODUCT / TOTAL AREA = **98**

REFERENCE NEH PART 630

WORKSHEET 3:TIME OF CONCENTRATION AND TRAVEL TIME

PROJECT: Hurstmont Estate **BY:** AGS **DATE:** 5/26/2023
LOCATION: Harding Township **CHECKED:** RCM2 **DATE:** -

SELECT ONE: PRESENT **DEVELOPED** D.A. #13 IMP.

SELECT ONE: **Tc** Tt

NOTES: SPACE FOR AS MANY AS TWO SEGMENTS PER FLOW CAN BE USED FOR EACH WORKSHEET.
INCLUDE A MAP, SCHEMATIC, OR DESCRIPTION OF FLOW SEGMENTS

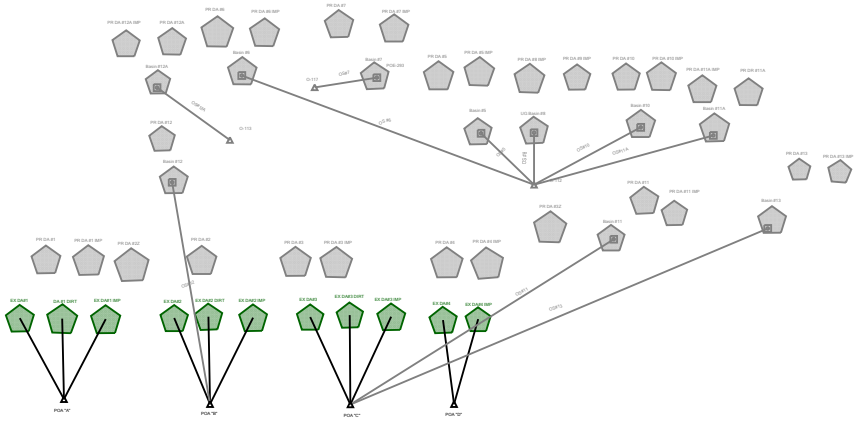
SHEET FLOW			SEGMENT ID		AB		
1	SURFACE DESCRIPTION				Smooth Surface		
2	MANNINGS ROUGHNESS COEFF., n				0.011		
3	LAND SLOPE, s			ft/ft	0.03		
4	MAXIMUM FLOW LENGTH, L	(EQ 15-9)		ft	100		
5	TWO YEAR 24 HOUR RAINFALL (NOAA)			in	3.49		
6	Tt (EQ 15-8)	COMPUTE Tt		hr.	0.02		0.02
SHALLOW CONCENTRATED FLOW			SEGMENT ID		BC		
7	SURFACE DESCRIPTION				Pavement and Small Upland Gullies		
8	FLOW LENGTH, L			ft	185		
9	WATERCOURSE SLOPE, s			ft/ft	0.06		
10	AVERAGE VELOCITY, V (FIG. 15-4)			ft/s	4.9		
11	Tt=L/3600V (EQ 15-1)	COMPUTE Tt		hr.	0.01		0.01
CHANNEL FLOW			SEGMENT ID				
12	CROSS SECTIONAL FLOW AREA, a			ft^2			
13	WETTED PERIMITER, Pw			ft			
14	HYDRAULIC RADIUS, r=a/Pw			ft			
15	CHANNEL SLOPE, S			ft/ft			
16	MANNINGS ROUGHNESS COEFF., n						
17	VELOCITY, V (EQ 15-10)			ft/s			
18	FLOW LENGTH, L			ft			
19	Tt=L/3600V (EQ 15-1)			hr			0.00
20	WATERSHED OR SUBAREA Tc OR Tt (EQ 15-7)					hr	0.03
						min	1.8

(210-VI-NEH, MAY 2010)

FLOOD ROUTING CALCULATIONS - APPENDIX B

FLOOD ROUTING CALCULATIONS – APPENDIX B-1
EXISTING CONDITIONS

Scenario: Pre-Development 2



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Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)
EX DA#1	Pre-Development 2	2	0.293	12.250	2.13
EX DA#1	Pre-Development 10	10	0.822	12.250	7.47
EX DA#1	Pre-Development 100	100	2.515	12.250	23.91
EX DA#1 IMP	Pre-Development 2	2	0.006	12.050	0.09
EX DA#1 IMP	Pre-Development 10	10	0.011	12.050	0.14
EX DA#1 IMP	Pre-Development 100	100	0.020	12.050	0.26
DA #1 DIRT	Pre-Development 2	2	0.012	12.100	0.20
DA #1 DIRT	Pre-Development 10	10	0.023	12.100	0.36
DA #1 DIRT	Pre-Development 100	100	0.051	12.100	0.74
EX DA#2	Pre-Development 2	2	0.302	12.250	2.25
EX DA#2	Pre-Development 10	10	0.828	12.250	7.49
EX DA#2	Pre-Development 100	100	2.489	12.250	23.45
EX DA#2 IMP	Pre-Development 2	2	0.108	12.050	1.43
EX DA#2 IMP	Pre-Development 10	10	0.172	12.050	2.24
EX DA#2 IMP	Pre-Development 100	100	0.324	12.050	4.17
EX DA#2 DIRT	Pre-Development 2	2	0.035	12.100	0.56
EX DA#2 DIRT	Pre-Development 10	10	0.066	12.100	1.01
EX DA#2 DIRT	Pre-Development 100	100	0.143	12.100	2.08
EX DA#3	Pre-Development 2	2	0.635	12.350	3.84
EX DA#3	Pre-Development 10	10	1.784	12.350	13.47
EX DA#3	Pre-Development 100	100	5.458	12.300	44.08
EX DA#3 IMP	Pre-Development 2	2	0.345	12.100	4.58
EX DA#3 IMP	Pre-Development 10	10	0.548	12.100	7.15
EX DA#3 IMP	Pre-Development 100	100	1.034	12.050	13.30
EX DA#3 DIRT	Pre-Development 2	2	0.043	12.100	0.68
EX DA#3 DIRT	Pre-Development 10	10	0.079	12.100	1.21
EX DA#3 DIRT	Pre-Development 100	100	0.171	12.100	2.47
EX DA#4	Pre-Development 2	2	0.299	12.300	1.89
EX DA#4	Pre-Development 10	10	0.860	12.300	7.05
EX DA#4	Pre-Development 100	100	2.681	12.250	23.56
EX DA#4 IMP	Pre-Development 2	2	0.010	12.050	0.13
EX DA#4 IMP	Pre-Development 10	10	0.016	12.050	0.21
EX DA#4 IMP	Pre-Development 100	100	0.030	12.050	0.39

Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)
POA "A"	Pre-Development 2	2	0.312	12.250	2.21
POA "A"	Pre-Development 10	10	0.856	12.250	7.60
POA "A"	Pre-Development 100	100	2.585	12.200	24.25
POA "B"	Pre-Development 2	2	0.445	12.100	3.06

Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)
POA "B"	Pre-Development 10	10	1.066	12.200	8.38
POA "B"	Pre-Development 100	100	2.957	12.200	25.46
POA "C"	Pre-Development 2	2	1.023	12.100	6.41
POA "C"	Pre-Development 10	10	2.410	12.300	15.56
POA "C"	Pre-Development 100	100	6.662	12.300	48.04
POA "D"	Pre-Development 2	2	0.309	12.300	1.93
POA "D"	Pre-Development 10	10	0.876	12.300	7.10
POA "D"	Pre-Development 100	100	2.712	12.250	23.66

Subsection: Unit Hydrograph Summary
Label: DA #1 DIRT
Scenario: Pre-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	0.060 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	0.20 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	0.20 ft³/s

Drainage Area	
SCS CN (Composite)	82.000
Area (User Defined)	0.060 acres
Maximum Retention (Pervious)	2.2 in
Maximum Retention (Pervious, 20 percent)	0.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.5 in
Runoff Volume (Pervious)	0.012 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.012 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Existing Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: DA #1 DIRT
Scenario: Pre-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	6.80 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

Subsection: Unit Hydrograph Summary
Label: DA #1 DIRT
Scenario: Pre-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	0.060 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	0.36 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	0.36 ft³/s

Drainage Area	
SCS CN (Composite)	82.000
Area (User Defined)	0.060 acres
Maximum Retention (Pervious)	2.2 in
Maximum Retention (Pervious, 20 percent)	0.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.6 in
Runoff Volume (Pervious)	0.023 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.023 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: DA #1 DIRT
Scenario: Pre-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	6.80 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

Subsection: Unit Hydrograph Summary
Label: DA #1 DIRT
Scenario: Pre-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	0.060 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	0.74 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	0.74 ft³/s

Drainage Area	
SCS CN (Composite)	82.000
Area (User Defined)	0.060 acres
Maximum Retention (Pervious)	2.2 in
Maximum Retention (Pervious, 20 percent)	0.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	10.1 in
Runoff Volume (Pervious)	0.051 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.051 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: DA #1 DIRT
Scenario: Pre-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	6.80 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#1
Scenario: Pre-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.290 hours
Area (User Defined)	4.690 acres

Computational Time Increment	0.039 hours
Time to Peak (Computed)	12.257 hours
Flow (Peak, Computed)	2.15 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.250 hours
Flow (Peak Interpolated Output)	2.13 ft³/s

Drainage Area	
SCS CN (Composite)	57.000
Area (User Defined)	4.690 acres
Maximum Retention (Pervious)	7.5 in
Maximum Retention (Pervious, 20 percent)	1.5 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.7 in
Runoff Volume (Pervious)	0.293 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.293 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.290 hours
Computational Time Increment	0.039 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#1
Scenario: Pre-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	18.32 ft³/s
Unit peak time, Tp	0.193 hours
Unit receding limb, Tr	0.773 hours
Total unit time, Tb	0.967 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#1
Scenario: Pre-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.290 hours
Area (User Defined)	4.690 acres

Computational Time Increment	0.039 hours
Time to Peak (Computed)	12.219 hours
Flow (Peak, Computed)	7.51 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.250 hours
Flow (Peak Interpolated Output)	7.47 ft³/s

Drainage Area	
SCS CN (Composite)	57.000
Area (User Defined)	4.690 acres
Maximum Retention (Pervious)	7.5 in
Maximum Retention (Pervious, 20 percent)	1.5 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.1 in
Runoff Volume (Pervious)	0.822 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.822 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.290 hours
Computational Time Increment	0.039 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#1
Scenario: Pre-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	18.32 ft³/s
Unit peak time, Tp	0.193 hours
Unit receding limb, Tr	0.773 hours
Total unit time, Tb	0.967 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#1
Scenario: Pre-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.290 hours
Area (User Defined)	4.690 acres

Computational Time Increment	0.039 hours
Time to Peak (Computed)	12.219 hours
Flow (Peak, Computed)	24.41 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.250 hours
Flow (Peak Interpolated Output)	23.91 ft³/s

Drainage Area	
SCS CN (Composite)	57.000
Area (User Defined)	4.690 acres
Maximum Retention (Pervious)	7.5 in
Maximum Retention (Pervious, 20 percent)	1.5 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.4 in
Runoff Volume (Pervious)	2.515 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	2.515 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.290 hours
Computational Time Increment	0.039 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#1
Scenario: Pre-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	18.32 ft³/s
Unit peak time, Tp	0.193 hours
Unit receding limb, Tr	0.773 hours
Total unit time, Tb	0.967 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#1 IMP
Scenario: Pre-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	0.020 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	0.09 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.09 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.020 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.007 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.006 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#1 IMP
Scenario: Pre-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	2.27 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#1 IMP
Scenario: Pre-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	0.020 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	0.14 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.14 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.020 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.4 in
Runoff Volume (Pervious)	0.011 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.011 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#1 IMP
Scenario: Pre-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	2.27 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#1 IMP
Scenario: Pre-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	0.020 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	0.26 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.26 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.020 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.2 in
Runoff Volume (Pervious)	0.020 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.020 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#1 IMP
Scenario: Pre-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	2.27 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#2
Scenario: Pre-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.300 hours
Area (User Defined)	4.530 acres

Computational Time Increment	0.040 hours
Time to Peak (Computed)	12.280 hours
Flow (Peak, Computed)	2.27 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.250 hours
Flow (Peak Interpolated Output)	2.25 ft³/s

Drainage Area	
SCS CN (Composite)	58.000
Area (User Defined)	4.530 acres
Maximum Retention (Pervious)	7.2 in
Maximum Retention (Pervious, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.8 in
Runoff Volume (Pervious)	0.302 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.302 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.300 hours
Computational Time Increment	0.040 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#2
Scenario: Pre-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	17.11 ft³/s
Unit peak time, Tp	0.200 hours
Unit receding limb, Tr	0.800 hours
Total unit time, Tb	1.000 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#2
Scenario: Pre-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.300 hours
Area (User Defined)	4.530 acres

Computational Time Increment	0.040 hours
Time to Peak (Computed)	12.240 hours
Flow (Peak, Computed)	7.54 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.250 hours
Flow (Peak Interpolated Output)	7.49 ft³/s

Drainage Area	
SCS CN (Composite)	58.000
Area (User Defined)	4.530 acres
Maximum Retention (Pervious)	7.2 in
Maximum Retention (Pervious, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.2 in
Runoff Volume (Pervious)	0.828 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.828 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.300 hours
Computational Time Increment	0.040 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#2
Scenario: Pre-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	17.11 ft³/s
Unit peak time, Tp	0.200 hours
Unit receding limb, Tr	0.800 hours
Total unit time, Tb	1.000 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#2
Scenario: Pre-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.300 hours
Area (User Defined)	4.530 acres

Computational Time Increment	0.040 hours
Time to Peak (Computed)	12.240 hours
Flow (Peak, Computed)	23.70 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.250 hours
Flow (Peak Interpolated Output)	23.45 ft³/s

Drainage Area	
SCS CN (Composite)	58.000
Area (User Defined)	4.530 acres
Maximum Retention (Pervious)	7.2 in
Maximum Retention (Pervious, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.6 in
Runoff Volume (Pervious)	2.489 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	2.489 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.300 hours
Computational Time Increment	0.040 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#2
Scenario: Pre-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	17.11 ft³/s
Unit peak time, Tp	0.200 hours
Unit receding limb, Tr	0.800 hours
Total unit time, Tb	1.000 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#2 DIRT
Scenario: Pre-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	0.170 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	0.56 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	0.56 ft³/s

Drainage Area	
SCS CN (Composite)	82.000
Area (User Defined)	0.170 acres
Maximum Retention (Pervious)	2.2 in
Maximum Retention (Pervious, 20 percent)	0.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.5 in
Runoff Volume (Pervious)	0.035 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.035 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#2 DIRT
Scenario: Pre-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	19.26 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#2 DIRT
Scenario: Pre-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	0.170 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	1.01 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	1.01 ft³/s

Drainage Area	
SCS CN (Composite)	82.000
Area (User Defined)	0.170 acres
Maximum Retention (Pervious)	2.2 in
Maximum Retention (Pervious, 20 percent)	0.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.6 in
Runoff Volume (Pervious)	0.065 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.066 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#2 DIRT
Scenario: Pre-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	19.26 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#2 DIRT
Scenario: Pre-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	0.170 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	2.08 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	2.08 ft³/s

Drainage Area	
SCS CN (Composite)	82.000
Area (User Defined)	0.170 acres
Maximum Retention (Pervious)	2.2 in
Maximum Retention (Pervious, 20 percent)	0.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	10.1 in
Runoff Volume (Pervious)	0.143 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.143 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#2 DIRT
Scenario: Pre-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	19.26 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#2 IMP
Scenario: Pre-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	0.320 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	1.44 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	1.43 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.320 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.108 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.108 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#2 IMP
Scenario: Pre-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	36.26 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#2 IMP
Scenario: Pre-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	0.320 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	2.24 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	2.24 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.320 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.4 in
Runoff Volume (Pervious)	0.172 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.172 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#2 IMP
Scenario: Pre-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	36.26 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#2 IMP
Scenario: Pre-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	0.320 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	4.17 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	4.17 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.320 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.2 in
Runoff Volume (Pervious)	0.324 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.324 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#2 IMP
Scenario: Pre-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	36.26 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#3
Scenario: Pre-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.420 hours
Area (User Defined)	10.180 acres

Computational Time Increment	0.056 hours
Time to Peak (Computed)	12.376 hours
Flow (Peak, Computed)	3.88 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.350 hours
Flow (Peak Interpolated Output)	3.84 ft³/s

Drainage Area	
SCS CN (Composite)	57.000
Area (User Defined)	10.180 acres
Maximum Retention (Pervious)	7.5 in
Maximum Retention (Pervious, 20 percent)	1.5 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.7 in
Runoff Volume (Pervious)	0.636 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.635 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.420 hours
Computational Time Increment	0.056 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#3
Scenario: Pre-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	27.46 ft³/s
Unit peak time, Tp	0.280 hours
Unit receding limb, Tr	1.120 hours
Total unit time, Tb	1.400 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#3
Scenario: Pre-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.420 hours
Area (User Defined)	10.180 acres

Computational Time Increment	0.056 hours
Time to Peak (Computed)	12.320 hours
Flow (Peak, Computed)	13.66 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.350 hours
Flow (Peak Interpolated Output)	13.47 ft³/s

Drainage Area	
SCS CN (Composite)	57.000
Area (User Defined)	10.180 acres
Maximum Retention (Pervious)	7.5 in
Maximum Retention (Pervious, 20 percent)	1.5 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.1 in
Runoff Volume (Pervious)	1.784 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.784 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.420 hours
Computational Time Increment	0.056 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#3
Scenario: Pre-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	27.46 ft³/s
Unit peak time, Tp	0.280 hours
Unit receding limb, Tr	1.120 hours
Total unit time, Tb	1.400 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#3
Scenario: Pre-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.420 hours
Area (User Defined)	10.180 acres

Computational Time Increment	0.056 hours
Time to Peak (Computed)	12.320 hours
Flow (Peak, Computed)	44.33 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.300 hours
Flow (Peak Interpolated Output)	44.08 ft³/s

Drainage Area	
SCS CN (Composite)	57.000
Area (User Defined)	10.180 acres
Maximum Retention (Pervious)	7.5 in
Maximum Retention (Pervious, 20 percent)	1.5 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.4 in
Runoff Volume (Pervious)	5.459 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	5.458 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.420 hours
Computational Time Increment	0.056 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#3
Scenario: Pre-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	27.46 ft³/s
Unit peak time, Tp	0.280 hours
Unit receding limb, Tr	1.120 hours
Total unit time, Tb	1.400 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#3 DIRT
Scenario: Pre-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	0.200 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	0.68 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	0.68 ft³/s

Drainage Area	
SCS CN (Composite)	83.000
Area (User Defined)	0.200 acres
Maximum Retention (Pervious)	2.0 in
Maximum Retention (Pervious, 20 percent)	0.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.5 in
Runoff Volume (Pervious)	0.042 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.043 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#3 DIRT
Scenario: Pre-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	22.66 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#3 DIRT
Scenario: Pre-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	0.200 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	1.21 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	1.21 ft³/s

Drainage Area	
SCS CN (Composite)	83.000
Area (User Defined)	0.200 acres
Maximum Retention (Pervious)	2.0 in
Maximum Retention (Pervious, 20 percent)	0.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.7 in
Runoff Volume (Pervious)	0.079 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.079 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#3 DIRT
Scenario: Pre-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	22.66 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#3 DIRT
Scenario: Pre-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	0.200 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	2.47 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	2.47 ft³/s

Drainage Area	
SCS CN (Composite)	83.000
Area (User Defined)	0.200 acres
Maximum Retention (Pervious)	2.0 in
Maximum Retention (Pervious, 20 percent)	0.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	10.2 in
Runoff Volume (Pervious)	0.171 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.171 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#3 DIRT
Scenario: Pre-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	22.66 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#3 IMP
Scenario: Pre-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	1.020 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	4.58 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	4.58 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1.020 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.345 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.345 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#3 IMP
Scenario: Pre-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	115.57 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#3 IMP
Scenario: Pre-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	1.020 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	7.15 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	7.15 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1.020 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.4 in
Runoff Volume (Pervious)	0.548 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.548 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#3 IMP
Scenario: Pre-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	115.57 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#3 IMP
Scenario: Pre-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	1.020 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	13.30 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	13.30 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1.020 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.2 in
Runoff Volume (Pervious)	1.033 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.034 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#3 IMP
Scenario: Pre-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	115.57 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#4
Scenario: Pre-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.350 hours
Area (User Defined)	5.130 acres

Computational Time Increment	0.047 hours
Time to Peak (Computed)	12.320 hours
Flow (Peak, Computed)	1.92 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.300 hours
Flow (Peak Interpolated Output)	1.89 ft³/s

Drainage Area	
SCS CN (Composite)	56.000
Area (User Defined)	5.130 acres
Maximum Retention (Pervious)	7.9 in
Maximum Retention (Pervious, 20 percent)	1.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.7 in
Runoff Volume (Pervious)	0.299 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.299 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.350 hours
Computational Time Increment	0.047 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#4
Scenario: Pre-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	16.61 ft³/s
Unit peak time, Tp	0.233 hours
Unit receding limb, Tr	0.933 hours
Total unit time, Tb	1.167 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#4
Scenario: Pre-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.350 hours
Area (User Defined)	5.130 acres

Computational Time Increment	0.047 hours
Time to Peak (Computed)	12.273 hours
Flow (Peak, Computed)	7.14 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.300 hours
Flow (Peak Interpolated Output)	7.05 ft³/s

Drainage Area	
SCS CN (Composite)	56.000
Area (User Defined)	5.130 acres
Maximum Retention (Pervious)	7.9 in
Maximum Retention (Pervious, 20 percent)	1.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.0 in
Runoff Volume (Pervious)	0.860 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.860 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.350 hours
Computational Time Increment	0.047 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#4
Scenario: Pre-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	16.61 ft³/s
Unit peak time, Tp	0.233 hours
Unit receding limb, Tr	0.933 hours
Total unit time, Tb	1.167 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#4
Scenario: Pre-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.350 hours
Area (User Defined)	5.130 acres

Computational Time Increment	0.047 hours
Time to Peak (Computed)	12.273 hours
Flow (Peak, Computed)	23.77 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.250 hours
Flow (Peak Interpolated Output)	23.56 ft³/s

Drainage Area	
SCS CN (Composite)	56.000
Area (User Defined)	5.130 acres
Maximum Retention (Pervious)	7.9 in
Maximum Retention (Pervious, 20 percent)	1.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.3 in
Runoff Volume (Pervious)	2.683 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	2.681 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.350 hours
Computational Time Increment	0.047 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#4
Scenario: Pre-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	16.61 ft³/s
Unit peak time, Tp	0.233 hours
Unit receding limb, Tr	0.933 hours
Total unit time, Tb	1.167 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#4 IMP
Scenario: Pre-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.030 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	0.13 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.13 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.030 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.010 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.010 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#4 IMP
Scenario: Pre-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	1.70 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#4 IMP
Scenario: Pre-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.030 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	0.21 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.21 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.030 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.4 in
Runoff Volume (Pervious)	0.016 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.016 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#4 IMP
Scenario: Pre-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	1.70 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Subsection: Unit Hydrograph Summary
Label: EX DA#4 IMP
Scenario: Pre-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.030 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	0.39 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.39 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.030 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.2 in
Runoff Volume (Pervious)	0.030 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.030 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: EX DA#4 IMP
Scenario: Pre-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	1.70 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

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FLOOD ROUTING CALCULATIONS – APPENDIX B-2
ALLOWABLE FLOW CALCULATIONS

POINT "A" ALLOWABLE

allowable peak = existing peak * (1 - area of disturbance / total area * RSIS red. Factor)

2 yr

existing peak = 2.21
area of disturbance = 2.94
RSIS red. Factor = 0.5
total area = 4.77

allowable peak = 1.53

10 yr

existing peak = 7.60
area of disturbance = 2.94
RSIS red. Factor = 0.3
total area = 4.77

allowable peak = 6.19

100 yr

existing peak = 24.25
area of disturbance = 2.94
RSIS red. Factor = 0.25
total area = 4.77

allowable peak = 20.51

POINT "B" ALLOWABLE

allowable peak = existing peak * (1 - area of disturbance / total area * RSIS red. Factor)

2 yr

existing peak = 3.06
area of disturbance = 3.74
RSIS red. Factor = 0.5
total area = 5.02

allowable peak = 1.92

10 yr

existing peak = 8.38
area of disturbance = 3.74
RSIS red. Factor = 0.3
total area = 5.02

allowable peak = 6.51

100 yr

existing peak = 25.46
area of disturbance = 3.74
RSIS red. Factor = 0.25
total area = 5.02

allowable peak = 20.72

POINT "C" ALLOWABLE

allowable peak = existing peak * (1 - area of disturbance * RSIS red. Factor)
total area

2 yr

existing peak = 6.41
area of disturbance = 7.23
RSIS red. Factor = 0.5
total area = 11.40

allowable peak = 4.38

10 yr

existing peak = 15.56
area of disturbance = 7.23
RSIS red. Factor = 0.3
total area = 11.40

allowable peak = 12.60

100 yr

existing peak = 48.04
area of disturbance = 7.23
RSIS red. Factor = 0.25
total area = 11.40

allowable peak = 40.42

POINT "D" ALLOWABLE

allowable peak = existing peak * (1 - area of disturbance / total area * RSIS red. Factor)

2 yr

existing peak = 1.93
area of disturbance = 1.20
RSIS red. Factor = 0.5
total area = 5.16

allowable peak = 1.71

10 yr

existing peak = 7.10
area of disturbance = 1.20
RSIS red. Factor = 0.3
total area = 5.16

allowable peak = 6.61

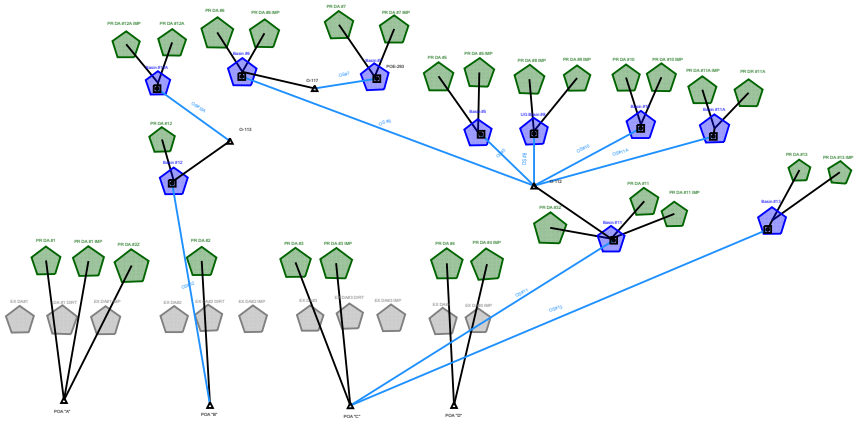
100 yr

existing peak = 23.66
area of disturbance = 1.20
RSIS red. Factor = 0.25
total area = 5.16

allowable peak = 22.29

FLOOD ROUTING CALCULATIONS – APPENDIX B-3
PROPOSED CONDITIONS

Scenario: Post-Development 2



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Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)
PR DA #1	Post-Development 2	2	0.127	12.200	1.00
PR DA #1	Post-Development 10	10	0.356	12.200	3.54
PR DA #1	Post-Development 100	100	1.088	12.200	11.40
PR DA #1 IMP	Post-Development 2	2	0.003	12.050	0.04
PR DA #1 IMP	Post-Development 10	10	0.005	12.050	0.07
PR DA #1 IMP	Post-Development 100	100	0.010	12.050	0.13
PR DA #2	Post-Development 2	2	0.093	12.150	0.94
PR DA #2	Post-Development 10	10	0.250	12.150	2.96
PR DA #2	Post-Development 100	100	0.737	12.150	9.01
PR DA #2Z	Post-Development 2	2	0.017	12.200	0.13
PR DA #2Z	Post-Development 10	10	0.049	12.200	0.50
PR DA #2Z	Post-Development 100	100	0.152	12.200	1.63
PR DA #3	Post-Development 2	2	0.097	12.150	1.03
PR DA #3	Post-Development 10	10	0.244	12.150	2.89
PR DA #3	Post-Development 100	100	0.686	12.150	8.24
PR DA #3 IMP	Post-Development 2	2	0.139	12.100	1.77
PR DA #3 IMP	Post-Development 10	10	0.220	12.100	2.76
PR DA #3 IMP	Post-Development 100	100	0.415	12.100	5.14
PR DA #3Z	Post-Development 2	2	0.172	12.250	1.22
PR DA #3Z	Post-Development 10	10	0.508	12.200	4.90
PR DA #3Z	Post-Development 100	100	1.615	12.200	16.77
PR DA #4	Post-Development 2	2	0.248	12.300	1.67
PR DA #4	Post-Development 10	10	0.715	12.250	6.24
PR DA #4	Post-Development 100	100	2.228	12.250	20.72
PR DA #5	Post-Development 2	2	0.101	12.150	1.01
PR DA #5	Post-Development 10	10	0.260	12.150	2.96
PR DA #5	Post-Development 100	100	0.741	12.150	8.66
PR DA #5 IMP	Post-Development 2	2	0.409	12.100	5.43
PR DA #5 IMP	Post-Development 10	10	0.650	12.100	8.48
PR DA #5 IMP	Post-Development 100	100	1.226	12.050	15.78
PR DA #6	Post-Development 2	2	0.053	12.150	0.53
PR DA #6	Post-Development 10	10	0.136	12.150	1.55
PR DA #6	Post-Development 100	100	0.388	12.150	4.54

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)
PR DA #6 IMP	Post-Development 2	2	0.095	12.050	1.25
PR DA #6 IMP	Post-Development 10	10	0.150	12.050	1.96
PR DA #6 IMP	Post-Development 100	100	0.284	12.050	3.64
PR DA #7	Post-Development 2	2	0.018	12.150	0.20
PR DA #7	Post-Development 10	10	0.047	12.150	0.57
PR DA #7	Post-Development 100	100	0.135	12.150	1.65
PR DA #7 IMP	Post-Development 2	2	0.071	12.050	0.94
PR DA #7 IMP	Post-Development 10	10	0.113	12.050	1.47
PR DA #7 IMP	Post-Development 100	100	0.213	12.050	2.73
PR DA #8 IMP	Post-Development 2	2	0.304	12.100	4.02
PR DA #8 IMP	Post-Development 10	10	0.483	12.100	6.28
PR DA #8 IMP	Post-Development 100	100	0.912	12.100	11.69
PR DA #9 IMP	Post-Development 2	2	0.321	12.100	4.24
PR DA #9 IMP	Post-Development 10	10	0.510	12.100	6.63
PR DA #9 IMP	Post-Development 100	100	0.962	12.100	12.34
PR DA #10	Post-Development 2	2	0.093	12.100	1.34
PR DA #10	Post-Development 10	10	0.229	12.100	3.51
PR DA #10	Post-Development 100	100	0.632	12.100	9.61
PR DA #10 IMP	Post-Development 2	2	0.439	12.100	5.82
PR DA #10 IMP	Post-Development 10	10	0.698	12.050	9.09
PR DA #10 IMP	Post-Development 100	100	1.317	12.050	16.91
PR DA #11	Post-Development 2	2	0.028	12.150	0.33
PR DA #11	Post-Development 10	10	0.072	12.150	0.92
PR DA #11	Post-Development 100	100	0.206	12.150	2.64
PR DA #12	Post-Development 2	2	0.028	12.150	0.32
PR DA #12	Post-Development 10	10	0.072	12.150	0.91
PR DA #12	Post-Development 100	100	0.206	12.150	2.61
PR DA #13	Post-Development 2	2	0.021	12.150	0.24
PR DA #13	Post-Development 10	10	0.054	12.150	0.69
PR DA #13	Post-Development 100	100	0.153	12.150	1.96
PR DA #13 IMP	Post-Development 2	2	0.064	12.100	0.85
PR DA #13 IMP	Post-Development 10	10	0.102	12.100	1.33
PR DA #13 IMP	Post-Development 100	100	0.193	12.100	2.48
PR DA #4 IMP	Post-Development 2	2	0.006	12.050	0.09

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)
PR DA #4 IMP	Post-Development 10	10	0.011	12.050	0.14
PR DA #4 IMP	Post-Development 100	100	0.020	12.050	0.26
PR DA #12A IMP	Post-Development 2	2	0.446	12.100	5.92
PR DA #12A IMP	Post-Development 10	10	0.709	12.100	9.25
PR DA #12A IMP	Post-Development 100	100	1.337	12.100	17.21
PR DA #12A	Post-Development 2	2	0.090	12.150	1.07
PR DA #12A	Post-Development 10	10	0.231	12.150	2.96
PR DA #12A	Post-Development 100	100	0.659	12.100	8.64
PR DA #11A IMP	Post-Development 2	2	0.291	12.100	3.85
PR DA #11A IMP	Post-Development 10	10	0.462	12.050	6.01
PR DA #11A IMP	Post-Development 100	100	0.871	12.050	11.19
PR DR #11A	Post-Development 2	2	0.069	12.150	0.81
PR DR #11A	Post-Development 10	10	0.177	12.150	2.27
PR DR #11A	Post-Development 100	100	0.506	12.150	6.50
PR DA #11 IMP	Post-Development 2	2	0.125	12.050	1.65
PR DA #11 IMP	Post-Development 10	10	0.199	12.050	2.59
PR DA #11 IMP	Post-Development 100	100	0.375	12.050	4.81

Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)
POA "A"	Post-Development 2	2	0.146	12.200	1.15
POA "A"	Post-Development 10	10	0.409	12.200	4.06
POA "A"	Post-Development 100	100	1.250	12.200	13.07
POA "B"	Post-Development 2	2	0.657	12.150	1.84
POA "B"	Post-Development 10	10	1.261	12.150	5.35
POA "B"	Post-Development 100	100	2.940	12.200	20.48
POA "C"	Post-Development 2	2	2.335	12.100	4.33
POA "C"	Post-Development 10	10	4.740	12.100	8.14
POA "C"	Post-Development 100	100	11.259	12.400	39.66
POA "D"	Post-Development 2	2	0.255	12.300	1.70
POA "D"	Post-Development 10	10	0.725	12.250	6.28
POA "D"	Post-Development 100	100	2.248	12.250	20.79

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Basin #5 (IN)	Post-Development 2	2	0.510	12.100	6.20	(N/A)	(N/A)
Basin #5 (OUT)	Post-Development 2	2	0.510	12.800	0.81	413.46	0.174
Basin #5 (IN)	Post-Development 10	10	0.909	12.100	10.90	(N/A)	(N/A)
Basin #5 (OUT)	Post-Development 10	10	0.910	12.150	7.50	414.13	0.222
Basin #5 (IN)	Post-Development 100	100	1.968	12.100	23.11	(N/A)	(N/A)
Basin #5 (OUT)	Post-Development 100	100	1.968	12.100	20.15	414.81	0.274
Basin #6 (IN)	Post-Development 2	2	0.238	12.100	2.08	(N/A)	(N/A)
Basin #6 (OUT)	Post-Development 2	2	0.195	13.100	0.24	474.09	0.131
Basin #6 (IN)	Post-Development 10	10	0.447	12.100	3.75	(N/A)	(N/A)
Basin #6 (OUT)	Post-Development 10	10	0.405	12.250	2.19	474.41	0.151
Basin #6 (IN)	Post-Development 100	100	1.020	12.100	8.27	(N/A)	(N/A)
Basin #6 (OUT)	Post-Development 100	100	0.978	12.150	7.24	474.80	0.176
Basin #7 (IN)	Post-Development 2	2	0.089	12.100	1.10	(N/A)	(N/A)
Basin #7 (OUT)	Post-Development 2	2	0.090	12.200	0.44	483.82	0.009
Basin #7 (IN)	Post-Development 10	10	0.160	12.100	1.95	(N/A)	(N/A)

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Basin #7 (OUT)	Post-Development 10	10	0.160	12.300	0.59	484.58	0.026
Basin #7 (IN)	Post-Development 100	100	0.348	12.100	4.18	(N/A)	(N/A)
Basin #7 (OUT)	Post-Development 100	100	0.348	12.400	1.01	486.01	0.082
UG Basin #8 (IN)	Post-Development 2	2	0.625	12.100	8.27	(N/A)	(N/A)
UG Basin #8 (OUT)	Post-Development 2	2	0.202	17.150	0.15	463.39	0.511
UG Basin #8 (IN)	Post-Development 10	10	0.993	12.100	12.92	(N/A)	(N/A)
UG Basin #8 (OUT)	Post-Development 10	10	0.570	12.550	1.71	464.34	0.620
UG Basin #8 (IN)	Post-Development 100	100	1.874	12.100	24.03	(N/A)	(N/A)
UG Basin #8 (OUT)	Post-Development 100	100	1.452	12.150	10.32	466.81	0.900
Basin #10 (IN)	Post-Development 2	2	0.532	12.100	7.16	(N/A)	(N/A)
Basin #10 (OUT)	Post-Development 2	2	0.422	12.500	1.26	408.29	0.302
Basin #10 (IN)	Post-Development 10	10	0.926	12.100	12.60	(N/A)	(N/A)
Basin #10 (OUT)	Post-Development 10	10	0.816	12.100	12.22	408.61	0.335
Basin #10 (IN)	Post-Development 100	100	1.950	12.100	26.52	(N/A)	(N/A)
Basin #10 (OUT)	Post-Development 100	100	1.839	12.100	25.67	408.86	0.363

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Basin #11 (IN)	Post-Development 2	2	2.014	12.100	8.08	(N/A)	(N/A)
Basin #11 (OUT)	Post-Development 2	2	2.015	17.550	1.22	404.13	0.596
Basin #11 (IN)	Post-Development 10	10	4.119	12.100	33.60	(N/A)	(N/A)
Basin #11 (OUT)	Post-Development 10	10	4.119	13.150	6.66	406.31	1.192
Basin #11 (IN)	Post-Development 100	100	9.811	12.100	98.39	(N/A)	(N/A)
Basin #11 (OUT)	Post-Development 100	100	9.811	12.450	35.13	411.01	2.943
Basin #12 (IN)	Post-Development 2	2	0.564	12.100	7.19	(N/A)	(N/A)
Basin #12 (OUT)	Post-Development 2	2	0.564	12.550	0.98	404.15	0.202
Basin #12 (IN)	Post-Development 10	10	1.012	12.100	13.00	(N/A)	(N/A)
Basin #12 (OUT)	Post-Development 10	10	1.012	12.350	3.05	405.24	0.341
Basin #12 (IN)	Post-Development 100	100	2.203	12.100	28.23	(N/A)	(N/A)
Basin #12 (OUT)	Post-Development 100	100	2.203	12.200	12.66	407.11	0.641
Basin #13 (IN)	Post-Development 2	2	0.085	12.100	1.06	(N/A)	(N/A)
Basin #13 (OUT)	Post-Development 2	2	0.085	12.100	1.04	382.78	0.012
Basin #13 (IN)	Post-Development 10	10	0.156	12.100	1.95	(N/A)	(N/A)

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Basin #13 (OUT)	Post-Development 10	10	0.156	12.100	1.91	382.90	0.014
Basin #13 (IN)	Post-Development 100	100	0.346	12.100	4.32	(N/A)	(N/A)
Basin #13 (OUT)	Post-Development 100	100	0.346	12.100	4.31	383.11	0.016
Basin #12A (IN)	Post-Development 2	2	0.536	12.100	6.92	(N/A)	(N/A)
Basin #12A (OUT)	Post-Development 2	2	0.536	12.100	6.92	0.00	0.000
Basin #12A (IN)	Post-Development 10	10	0.939	12.100	12.20	(N/A)	(N/A)
Basin #12A (OUT)	Post-Development 10	10	0.939	12.100	12.20	0.00	0.000
Basin #12A (IN)	Post-Development 100	100	1.997	12.100	25.85	(N/A)	(N/A)
Basin #12A (OUT)	Post-Development 100	100	1.997	12.100	25.85	0.00	0.000
Basin #11A (IN)	Post-Development 2	2	0.360	12.100	4.54	(N/A)	(N/A)
Basin #11A (OUT)	Post-Development 2	2	0.360	12.100	4.54	0.00	0.000
Basin #11A (IN)	Post-Development 10	10	0.639	12.100	8.07	(N/A)	(N/A)
Basin #11A (OUT)	Post-Development 10	10	0.639	12.100	8.07	0.00	0.000
Basin #11A (IN)	Post-Development 100	100	1.378	12.100	17.29	(N/A)	(N/A)
Basin #11A (OUT)	Post-Development 100	100	1.378	12.100	17.29	0.00	0.000

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #1
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.240 hours
Area (User Defined)	2.030 acres

Computational Time Increment	0.032 hours
Time to Peak (Computed)	12.224 hours
Flow (Peak, Computed)	1.02 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.200 hours
Flow (Peak Interpolated Output)	1.00 ft³/s

Drainage Area	
SCS CN (Composite)	57.000
Area (User Defined)	2.030 acres
Maximum Retention (Pervious)	7.5 in
Maximum Retention (Pervious, 20 percent)	1.5 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.7 in
Runoff Volume (Pervious)	0.127 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.127 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.240 hours
Computational Time Increment	0.032 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #1
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	9.58 ft³/s
Unit peak time, Tp	0.160 hours
Unit receding limb, Tr	0.640 hours
Total unit time, Tb	0.800 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #1
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.240 hours
Area (User Defined)	2.030 acres

Computational Time Increment	0.032 hours
Time to Peak (Computed)	12.192 hours
Flow (Peak, Computed)	3.55 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.200 hours
Flow (Peak Interpolated Output)	3.54 ft³/s

Drainage Area	
SCS CN (Composite)	57.000
Area (User Defined)	2.030 acres
Maximum Retention (Pervious)	7.5 in
Maximum Retention (Pervious, 20 percent)	1.5 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.1 in
Runoff Volume (Pervious)	0.356 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.356 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.240 hours
Computational Time Increment	0.032 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #1
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	9.58 ft^3/s
Unit peak time, Tp	0.160 hours
Unit receding limb, Tr	0.640 hours
Total unit time, Tb	0.800 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #1
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.240 hours
Area (User Defined)	2.030 acres

Computational Time Increment	0.032 hours
Time to Peak (Computed)	12.192 hours
Flow (Peak, Computed)	11.48 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.200 hours
Flow (Peak Interpolated Output)	11.40 ft³/s

Drainage Area	
SCS CN (Composite)	57.000
Area (User Defined)	2.030 acres
Maximum Retention (Pervious)	7.5 in
Maximum Retention (Pervious, 20 percent)	1.5 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.4 in
Runoff Volume (Pervious)	1.088 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.088 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.240 hours
Computational Time Increment	0.032 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #1
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	9.58 ft³/s
Unit peak time, Tp	0.160 hours
Unit receding limb, Tr	0.640 hours
Total unit time, Tb	0.800 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #1 IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	0.010 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	0.04 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.04 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.010 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.003 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.003 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #1 IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	1.13 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #1 IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	0.010 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	0.07 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.07 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.010 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.4 in
Runoff Volume (Pervious)	0.005 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.005 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #1 IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	1.13 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #1 IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	0.010 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	0.13 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.13 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.010 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.2 in
Runoff Volume (Pervious)	0.010 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.010 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #1 IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	1.13 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #10
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.060 hours
Area (User Defined)	1.030 acres

Computational Time Increment	0.008 hours
Time to Peak (Computed)	12.112 hours
Flow (Peak, Computed)	1.36 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	1.34 ft³/s

Drainage Area	
SCS CN (Composite)	63.000
Area (User Defined)	1.030 acres
Maximum Retention (Pervious)	5.9 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.1 in
Runoff Volume (Pervious)	0.093 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.093 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.060 hours
Computational Time Increment	0.008 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #10
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	19.45 ft³/s
Unit peak time, Tp	0.040 hours
Unit receding limb, Tr	0.160 hours
Total unit time, Tb	0.200 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #10
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.060 hours
Area (User Defined)	1.030 acres

Computational Time Increment	0.008 hours
Time to Peak (Computed)	12.104 hours
Flow (Peak, Computed)	3.54 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	3.51 ft³/s

Drainage Area	
SCS CN (Composite)	63.000
Area (User Defined)	1.030 acres
Maximum Retention (Pervious)	5.9 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.7 in
Runoff Volume (Pervious)	0.229 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.229 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.060 hours
Computational Time Increment	0.008 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #10
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	19.45 ft³/s
Unit peak time, Tp	0.040 hours
Unit receding limb, Tr	0.160 hours
Total unit time, Tb	0.200 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #10
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.060 hours
Area (User Defined)	1.030 acres

Computational Time Increment	0.008 hours
Time to Peak (Computed)	12.104 hours
Flow (Peak, Computed)	9.65 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	9.61 ft³/s

Drainage Area	
SCS CN (Composite)	63.000
Area (User Defined)	1.030 acres
Maximum Retention (Pervious)	5.9 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	7.4 in
Runoff Volume (Pervious)	0.633 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.632 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.060 hours
Computational Time Increment	0.008 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #10
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	19.45 ft³/s
Unit peak time, Tp	0.040 hours
Unit receding limb, Tr	0.160 hours
Total unit time, Tb	0.200 hours

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #10 IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	1.300 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	5.83 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	5.82 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1.300 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.439 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.439 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #10 IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	73.65 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #10 IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	1.300 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	9.11 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	9.09 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1.300 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.4 in
Runoff Volume (Pervious)	0.698 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.698 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #10 IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	73.65 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #10 IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	1.300 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	16.95 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	16.91 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1.300 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.2 in
Runoff Volume (Pervious)	1.317 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.317 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #10 IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	73.65 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #11
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.130 hours
Area (User Defined)	0.350 acres

Computational Time Increment	0.017 hours
Time to Peak (Computed)	12.133 hours
Flow (Peak, Computed)	0.33 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	0.33 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.350 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.0 in
Runoff Volume (Pervious)	0.028 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.028 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.130 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #11
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	3.05 ft³/s
Unit peak time, Tp	0.087 hours
Unit receding limb, Tr	0.347 hours
Total unit time, Tb	0.433 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #11
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.130 hours
Area (User Defined)	0.350 acres

Computational Time Increment	0.017 hours
Time to Peak (Computed)	12.133 hours
Flow (Peak, Computed)	0.94 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	0.92 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.350 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.5 in
Runoff Volume (Pervious)	0.072 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.072 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.130 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #11
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	3.05 ft³/s
Unit peak time, Tp	0.087 hours
Unit receding limb, Tr	0.347 hours
Total unit time, Tb	0.433 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #11
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.130 hours
Area (User Defined)	0.350 acres

Computational Time Increment	0.017 hours
Time to Peak (Computed)	12.133 hours
Flow (Peak, Computed)	2.72 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	2.64 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.350 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	7.1 in
Runoff Volume (Pervious)	0.206 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.206 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.130 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #11
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	3.05 ft³/s
Unit peak time, Tp	0.087 hours
Unit receding limb, Tr	0.347 hours
Total unit time, Tb	0.433 hours

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #11 IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.370 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	1.66 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	1.65 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.370 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.125 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.125 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #11 IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	20.96 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #11 IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.370 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	2.59 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	2.59 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.370 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.4 in
Runoff Volume (Pervious)	0.199 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.199 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #11 IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	20.96 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #11 IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.370 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	4.82 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	4.81 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.370 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.2 in
Runoff Volume (Pervious)	0.375 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.375 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #11 IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	20.96 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #11A IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.860 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	3.86 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	3.85 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.860 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.291 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.291 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #11A IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	48.72 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #11A IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.860 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	6.03 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	6.01 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.860 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.4 in
Runoff Volume (Pervious)	0.462 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.462 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #11A IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	48.72 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #11A IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.860 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	11.21 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	11.19 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.860 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.2 in
Runoff Volume (Pervious)	0.871 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.871 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #11A IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	48.72 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #12
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.140 hours
Area (User Defined)	0.350 acres

Computational Time Increment	0.019 hours
Time to Peak (Computed)	12.152 hours
Flow (Peak, Computed)	0.32 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	0.32 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.350 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.0 in
Runoff Volume (Pervious)	0.028 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.028 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.140 hours
Computational Time Increment	0.019 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #12
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	2.83 ft³/s
Unit peak time, Tp	0.093 hours
Unit receding limb, Tr	0.373 hours
Total unit time, Tb	0.467 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #12
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.140 hours
Area (User Defined)	0.350 acres

Computational Time Increment	0.019 hours
Time to Peak (Computed)	12.133 hours
Flow (Peak, Computed)	0.91 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	0.91 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.350 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.5 in
Runoff Volume (Pervious)	0.072 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.072 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.140 hours
Computational Time Increment	0.019 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #12
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	2.83 ft³/s
Unit peak time, Tp	0.093 hours
Unit receding limb, Tr	0.373 hours
Total unit time, Tb	0.467 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #12
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.140 hours
Area (User Defined)	0.350 acres

Computational Time Increment	0.019 hours
Time to Peak (Computed)	12.133 hours
Flow (Peak, Computed)	2.65 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	2.61 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.350 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	7.1 in
Runoff Volume (Pervious)	0.206 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.206 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.140 hours
Computational Time Increment	0.019 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #12
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	2.83 ft³/s
Unit peak time, Tp	0.093 hours
Unit receding limb, Tr	0.373 hours
Total unit time, Tb	0.467 hours

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #12A
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.110 hours
Area (User Defined)	1.120 acres

Computational Time Increment	0.015 hours
Time to Peak (Computed)	12.129 hours
Flow (Peak, Computed)	1.12 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	1.07 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	1.120 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.0 in
Runoff Volume (Pervious)	0.090 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.090 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.110 hours
Computational Time Increment	0.015 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #12A
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	11.54 ft³/s
Unit peak time, Tp	0.073 hours
Unit receding limb, Tr	0.293 hours
Total unit time, Tb	0.367 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #12A
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.110 hours
Area (User Defined)	1.120 acres

Computational Time Increment	0.015 hours
Time to Peak (Computed)	12.129 hours
Flow (Peak, Computed)	3.17 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	2.96 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	1.120 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.5 in
Runoff Volume (Pervious)	0.231 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.231 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.110 hours
Computational Time Increment	0.015 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #12A
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	11.54 ft³/s
Unit peak time, Tp	0.073 hours
Unit receding limb, Tr	0.293 hours
Total unit time, Tb	0.367 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #12A
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.110 hours
Area (User Defined)	1.120 acres

Computational Time Increment	0.015 hours
Time to Peak (Computed)	12.129 hours
Flow (Peak, Computed)	9.09 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	8.64 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	1.120 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	7.1 in
Runoff Volume (Pervious)	0.659 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.659 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.110 hours
Computational Time Increment	0.015 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #12A
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	11.54 ft³/s
Unit peak time, Tp	0.073 hours
Unit receding limb, Tr	0.293 hours
Total unit time, Tb	0.367 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #12A IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.030 hours
Area (User Defined)	1.320 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	5.92 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	5.92 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1.320 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.446 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.446 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.030 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #12A IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	49.85 ft³/s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.080 hours
Total unit time, Tb	0.100 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #12A IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.030 hours
Area (User Defined)	1.320 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	9.25 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	9.25 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1.320 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.4 in
Runoff Volume (Pervious)	0.709 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.709 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.030 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #12A IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	49.85 ft³/s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.080 hours
Total unit time, Tb	0.100 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #12A IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.030 hours
Area (User Defined)	1.320 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	17.21 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	17.21 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1.320 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.2 in
Runoff Volume (Pervious)	1.337 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.337 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.030 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #12A IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	49.85 ft³/s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.080 hours
Total unit time, Tb	0.100 hours

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #13
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.130 hours
Area (User Defined)	0.260 acres

Computational Time Increment	0.017 hours
Time to Peak (Computed)	12.133 hours
Flow (Peak, Computed)	0.24 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	0.24 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.260 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.0 in
Runoff Volume (Pervious)	0.021 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.021 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.130 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #13
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	2.27 ft³/s
Unit peak time, Tp	0.087 hours
Unit receding limb, Tr	0.347 hours
Total unit time, Tb	0.433 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #13
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.130 hours
Area (User Defined)	0.260 acres

Computational Time Increment	0.017 hours
Time to Peak (Computed)	12.133 hours
Flow (Peak, Computed)	0.70 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	0.69 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.260 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.5 in
Runoff Volume (Pervious)	0.054 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.054 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.130 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #13
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	2.27 ft³/s
Unit peak time, Tp	0.087 hours
Unit receding limb, Tr	0.347 hours
Total unit time, Tb	0.433 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #13
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.130 hours
Area (User Defined)	0.260 acres

Computational Time Increment	0.017 hours
Time to Peak (Computed)	12.133 hours
Flow (Peak, Computed)	2.02 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	1.96 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.260 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	7.1 in
Runoff Volume (Pervious)	0.153 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.153 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.130 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #13
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	2.27 ft³/s
Unit peak time, Tp	0.087 hours
Unit receding limb, Tr	0.347 hours
Total unit time, Tb	0.433 hours

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #13 IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.030 hours
Area (User Defined)	0.190 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	0.85 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	0.85 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.190 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.064 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.064 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.030 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #13 IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	7.18 ft³/s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.080 hours
Total unit time, Tb	0.100 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #13 IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.030 hours
Area (User Defined)	0.190 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	1.33 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	1.33 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.190 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.4 in
Runoff Volume (Pervious)	0.102 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.102 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.030 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #13 IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	7.18 ft³/s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.080 hours
Total unit time, Tb	0.100 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #13 IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.030 hours
Area (User Defined)	0.190 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	2.48 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	2.48 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.190 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.2 in
Runoff Volume (Pervious)	0.193 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.193 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.030 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #13 IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	7.18 ft³/s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.080 hours
Total unit time, Tb	0.100 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #2
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.160 hours
Area (User Defined)	1.310 acres

Computational Time Increment	0.021 hours
Time to Peak (Computed)	12.160 hours
Flow (Peak, Computed)	0.96 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	0.94 ft³/s

Drainage Area	
SCS CN (Composite)	59.000
Area (User Defined)	1.310 acres
Maximum Retention (Pervious)	6.9 in
Maximum Retention (Pervious, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.9 in
Runoff Volume (Pervious)	0.093 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.093 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.160 hours
Computational Time Increment	0.021 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #2
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	9.28 ft³/s
Unit peak time, Tp	0.107 hours
Unit receding limb, Tr	0.427 hours
Total unit time, Tb	0.533 hours

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #2
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.160 hours
Area (User Defined)	1.310 acres

Computational Time Increment	0.021 hours
Time to Peak (Computed)	12.160 hours
Flow (Peak, Computed)	2.98 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	2.96 ft³/s

Drainage Area	
SCS CN (Composite)	59.000
Area (User Defined)	1.310 acres
Maximum Retention (Pervious)	6.9 in
Maximum Retention (Pervious, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.3 in
Runoff Volume (Pervious)	0.250 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.250 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.160 hours
Computational Time Increment	0.021 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #2
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	9.28 ft³/s
Unit peak time, Tp	0.107 hours
Unit receding limb, Tr	0.427 hours
Total unit time, Tb	0.533 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #2
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.160 hours
Area (User Defined)	1.310 acres

Computational Time Increment	0.021 hours
Time to Peak (Computed)	12.139 hours
Flow (Peak, Computed)	9.02 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	9.01 ft³/s

Drainage Area	
SCS CN (Composite)	59.000
Area (User Defined)	1.310 acres
Maximum Retention (Pervious)	6.9 in
Maximum Retention (Pervious, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.7 in
Runoff Volume (Pervious)	0.737 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.737 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.160 hours
Computational Time Increment	0.021 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #2
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	9.28 ft³/s
Unit peak time, Tp	0.107 hours
Unit receding limb, Tr	0.427 hours
Total unit time, Tb	0.533 hours

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #2Z
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.220 hours
Area (User Defined)	0.290 acres

Computational Time Increment	0.029 hours
Time to Peak (Computed)	12.203 hours
Flow (Peak, Computed)	0.13 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.200 hours
Flow (Peak Interpolated Output)	0.13 ft³/s

Drainage Area	
SCS CN (Composite)	56.000
Area (User Defined)	0.290 acres
Maximum Retention (Pervious)	7.9 in
Maximum Retention (Pervious, 20 percent)	1.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.7 in
Runoff Volume (Pervious)	0.017 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.017 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.220 hours
Computational Time Increment	0.029 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #2Z
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	1.49 ft³/s
Unit peak time, Tp	0.147 hours
Unit receding limb, Tr	0.587 hours
Total unit time, Tb	0.733 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #2Z
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.220 hours
Area (User Defined)	0.290 acres

Computational Time Increment	0.029 hours
Time to Peak (Computed)	12.203 hours
Flow (Peak, Computed)	0.50 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.200 hours
Flow (Peak Interpolated Output)	0.50 ft³/s

Drainage Area	
SCS CN (Composite)	56.000
Area (User Defined)	0.290 acres
Maximum Retention (Pervious)	7.9 in
Maximum Retention (Pervious, 20 percent)	1.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.0 in
Runoff Volume (Pervious)	0.049 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.049 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.220 hours
Computational Time Increment	0.029 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #2Z
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	1.49 ft³/s
Unit peak time, Tp	0.147 hours
Unit receding limb, Tr	0.587 hours
Total unit time, Tb	0.733 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #2Z
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.220 hours
Area (User Defined)	0.290 acres

Computational Time Increment	0.029 hours
Time to Peak (Computed)	12.173 hours
Flow (Peak, Computed)	1.65 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.200 hours
Flow (Peak Interpolated Output)	1.63 ft³/s

Drainage Area	
SCS CN (Composite)	56.000
Area (User Defined)	0.290 acres
Maximum Retention (Pervious)	7.9 in
Maximum Retention (Pervious, 20 percent)	1.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.3 in
Runoff Volume (Pervious)	0.152 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.152 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.220 hours
Computational Time Increment	0.029 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #2Z
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	1.49 ft³/s
Unit peak time, Tp	0.147 hours
Unit receding limb, Tr	0.587 hours
Total unit time, Tb	0.733 hours

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #3
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.170 hours
Area (User Defined)	1.140 acres

Computational Time Increment	0.023 hours
Time to Peak (Computed)	12.172 hours
Flow (Peak, Computed)	1.04 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	1.03 ft³/s

Drainage Area	
SCS CN (Composite)	62.000
Area (User Defined)	1.140 acres
Maximum Retention (Pervious)	6.1 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.0 in
Runoff Volume (Pervious)	0.097 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.097 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.170 hours
Computational Time Increment	0.023 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #3
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	7.60 ft³/s
Unit peak time, Tp	0.113 hours
Unit receding limb, Tr	0.453 hours
Total unit time, Tb	0.567 hours

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #3
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.170 hours
Area (User Defined)	1.140 acres

Computational Time Increment	0.023 hours
Time to Peak (Computed)	12.149 hours
Flow (Peak, Computed)	2.89 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	2.89 ft³/s

Drainage Area	
SCS CN (Composite)	62.000
Area (User Defined)	1.140 acres
Maximum Retention (Pervious)	6.1 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.6 in
Runoff Volume (Pervious)	0.244 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.244 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.170 hours
Computational Time Increment	0.023 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #3
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	7.60 ft³/s
Unit peak time, Tp	0.113 hours
Unit receding limb, Tr	0.453 hours
Total unit time, Tb	0.567 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #3
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.170 hours
Area (User Defined)	1.140 acres

Computational Time Increment	0.023 hours
Time to Peak (Computed)	12.149 hours
Flow (Peak, Computed)	8.24 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	8.24 ft³/s

Drainage Area	
SCS CN (Composite)	62.000
Area (User Defined)	1.140 acres
Maximum Retention (Pervious)	6.1 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	7.2 in
Runoff Volume (Pervious)	0.686 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.686 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.170 hours
Computational Time Increment	0.023 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #3
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	7.60 ft³/s
Unit peak time, Tp	0.113 hours
Unit receding limb, Tr	0.453 hours
Total unit time, Tb	0.567 hours

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #3 IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.070 hours
Area (User Defined)	0.410 acres

Computational Time Increment	0.009 hours
Time to Peak (Computed)	12.105 hours
Flow (Peak, Computed)	1.77 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	1.77 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.410 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.139 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.139 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.070 hours
Computational Time Increment	0.009 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #3 IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	6.64 ft³/s
Unit peak time, Tp	0.047 hours
Unit receding limb, Tr	0.187 hours
Total unit time, Tb	0.233 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #3 IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.070 hours
Area (User Defined)	0.410 acres

Computational Time Increment	0.009 hours
Time to Peak (Computed)	12.105 hours
Flow (Peak, Computed)	2.77 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	2.76 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.410 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.4 in
Runoff Volume (Pervious)	0.220 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.220 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.070 hours
Computational Time Increment	0.009 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #3 IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	6.64 ft³/s
Unit peak time, Tp	0.047 hours
Unit receding limb, Tr	0.187 hours
Total unit time, Tb	0.233 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #3 IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.070 hours
Area (User Defined)	0.410 acres

Computational Time Increment	0.009 hours
Time to Peak (Computed)	12.105 hours
Flow (Peak, Computed)	5.16 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	5.14 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.410 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.2 in
Runoff Volume (Pervious)	0.415 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.415 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.070 hours
Computational Time Increment	0.009 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #3 IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	6.64 ft³/s
Unit peak time, Tp	0.047 hours
Unit receding limb, Tr	0.187 hours
Total unit time, Tb	0.233 hours

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Subsection: Unit Hydrograph Summary
Label: PR DA #3Z
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.250 hours
Area (User Defined)	3.170 acres

Computational Time Increment	0.033 hours
Time to Peak (Computed)	12.233 hours
Flow (Peak, Computed)	1.23 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.250 hours
Flow (Peak Interpolated Output)	1.22 ft³/s

Drainage Area	
SCS CN (Composite)	55.000
Area (User Defined)	3.170 acres
Maximum Retention (Pervious)	8.2 in
Maximum Retention (Pervious, 20 percent)	1.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.6 in
Runoff Volume (Pervious)	0.172 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.172 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.250 hours
Computational Time Increment	0.033 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #3Z
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	14.37 ft³/s
Unit peak time, Tp	0.167 hours
Unit receding limb, Tr	0.667 hours
Total unit time, Tb	0.833 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #3Z
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.250 hours
Area (User Defined)	3.170 acres

Computational Time Increment	0.033 hours
Time to Peak (Computed)	12.200 hours
Flow (Peak, Computed)	4.90 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.200 hours
Flow (Peak Interpolated Output)	4.90 ft³/s

Drainage Area	
SCS CN (Composite)	55.000
Area (User Defined)	3.170 acres
Maximum Retention (Pervious)	8.2 in
Maximum Retention (Pervious, 20 percent)	1.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.9 in
Runoff Volume (Pervious)	0.508 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.508 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.250 hours
Computational Time Increment	0.033 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #3Z
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	14.37 ft³/s
Unit peak time, Tp	0.167 hours
Unit receding limb, Tr	0.667 hours
Total unit time, Tb	0.833 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #3Z
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.250 hours
Area (User Defined)	3.170 acres

Computational Time Increment	0.033 hours
Time to Peak (Computed)	12.200 hours
Flow (Peak, Computed)	16.77 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.200 hours
Flow (Peak Interpolated Output)	16.77 ft³/s

Drainage Area	
SCS CN (Composite)	55.000
Area (User Defined)	3.170 acres
Maximum Retention (Pervious)	8.2 in
Maximum Retention (Pervious, 20 percent)	1.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.1 in
Runoff Volume (Pervious)	1.615 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.615 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.250 hours
Computational Time Increment	0.033 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #3Z
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	14.37 ft³/s
Unit peak time, Tp	0.167 hours
Unit receding limb, Tr	0.667 hours
Total unit time, Tb	0.833 hours

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Subsection: Unit Hydrograph Summary
Label: PR DA #4
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.310 hours
Area (User Defined)	4.260 acres

Computational Time Increment	0.041 hours
Time to Peak (Computed)	12.276 hours
Flow (Peak, Computed)	1.69 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.300 hours
Flow (Peak Interpolated Output)	1.67 ft³/s

Drainage Area	
SCS CN (Composite)	56.000
Area (User Defined)	4.260 acres
Maximum Retention (Pervious)	7.9 in
Maximum Retention (Pervious, 20 percent)	1.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.7 in
Runoff Volume (Pervious)	0.248 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.248 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.310 hours
Computational Time Increment	0.041 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #4
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	15.57 ft³/s
Unit peak time, Tp	0.207 hours
Unit receding limb, Tr	0.827 hours
Total unit time, Tb	1.033 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #4
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.310 hours
Area (User Defined)	4.260 acres

Computational Time Increment	0.041 hours
Time to Peak (Computed)	12.235 hours
Flow (Peak, Computed)	6.26 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.250 hours
Flow (Peak Interpolated Output)	6.24 ft³/s

Drainage Area	
SCS CN (Composite)	56.000
Area (User Defined)	4.260 acres
Maximum Retention (Pervious)	7.9 in
Maximum Retention (Pervious, 20 percent)	1.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.0 in
Runoff Volume (Pervious)	0.715 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.715 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.310 hours
Computational Time Increment	0.041 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: PR DA #4
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	15.57 ft³/s
Unit peak time, Tp	0.207 hours
Unit receding limb, Tr	0.827 hours
Total unit time, Tb	1.033 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #4
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.310 hours
Area (User Defined)	4.260 acres

Computational Time Increment	0.041 hours
Time to Peak (Computed)	12.235 hours
Flow (Peak, Computed)	20.94 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.250 hours
Flow (Peak Interpolated Output)	20.72 ft³/s

Drainage Area	
SCS CN (Composite)	56.000
Area (User Defined)	4.260 acres
Maximum Retention (Pervious)	7.9 in
Maximum Retention (Pervious, 20 percent)	1.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.3 in
Runoff Volume (Pervious)	2.228 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	2.228 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.310 hours
Computational Time Increment	0.041 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #4
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	15.57 ft³/s
Unit peak time, Tp	0.207 hours
Unit receding limb, Tr	0.827 hours
Total unit time, Tb	1.033 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #4 IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.020 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	0.09 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.09 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.020 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.007 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.006 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: PR DA #4 IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	1.13 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #4 IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.020 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	0.14 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.14 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.020 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.4 in
Runoff Volume (Pervious)	0.011 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.011 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #4 IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	1.13 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #4 IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.020 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	0.26 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.26 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.020 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.2 in
Runoff Volume (Pervious)	0.020 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.020 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #4 IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	1.13 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

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Subsection: Unit Hydrograph Summary
Label: PR DA #5
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.180 hours
Area (User Defined)	1.260 acres

Computational Time Increment	0.024 hours
Time to Peak (Computed)	12.168 hours
Flow (Peak, Computed)	1.05 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	1.01 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	1.260 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.0 in
Runoff Volume (Pervious)	0.101 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.101 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.180 hours
Computational Time Increment	0.024 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #5
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	7.93 ft³/s
Unit peak time, Tp	0.120 hours
Unit receding limb, Tr	0.480 hours
Total unit time, Tb	0.600 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #5
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.180 hours
Area (User Defined)	1.260 acres

Computational Time Increment	0.024 hours
Time to Peak (Computed)	12.168 hours
Flow (Peak, Computed)	3.01 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	2.96 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	1.260 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.5 in
Runoff Volume (Pervious)	0.260 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.260 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.180 hours
Computational Time Increment	0.024 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: PR DA #5
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	7.93 ft³/s
Unit peak time, Tp	0.120 hours
Unit receding limb, Tr	0.480 hours
Total unit time, Tb	0.600 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #5
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.180 hours
Area (User Defined)	1.260 acres

Computational Time Increment	0.024 hours
Time to Peak (Computed)	12.168 hours
Flow (Peak, Computed)	8.72 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	8.66 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	1.260 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	7.1 in
Runoff Volume (Pervious)	0.741 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.741 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.180 hours
Computational Time Increment	0.024 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #5
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	7.93 ft^3/s
Unit peak time, Tp	0.120 hours
Unit receding limb, Tr	0.480 hours
Total unit time, Tb	0.600 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #5 IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	1.210 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	5.43 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	5.43 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1.210 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.409 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.409 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #5 IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	137.10 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #5 IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	1.210 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	8.48 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	8.48 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1.210 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.4 in
Runoff Volume (Pervious)	0.649 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.650 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #5 IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	137.10 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #5 IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	1.210 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	15.78 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	15.78 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1.210 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.2 in
Runoff Volume (Pervious)	1.226 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.226 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #5 IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	137.10 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

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Subsection: Unit Hydrograph Summary
Label: PR DA #6
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.180 hours
Area (User Defined)	0.660 acres

Computational Time Increment	0.024 hours
Time to Peak (Computed)	12.168 hours
Flow (Peak, Computed)	0.55 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	0.53 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.660 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.0 in
Runoff Volume (Pervious)	0.053 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.053 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.180 hours
Computational Time Increment	0.024 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #6
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	4.15 ft³/s
Unit peak time, Tp	0.120 hours
Unit receding limb, Tr	0.480 hours
Total unit time, Tb	0.600 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #6
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.180 hours
Area (User Defined)	0.660 acres

Computational Time Increment	0.024 hours
Time to Peak (Computed)	12.168 hours
Flow (Peak, Computed)	1.57 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	1.55 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.660 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.5 in
Runoff Volume (Pervious)	0.136 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.136 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.180 hours
Computational Time Increment	0.024 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #6
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	4.15 ft³/s
Unit peak time, Tp	0.120 hours
Unit receding limb, Tr	0.480 hours
Total unit time, Tb	0.600 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #6
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.180 hours
Area (User Defined)	0.660 acres

Computational Time Increment	0.024 hours
Time to Peak (Computed)	12.168 hours
Flow (Peak, Computed)	4.57 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	4.54 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.660 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	7.1 in
Runoff Volume (Pervious)	0.388 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.388 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.180 hours
Computational Time Increment	0.024 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: PR DA #6
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	4.15 ft³/s
Unit peak time, Tp	0.120 hours
Unit receding limb, Tr	0.480 hours
Total unit time, Tb	0.600 hours

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #6 IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.280 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	1.26 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	1.25 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.280 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.095 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.095 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #6 IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	15.86 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #6 IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.280 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	1.96 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	1.96 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.280 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.4 in
Runoff Volume (Pervious)	0.150 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.150 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #6 IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	15.86 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #6 IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.280 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	3.65 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	3.64 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.280 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.2 in
Runoff Volume (Pervious)	0.284 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.284 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #6 IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	15.86 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #7
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.160 hours
Area (User Defined)	0.230 acres

Computational Time Increment	0.021 hours
Time to Peak (Computed)	12.160 hours
Flow (Peak, Computed)	0.20 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	0.20 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.230 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.0 in
Runoff Volume (Pervious)	0.018 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.018 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.160 hours
Computational Time Increment	0.021 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #7
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	1.63 ft³/s
Unit peak time, Tp	0.107 hours
Unit receding limb, Tr	0.427 hours
Total unit time, Tb	0.533 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #7
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.160 hours
Area (User Defined)	0.230 acres

Computational Time Increment	0.021 hours
Time to Peak (Computed)	12.160 hours
Flow (Peak, Computed)	0.57 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	0.57 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.230 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.5 in
Runoff Volume (Pervious)	0.047 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.047 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.160 hours
Computational Time Increment	0.021 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

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Subsection: Unit Hydrograph Summary
Label: PR DA #7
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	1.63 ft³/s
Unit peak time, Tp	0.107 hours
Unit receding limb, Tr	0.427 hours
Total unit time, Tb	0.533 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #7
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.160 hours
Area (User Defined)	0.230 acres

Computational Time Increment	0.021 hours
Time to Peak (Computed)	12.139 hours
Flow (Peak, Computed)	1.65 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	1.65 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.230 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	7.1 in
Runoff Volume (Pervious)	0.135 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.135 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.160 hours
Computational Time Increment	0.021 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #7
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	1.63 ft^3/s
Unit peak time, Tp	0.107 hours
Unit receding limb, Tr	0.427 hours
Total unit time, Tb	0.533 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #7 IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.210 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	0.94 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.94 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.210 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.071 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.071 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #7 IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	11.90 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #7 IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.210 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	1.47 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	1.47 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.210 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.4 in
Runoff Volume (Pervious)	0.113 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.113 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #7 IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	11.90 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #7 IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.210 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	2.74 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	2.73 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.210 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.2 in
Runoff Volume (Pervious)	0.213 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.213 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #7 IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	11.90 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

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Subsection: Unit Hydrograph Summary
Label: PR DA #8 IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.040 hours
Area (User Defined)	0.900 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.096 hours
Flow (Peak, Computed)	4.03 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	4.02 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.900 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.304 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.304 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.040 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #8 IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	25.49 ft³/s
Unit peak time, Tp	0.027 hours
Unit receding limb, Tr	0.107 hours
Total unit time, Tb	0.133 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #8 IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.040 hours
Area (User Defined)	0.900 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.096 hours
Flow (Peak, Computed)	6.29 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	6.28 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.900 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.4 in
Runoff Volume (Pervious)	0.483 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.483 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.040 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #8 IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	25.49 ft³/s
Unit peak time, Tp	0.027 hours
Unit receding limb, Tr	0.107 hours
Total unit time, Tb	0.133 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #8 IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.040 hours
Area (User Defined)	0.900 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.096 hours
Flow (Peak, Computed)	11.70 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	11.69 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.900 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.2 in
Runoff Volume (Pervious)	0.912 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.912 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.040 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #8 IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	25.49 ft³/s
Unit peak time, Tp	0.027 hours
Unit receding limb, Tr	0.107 hours
Total unit time, Tb	0.133 hours

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Subsection: Unit Hydrograph Summary
Label: PR DA #9 IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.040 hours
Area (User Defined)	0.950 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.096 hours
Flow (Peak, Computed)	4.25 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	4.24 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.950 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	4.1 in
Runoff Volume (Pervious)	0.321 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.321 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.040 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #9 IMP
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	26.91 ft³/s
Unit peak time, Tp	0.027 hours
Unit receding limb, Tr	0.107 hours
Total unit time, Tb	0.133 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #9 IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.040 hours
Area (User Defined)	0.950 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.096 hours
Flow (Peak, Computed)	6.64 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	6.63 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.950 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	6.4 in
Runoff Volume (Pervious)	0.510 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.510 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.040 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #9 IMP
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	26.91 ft³/s
Unit peak time, Tp	0.027 hours
Unit receding limb, Tr	0.107 hours
Total unit time, Tb	0.133 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #9 IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.040 hours
Area (User Defined)	0.950 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.096 hours
Flow (Peak, Computed)	12.35 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	12.34 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.950 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.2 in
Runoff Volume (Pervious)	0.963 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.962 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.040 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #9 IMP
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	26.91 ft³/s
Unit peak time, Tp	0.027 hours
Unit receding limb, Tr	0.107 hours
Total unit time, Tb	0.133 hours

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Subsection: Unit Hydrograph Summary
Label: PR DR #11A
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Storm Event	NOAA 2 YR - D DIST.
Return Event	2 years
Duration	100.000 hours
Depth	4.3 in
Time of Concentration (Composite)	0.130 hours
Area (User Defined)	0.860 acres

Computational Time Increment	0.017 hours
Time to Peak (Computed)	12.133 hours
Flow (Peak, Computed)	0.81 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	0.81 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.860 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.0 in
Runoff Volume (Pervious)	0.069 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.069 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.130 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Proposed Conditions Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DR #11A
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	7.50 ft³/s
Unit peak time, Tp	0.087 hours
Unit receding limb, Tr	0.347 hours
Total unit time, Tb	0.433 hours

Subsection: Unit Hydrograph Summary
Label: PR DR #11A
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Storm Event	NOAA 10 YR - D DIST.
Return Event	10 years
Duration	100.000 hours
Depth	6.7 in
Time of Concentration (Composite)	0.130 hours
Area (User Defined)	0.860 acres

Computational Time Increment	0.017 hours
Time to Peak (Computed)	12.133 hours
Flow (Peak, Computed)	2.31 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	2.27 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.860 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.5 in
Runoff Volume (Pervious)	0.177 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.177 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.130 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DR #11A
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	7.50 ft³/s
Unit peak time, Tp	0.087 hours
Unit receding limb, Tr	0.347 hours
Total unit time, Tb	0.433 hours

Subsection: Unit Hydrograph Summary
Label: PR DR #11A
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Storm Event	NOAA 100 YR - D DIST.
Return Event	100 years
Duration	100.000 hours
Depth	12.4 in
Time of Concentration (Composite)	0.130 hours
Area (User Defined)	0.860 acres

Computational Time Increment	0.017 hours
Time to Peak (Computed)	12.133 hours
Flow (Peak, Computed)	6.68 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	6.50 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.860 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	7.1 in
Runoff Volume (Pervious)	0.506 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.506 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.130 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DR #11A
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	7.50 ft³/s
Unit peak time, Tp	0.087 hours
Unit receding limb, Tr	0.347 hours
Total unit time, Tb	0.433 hours

Subsection: Outlet Input Data
Label: OS #10
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Requested Pond Water Surface Elevations	
Minimum (Headwater)	403.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	410.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Inlet Box	Riser - 1	Forward	TW	408.25	410.00
Orifice-Circular	Orifice - 1	Forward	TW	406.00	410.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #10
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	406.00 ft
Orifice Diameter	2.5 in
Orifice Coefficient	0.680

Structure ID: Riser - 1 Structure Type: Inlet Box	
Number of Openings	1
Elevation	408.25 ft
Orifice Area	16.0 ft²
Orifice Coefficient	0.680
Weir Length	16.00 ft
Weir Coefficient	3.15 (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	True

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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #10
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
403.00	0.00	(N/A)	0.00	None Contributing
403.50	0.00	(N/A)	0.00	None Contributing
404.00	0.00	(N/A)	0.00	None Contributing
404.50	0.00	(N/A)	0.00	None Contributing
405.00	0.00	(N/A)	0.00	None Contributing
405.50	0.00	(N/A)	0.00	None Contributing
406.00	0.00	(N/A)	0.00	None Contributing
406.50	0.12	(N/A)	0.00	Orifice - 1
407.00	0.18	(N/A)	0.00	Orifice - 1
407.50	0.22	(N/A)	0.00	Orifice - 1
408.00	0.26	(N/A)	0.00	Orifice - 1
408.25	0.27	(N/A)	0.00	Riser - 1 + Orifice - 1
408.50	6.59	(N/A)	0.00	Riser - 1 + Orifice - 1
409.00	33.05	(N/A)	0.00	Riser - 1 + Orifice - 1
409.50	70.78	(N/A)	0.00	Riser - 1 + Orifice - 1
410.00	115.82	(N/A)	0.00	Riser - 1 + Orifice - 1

Subsection: Outlet Input Data
Label: OS #10
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Requested Pond Water Surface Elevations	
Minimum (Headwater)	403.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	410.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Inlet Box	Riser - 1	Forward	TW	408.25	410.00
Orifice-Circular	Orifice - 1	Forward	TW	406.00	410.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #10
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	406.00 ft
Orifice Diameter	2.5 in
Orifice Coefficient	0.680

Structure ID: Riser - 1 Structure Type: Inlet Box	
Number of Openings	1
Elevation	408.25 ft
Orifice Area	16.0 ft²
Orifice Coefficient	0.680
Weir Length	16.00 ft
Weir Coefficient	3.15 (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	True

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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #10
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
403.00	0.00	(N/A)	0.00	None Contributing
403.50	0.00	(N/A)	0.00	None Contributing
404.00	0.00	(N/A)	0.00	None Contributing
404.50	0.00	(N/A)	0.00	None Contributing
405.00	0.00	(N/A)	0.00	None Contributing
405.50	0.00	(N/A)	0.00	None Contributing
406.00	0.00	(N/A)	0.00	None Contributing
406.50	0.12	(N/A)	0.00	Orifice - 1
407.00	0.18	(N/A)	0.00	Orifice - 1
407.50	0.22	(N/A)	0.00	Orifice - 1
408.00	0.26	(N/A)	0.00	Orifice - 1
408.25	0.27	(N/A)	0.00	Riser - 1 + Orifice - 1
408.50	6.59	(N/A)	0.00	Riser - 1 + Orifice - 1
409.00	33.05	(N/A)	0.00	Riser - 1 + Orifice - 1
409.50	70.78	(N/A)	0.00	Riser - 1 + Orifice - 1
410.00	115.82	(N/A)	0.00	Riser - 1 + Orifice - 1

Subsection: Outlet Input Data
Label: OS #10
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Requested Pond Water Surface Elevations	
Minimum (Headwater)	403.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	410.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Inlet Box	Riser - 1	Forward	TW	408.25	410.00
Orifice-Circular	Orifice - 1	Forward	TW	406.00	410.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #10
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	406.00 ft
Orifice Diameter	2.5 in
Orifice Coefficient	0.680

Structure ID: Riser - 1 Structure Type: Inlet Box	
Number of Openings	1
Elevation	408.25 ft
Orifice Area	16.0 ft²
Orifice Coefficient	0.680
Weir Length	16.00 ft
Weir Coefficient	3.15 (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	True

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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #10
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
403.00	0.00	(N/A)	0.00	None Contributing
403.50	0.00	(N/A)	0.00	None Contributing
404.00	0.00	(N/A)	0.00	None Contributing
404.50	0.00	(N/A)	0.00	None Contributing
405.00	0.00	(N/A)	0.00	None Contributing
405.50	0.00	(N/A)	0.00	None Contributing
406.00	0.00	(N/A)	0.00	None Contributing
406.50	0.12	(N/A)	0.00	Orifice - 1
407.00	0.18	(N/A)	0.00	Orifice - 1
407.50	0.22	(N/A)	0.00	Orifice - 1
408.00	0.26	(N/A)	0.00	Orifice - 1
408.25	0.27	(N/A)	0.00	Riser - 1 + Orifice - 1
408.50	6.59	(N/A)	0.00	Riser - 1 + Orifice - 1
409.00	33.05	(N/A)	0.00	Riser - 1 + Orifice - 1
409.50	70.78	(N/A)	0.00	Riser - 1 + Orifice - 1
410.00	115.82	(N/A)	0.00	Riser - 1 + Orifice - 1

Subsection: Outlet Input Data
Label: OS #11
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Requested Pond Water Surface Elevations	
Minimum (Headwater)	399.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	412.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	412.00
Orifice-Circular	Orifice - 1	Forward	TW	401.25	412.00
Rectangular Weir	Weir - 2	Forward	TW	404.10	412.00
Rectangular Weir	Weir - 1	Forward	TW	410.50	412.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #11
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Structure ID: Orifice - 1
Structure Type: Orifice-Circular

Number of Openings	1
Elevation	401.25 ft
Orifice Diameter	2.5 in
Orifice Coefficient	0.680

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft^3/s)
0.00	0.47
0.50	0.51
1.00	0.55
1.50	0.59
2.00	0.63
2.50	0.67
3.00	0.71
3.50	0.75
4.00	0.79
4.50	0.83
5.00	0.87
5.50	0.91
6.00	0.95
6.50	0.99
7.00	1.03
7.50	1.07
8.00	1.11
8.50	1.15
9.00	1.19
9.50	1.23
10.00	1.27
10.50	1.31
11.00	1.35
11.50	1.39
12.00	1.43
12.50	1.47
13.00	1.51

Structure ID: Weir - 1
Structure Type: Rectangular Weir

Number of Openings	1
Elevation	410.50 ft
Weir Length	4.00 ft

Subsection: Outlet Input Data
Label: OS #11
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Weir Coefficient	3.15 (ft^0.5)/s

Structure ID: Weir - 2 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	404.10 ft
Weir Length	0.50 ft
Weir Coefficient	3.15 (ft^0.5)/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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #11
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
399.00	0.47	(N/A)	0.00	User Defined Rating Table - 1
399.50	0.51	(N/A)	0.00	User Defined Rating Table - 1
400.00	0.55	(N/A)	0.00	User Defined Rating Table - 1
400.50	0.59	(N/A)	0.00	User Defined Rating Table - 1
401.00	0.63	(N/A)	0.00	User Defined Rating Table - 1
401.25	0.65	(N/A)	0.00	User Defined Rating Table - 1
401.50	0.74	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
402.00	0.86	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
402.50	0.95	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
403.00	1.03	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
403.50	1.10	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
404.00	1.17	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
404.10	1.19	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
404.50	1.64	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
405.00	2.65	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
405.50	3.98	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
406.00	5.55	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
406.50	7.35	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
407.00	9.33	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #11
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
407.50	11.48	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
408.00	13.80	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
408.50	16.26	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
409.00	18.86	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
409.50	21.60	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
410.00	24.46	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
410.50	27.45	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2 + Weir - 1
411.00	35.00	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2 + Weir - 1
411.50	46.36	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2 + Weir - 1
412.00	60.23	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2 + Weir - 1

Subsection: Outlet Input Data
Label: OS #11
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Requested Pond Water Surface Elevations	
Minimum (Headwater)	399.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	412.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	412.00
Orifice-Circular	Orifice - 1	Forward	TW	401.25	412.00
Rectangular Weir	Weir - 2	Forward	TW	404.10	412.00
Rectangular Weir	Weir - 1	Forward	TW	410.50	412.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #11
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Structure ID: Orifice - 1
Structure Type: Orifice-Circular

Number of Openings	1
Elevation	401.25 ft
Orifice Diameter	2.5 in
Orifice Coefficient	0.680

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft^3/s)
0.00	0.47
0.50	0.51
1.00	0.55
1.50	0.59
2.00	0.63
2.50	0.67
3.00	0.71
3.50	0.75
4.00	0.79
4.50	0.83
5.00	0.87
5.50	0.91
6.00	0.95
6.50	0.99
7.00	1.03
7.50	1.07
8.00	1.11
8.50	1.15
9.00	1.19
9.50	1.23
10.00	1.27
10.50	1.31
11.00	1.35
11.50	1.39
12.00	1.43
12.50	1.47
13.00	1.51

Structure ID: Weir - 1
Structure Type: Rectangular Weir

Number of Openings	1
Elevation	410.50 ft
Weir Length	4.00 ft

Subsection: Outlet Input Data
Label: OS #11
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Weir Coefficient	3.15 (ft^0.5)/s

Structure ID: Weir - 2 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	404.10 ft
Weir Length	0.50 ft
Weir Coefficient	3.15 (ft^0.5)/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 #11
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
399.00	0.47	(N/A)	0.00	User Defined Rating Table - 1
399.50	0.51	(N/A)	0.00	User Defined Rating Table - 1
400.00	0.55	(N/A)	0.00	User Defined Rating Table - 1
400.50	0.59	(N/A)	0.00	User Defined Rating Table - 1
401.00	0.63	(N/A)	0.00	User Defined Rating Table - 1
401.25	0.65	(N/A)	0.00	User Defined Rating Table - 1
401.50	0.74	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
402.00	0.86	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
402.50	0.95	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
403.00	1.03	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
403.50	1.10	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
404.00	1.17	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
404.10	1.19	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
404.50	1.64	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
405.00	2.65	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
405.50	3.98	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
406.00	5.55	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
406.50	7.35	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
407.00	9.33	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #11
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
407.50	11.48	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
408.00	13.80	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
408.50	16.26	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
409.00	18.86	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
409.50	21.60	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
410.00	24.46	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
410.50	27.45	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2 + Weir - 1
411.00	35.00	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2 + Weir - 1
411.50	46.36	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2 + Weir - 1
412.00	60.23	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2 + Weir - 1

Subsection: Outlet Input Data
Label: OS #11
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Requested Pond Water Surface Elevations	
Minimum (Headwater)	399.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	412.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	412.00
Orifice-Circular	Orifice - 1	Forward	TW	401.25	412.00
Rectangular Weir	Weir - 2	Forward	TW	404.10	412.00
Rectangular Weir	Weir - 1	Forward	TW	410.50	412.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #11
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Structure ID: Orifice - 1
Structure Type: Orifice-Circular

Number of Openings	1
Elevation	401.25 ft
Orifice Diameter	2.5 in
Orifice Coefficient	0.680

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft^3/s)
0.00	0.47
0.50	0.51
1.00	0.55
1.50	0.59
2.00	0.63
2.50	0.67
3.00	0.71
3.50	0.75
4.00	0.79
4.50	0.83
5.00	0.87
5.50	0.91
6.00	0.95
6.50	0.99
7.00	1.03
7.50	1.07
8.00	1.11
8.50	1.15
9.00	1.19
9.50	1.23
10.00	1.27
10.50	1.31
11.00	1.35
11.50	1.39
12.00	1.43
12.50	1.47
13.00	1.51

Structure ID: Weir - 1
Structure Type: Rectangular Weir

Number of Openings	1
Elevation	410.50 ft
Weir Length	4.00 ft

Subsection: Outlet Input Data
Label: OS #11
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Weir Coefficient	3.15 (ft^0.5)/s

Structure ID: Weir - 2 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	404.10 ft
Weir Length	0.50 ft
Weir Coefficient	3.15 (ft^0.5)/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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #11
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
399.00	0.47	(N/A)	0.00	User Defined Rating Table - 1
399.50	0.51	(N/A)	0.00	User Defined Rating Table - 1
400.00	0.55	(N/A)	0.00	User Defined Rating Table - 1
400.50	0.59	(N/A)	0.00	User Defined Rating Table - 1
401.00	0.63	(N/A)	0.00	User Defined Rating Table - 1
401.25	0.65	(N/A)	0.00	User Defined Rating Table - 1
401.50	0.74	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
402.00	0.86	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
402.50	0.95	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
403.00	1.03	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
403.50	1.10	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
404.00	1.17	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
404.10	1.19	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
404.50	1.64	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
405.00	2.65	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
405.50	3.98	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
406.00	5.55	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
406.50	7.35	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
407.00	9.33	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #11
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
407.50	11.48	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
408.00	13.80	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
408.50	16.26	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
409.00	18.86	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
409.50	21.60	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
410.00	24.46	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
410.50	27.45	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2 + Weir - 1
411.00	35.00	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2 + Weir - 1
411.50	46.36	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2 + Weir - 1
412.00	60.23	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2 + Weir - 1

Subsection: Outlet Input Data
Label: OS #12
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Requested Pond Water Surface Elevations	
Minimum (Headwater)	400.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	408.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	408.00
Orifice-Circular	Orifice - 1	Forward	TW	402.25	408.00
Rectangular Weir	Weir - 1	Forward	TW	404.15	408.00
Rectangular Weir	Weir - 2	Forward	TW	406.75	408.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #12
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	402.25 ft
Orifice Diameter	4.0 in
Orifice Coefficient	0.680

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft^3/s)
0.00	0.09
0.50	0.13
1.00	0.16
1.50	0.19
2.00	0.22
2.50	0.25
3.00	0.28
3.50	0.31
4.00	0.35
4.50	0.38
5.00	0.41
5.50	0.44
6.00	0.47
6.50	0.50
7.00	0.53
7.50	0.57
8.00	0.60

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	404.15 ft
Weir Length	0.50 ft
Weir Coefficient	3.15 (ft^0.5)/s

Structure ID: Weir - 2 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	406.75 ft
Weir Length	4.00 ft
Weir Coefficient	3.15 (ft^0.5)/s

Subsection: Outlet Input Data
Label: OS #12
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #12
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
400.00	0.09	(N/A)	0.00	User Defined Rating Table - 1
400.50	0.13	(N/A)	0.00	User Defined Rating Table - 1
401.00	0.16	(N/A)	0.00	User Defined Rating Table - 1
401.50	0.19	(N/A)	0.00	User Defined Rating Table - 1
402.00	0.22	(N/A)	0.00	User Defined Rating Table - 1
402.25	0.24	(N/A)	0.00	User Defined Rating Table - 1
402.50	0.35	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
403.00	0.65	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
403.50	0.81	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
404.00	0.94	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
404.15	0.98	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
404.50	1.39	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
405.00	2.41	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
405.50	3.75	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
406.00	5.34	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
406.50	7.14	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
406.75	8.11	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1 + Weir - 2
407.00	10.70	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1 + Weir - 2

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #12
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
407.50	19.48	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1 + Weir - 2
408.00	31.23	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1 + Weir - 2

Subsection: Outlet Input Data
Label: OS #12
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Requested Pond Water Surface Elevations	
Minimum (Headwater)	400.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	408.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	408.00
Orifice-Circular	Orifice - 1	Forward	TW	402.25	408.00
Rectangular Weir	Weir - 1	Forward	TW	404.15	408.00
Rectangular Weir	Weir - 2	Forward	TW	406.75	408.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #12
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	402.25 ft
Orifice Diameter	4.0 in
Orifice Coefficient	0.680

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft^3/s)
0.00	0.09
0.50	0.13
1.00	0.16
1.50	0.19
2.00	0.22
2.50	0.25
3.00	0.28
3.50	0.31
4.00	0.35
4.50	0.38
5.00	0.41
5.50	0.44
6.00	0.47
6.50	0.50
7.00	0.53
7.50	0.57
8.00	0.60

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	404.15 ft
Weir Length	0.50 ft
Weir Coefficient	3.15 (ft^0.5)/s

Structure ID: Weir - 2 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	406.75 ft
Weir Length	4.00 ft
Weir Coefficient	3.15 (ft^0.5)/s

Subsection: Outlet Input Data
Label: OS #12
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

Subsection: Composite Rating Curve
Label: OS #12
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
400.00	0.09	(N/A)	0.00	User Defined Rating Table - 1
400.50	0.13	(N/A)	0.00	User Defined Rating Table - 1
401.00	0.16	(N/A)	0.00	User Defined Rating Table - 1
401.50	0.19	(N/A)	0.00	User Defined Rating Table - 1
402.00	0.22	(N/A)	0.00	User Defined Rating Table - 1
402.25	0.24	(N/A)	0.00	User Defined Rating Table - 1
402.50	0.35	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
403.00	0.65	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
403.50	0.81	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
404.00	0.94	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
404.15	0.98	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
404.50	1.39	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
405.00	2.41	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
405.50	3.75	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
406.00	5.34	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
406.50	7.14	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
406.75	8.11	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1 + Weir - 2
407.00	10.70	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1 + Weir - 2

Subsection: Composite Rating Curve
Label: OS #12
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
407.50	19.48	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1 + Weir - 2
408.00	31.23	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1 + Weir - 2

Subsection: Outlet Input Data
Label: OS #12
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Requested Pond Water Surface Elevations	
Minimum (Headwater)	400.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	408.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	408.00
Orifice-Circular	Orifice - 1	Forward	TW	402.25	408.00
Rectangular Weir	Weir - 1	Forward	TW	404.15	408.00
Rectangular Weir	Weir - 2	Forward	TW	406.75	408.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #12
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	402.25 ft
Orifice Diameter	4.0 in
Orifice Coefficient	0.680

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft^3/s)
0.00	0.09
0.50	0.13
1.00	0.16
1.50	0.19
2.00	0.22
2.50	0.25
3.00	0.28
3.50	0.31
4.00	0.35
4.50	0.38
5.00	0.41
5.50	0.44
6.00	0.47
6.50	0.50
7.00	0.53
7.50	0.57
8.00	0.60

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	404.15 ft
Weir Length	0.50 ft
Weir Coefficient	3.15 (ft^0.5)/s

Structure ID: Weir - 2 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	406.75 ft
Weir Length	4.00 ft
Weir Coefficient	3.15 (ft^0.5)/s

Subsection: Outlet Input Data
Label: OS #12
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #12
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
400.00	0.09	(N/A)	0.00	User Defined Rating Table - 1
400.50	0.13	(N/A)	0.00	User Defined Rating Table - 1
401.00	0.16	(N/A)	0.00	User Defined Rating Table - 1
401.50	0.19	(N/A)	0.00	User Defined Rating Table - 1
402.00	0.22	(N/A)	0.00	User Defined Rating Table - 1
402.25	0.24	(N/A)	0.00	User Defined Rating Table - 1
402.50	0.35	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
403.00	0.65	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
403.50	0.81	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
404.00	0.94	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
404.15	0.98	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
404.50	1.39	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
405.00	2.41	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
405.50	3.75	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
406.00	5.34	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
406.50	7.14	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
406.75	8.11	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1 + Weir - 2
407.00	10.70	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1 + Weir - 2

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #12
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
407.50	19.48	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1 + Weir - 2
408.00	31.23	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1 + Weir - 2

Subsection: Outlet Input Data
Label: OS #13
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Requested Pond Water Surface Elevations	
Minimum (Headwater)	380.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	384.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	384.00
Rectangular Weir	Weir - 1	Forward	TW	382.65	384.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #13
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Structure ID: Weir - 1
Structure Type: Rectangular Weir

Number of Openings	1
Elevation	382.65 ft
Weir Length	4.00 ft
Weir Coefficient	3.15 (ft^0.5)/s

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft³/s)
0.00	0.02
0.50	0.03
1.00	0.04
1.50	0.05
2.00	0.06
2.50	0.06
3.00	0.07
3.50	0.08
4.00	0.09

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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #13
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
380.00	0.02	(N/A)	0.00	User Defined Rating Table - 1
380.50	0.03	(N/A)	0.00	User Defined Rating Table - 1
381.00	0.04	(N/A)	0.00	User Defined Rating Table - 1
381.50	0.05	(N/A)	0.00	User Defined Rating Table - 1
382.00	0.06	(N/A)	0.00	User Defined Rating Table - 1
382.50	0.06	(N/A)	0.00	User Defined Rating Table - 1
382.65	0.07	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1
383.00	2.68	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1
383.50	9.95	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1
384.00	19.85	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1

Subsection: Outlet Input Data
Label: OS #13
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Requested Pond Water Surface Elevations	
Minimum (Headwater)	380.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	384.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	384.00
Rectangular Weir	Weir - 1	Forward	TW	382.65	384.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #13
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Structure ID: Weir - 1
Structure Type: Rectangular Weir

Number of Openings	1
Elevation	382.65 ft
Weir Length	4.00 ft
Weir Coefficient	3.15 (ft^0.5)/s

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft³/s)
0.00	0.02
0.50	0.03
1.00	0.04
1.50	0.05
2.00	0.06
2.50	0.06
3.00	0.07
3.50	0.08
4.00	0.09

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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #13
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
380.00	0.02	(N/A)	0.00	User Defined Rating Table - 1
380.50	0.03	(N/A)	0.00	User Defined Rating Table - 1
381.00	0.04	(N/A)	0.00	User Defined Rating Table - 1
381.50	0.05	(N/A)	0.00	User Defined Rating Table - 1
382.00	0.06	(N/A)	0.00	User Defined Rating Table - 1
382.50	0.06	(N/A)	0.00	User Defined Rating Table - 1
382.65	0.07	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1
383.00	2.68	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1
383.50	9.95	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1
384.00	19.85	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1

Subsection: Outlet Input Data
Label: OS #13
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Requested Pond Water Surface Elevations	
Minimum (Headwater)	380.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	384.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	384.00
Rectangular Weir	Weir - 1	Forward	TW	382.65	384.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #13
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Structure ID: Weir - 1
Structure Type: Rectangular Weir

Number of Openings	1
Elevation	382.65 ft
Weir Length	4.00 ft
Weir Coefficient	3.15 (ft^0.5)/s

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft³/s)
0.00	0.02
0.50	0.03
1.00	0.04
1.50	0.05
2.00	0.06
2.50	0.06
3.00	0.07
3.50	0.08
4.00	0.09

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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #13
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
380.00	0.02	(N/A)	0.00	User Defined Rating Table - 1
380.50	0.03	(N/A)	0.00	User Defined Rating Table - 1
381.00	0.04	(N/A)	0.00	User Defined Rating Table - 1
381.50	0.05	(N/A)	0.00	User Defined Rating Table - 1
382.00	0.06	(N/A)	0.00	User Defined Rating Table - 1
382.50	0.06	(N/A)	0.00	User Defined Rating Table - 1
382.65	0.07	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1
383.00	2.68	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1
383.50	9.95	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1
384.00	19.85	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1

Subsection: Outlet Input Data
Label: OS #5
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Requested Pond Water Surface Elevations	
Minimum (Headwater)	409.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	416.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	416.00
Orifice-Circular	Orifice - 1	Forward	TW	411.60	416.00
Rectangular Weir	Weir - 1	Forward	TW	413.50	416.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #5
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	411.60 ft
Orifice Diameter	2.5 in
Orifice Coefficient	0.680

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft^3/s)
0.00	0.14
0.50	0.19
1.00	0.24
1.50	0.28
2.00	0.33
2.50	0.38
3.00	0.43
3.50	0.47
4.00	0.52
4.50	0.57
5.00	0.62
5.50	0.66
6.00	0.71
6.50	0.76
7.00	0.81

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	413.50 ft
Weir Length	4.00 ft
Weir Coefficient	3.15 (ft^0.5)/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

1047-01 - Proposed Conditions Flood Routings

Subsection: Outlet Input Data
Label: OS #5
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Convergence Tolerances	
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

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #5
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
409.00	0.14	(N/A)	0.00	User Defined Rating Table - 1
409.50	0.19	(N/A)	0.00	User Defined Rating Table - 1
410.00	0.24	(N/A)	0.00	User Defined Rating Table - 1
410.50	0.28	(N/A)	0.00	User Defined Rating Table - 1
411.00	0.33	(N/A)	0.00	User Defined Rating Table - 1
411.50	0.38	(N/A)	0.00	User Defined Rating Table - 1
411.60	0.39	(N/A)	0.00	User Defined Rating Table - 1
412.00	0.53	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
412.50	0.64	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
413.00	0.73	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
413.50	0.82	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
414.00	5.35	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
414.50	13.57	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
415.00	24.20	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
415.50	36.76	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
416.00	51.00	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1

Subsection: Outlet Input Data
Label: OS #5
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Requested Pond Water Surface Elevations	
Minimum (Headwater)	409.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	416.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	416.00
Orifice-Circular	Orifice - 1	Forward	TW	411.60	416.00
Rectangular Weir	Weir - 1	Forward	TW	413.50	416.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #5
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	411.60 ft
Orifice Diameter	2.5 in
Orifice Coefficient	0.680

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft³/s)
0.00	0.14
0.50	0.19
1.00	0.24
1.50	0.28
2.00	0.33
2.50	0.38
3.00	0.43
3.50	0.47
4.00	0.52
4.50	0.57
5.00	0.62
5.50	0.66
6.00	0.71
6.50	0.76
7.00	0.81

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	413.50 ft
Weir Length	4.00 ft
Weir Coefficient	3.15 (ft^0.5)/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

Subsection: Outlet Input Data
Label: OS #5
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Convergence Tolerances	
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

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #5
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
409.00	0.14	(N/A)	0.00	User Defined Rating Table - 1
409.50	0.19	(N/A)	0.00	User Defined Rating Table - 1
410.00	0.24	(N/A)	0.00	User Defined Rating Table - 1
410.50	0.28	(N/A)	0.00	User Defined Rating Table - 1
411.00	0.33	(N/A)	0.00	User Defined Rating Table - 1
411.50	0.38	(N/A)	0.00	User Defined Rating Table - 1
411.60	0.39	(N/A)	0.00	User Defined Rating Table - 1
412.00	0.53	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
412.50	0.64	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
413.00	0.73	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
413.50	0.82	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
414.00	5.35	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
414.50	13.57	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
415.00	24.20	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
415.50	36.76	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
416.00	51.00	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1

Subsection: Outlet Input Data
Label: OS #5
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Requested Pond Water Surface Elevations	
Minimum (Headwater)	409.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	416.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	416.00
Orifice-Circular	Orifice - 1	Forward	TW	411.60	416.00
Rectangular Weir	Weir - 1	Forward	TW	413.50	416.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #5
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	411.60 ft
Orifice Diameter	2.5 in
Orifice Coefficient	0.680

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft³/s)
0.00	0.14
0.50	0.19
1.00	0.24
1.50	0.28
2.00	0.33
2.50	0.38
3.00	0.43
3.50	0.47
4.00	0.52
4.50	0.57
5.00	0.62
5.50	0.66
6.00	0.71
6.50	0.76
7.00	0.81

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	413.50 ft
Weir Length	4.00 ft
Weir Coefficient	3.15 (ft^0.5)/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

1047-01 - Proposed Conditions Flood Routings

Subsection: Outlet Input Data
Label: OS #5
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Convergence Tolerances	
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #5
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
409.00	0.14	(N/A)	0.00	User Defined Rating Table - 1
409.50	0.19	(N/A)	0.00	User Defined Rating Table - 1
410.00	0.24	(N/A)	0.00	User Defined Rating Table - 1
410.50	0.28	(N/A)	0.00	User Defined Rating Table - 1
411.00	0.33	(N/A)	0.00	User Defined Rating Table - 1
411.50	0.38	(N/A)	0.00	User Defined Rating Table - 1
411.60	0.39	(N/A)	0.00	User Defined Rating Table - 1
412.00	0.53	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
412.50	0.64	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
413.00	0.73	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
413.50	0.82	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
414.00	5.35	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
414.50	13.57	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
415.00	24.20	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
415.50	36.76	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
416.00	51.00	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1

Subsection: Outlet Input Data
Label: OS #6
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Requested Pond Water Surface Elevations	
Minimum (Headwater)	470.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	476.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	Orifice - 1	Forward	TW	472.25	476.00
Rectangular Weir	Weir - 1	Forward	TW	474.15	476.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #6
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	472.25 ft
Orifice Diameter	2.5 in
Orifice Coefficient	0.680

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	474.15 ft
Weir Length	4.00 ft
Weir Coefficient	3.15 (ft^0.5)/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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #6
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
470.00	0.00	(N/A)	0.00	None Contributing
470.50	0.00	(N/A)	0.00	None Contributing
471.00	0.00	(N/A)	0.00	None Contributing
471.50	0.00	(N/A)	0.00	None Contributing
472.00	0.00	(N/A)	0.00	None Contributing
472.25	0.00	(N/A)	0.00	None Contributing
472.50	0.07	(N/A)	0.00	Orifice - 1
473.00	0.15	(N/A)	0.00	Orifice - 1
473.50	0.20	(N/A)	0.00	Orifice - 1
474.00	0.24	(N/A)	0.00	Orifice - 1
474.15	0.25	(N/A)	0.00	Orifice - 1 + Weir - 1
474.50	2.88	(N/A)	0.00	Orifice - 1 + Weir - 1
475.00	10.18	(N/A)	0.00	Orifice - 1 + Weir - 1
475.50	20.09	(N/A)	0.00	Orifice - 1 + Weir - 1
476.00	32.06	(N/A)	0.00	Orifice - 1 + Weir - 1

Subsection: Outlet Input Data
Label: OS #6
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Requested Pond Water Surface Elevations	
Minimum (Headwater)	470.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	476.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	Orifice - 1	Forward	TW	472.25	476.00
Rectangular Weir	Weir - 1	Forward	TW	474.15	476.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #6
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	472.25 ft
Orifice Diameter	2.5 in
Orifice Coefficient	0.680

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	474.15 ft
Weir Length	4.00 ft
Weir Coefficient	3.15 (ft^0.5)/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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #6
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
470.00	0.00	(N/A)	0.00	None Contributing
470.50	0.00	(N/A)	0.00	None Contributing
471.00	0.00	(N/A)	0.00	None Contributing
471.50	0.00	(N/A)	0.00	None Contributing
472.00	0.00	(N/A)	0.00	None Contributing
472.25	0.00	(N/A)	0.00	None Contributing
472.50	0.07	(N/A)	0.00	Orifice - 1
473.00	0.15	(N/A)	0.00	Orifice - 1
473.50	0.20	(N/A)	0.00	Orifice - 1
474.00	0.24	(N/A)	0.00	Orifice - 1
474.15	0.25	(N/A)	0.00	Orifice - 1 + Weir - 1
474.50	2.88	(N/A)	0.00	Orifice - 1 + Weir - 1
475.00	10.18	(N/A)	0.00	Orifice - 1 + Weir - 1
475.50	20.09	(N/A)	0.00	Orifice - 1 + Weir - 1
476.00	32.06	(N/A)	0.00	Orifice - 1 + Weir - 1

Subsection: Outlet Input Data
Label: OS #6
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Requested Pond Water Surface Elevations	
Minimum (Headwater)	470.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	476.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	Orifice - 1	Forward	TW	472.25	476.00
Rectangular Weir	Weir - 1	Forward	TW	474.15	476.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #6
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	472.25 ft
Orifice Diameter	2.5 in
Orifice Coefficient	0.680

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	474.15 ft
Weir Length	4.00 ft
Weir Coefficient	3.15 (ft^0.5)/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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #6
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
470.00	0.00	(N/A)	0.00	None Contributing
470.50	0.00	(N/A)	0.00	None Contributing
471.00	0.00	(N/A)	0.00	None Contributing
471.50	0.00	(N/A)	0.00	None Contributing
472.00	0.00	(N/A)	0.00	None Contributing
472.25	0.00	(N/A)	0.00	None Contributing
472.50	0.07	(N/A)	0.00	Orifice - 1
473.00	0.15	(N/A)	0.00	Orifice - 1
473.50	0.20	(N/A)	0.00	Orifice - 1
474.00	0.24	(N/A)	0.00	Orifice - 1
474.15	0.25	(N/A)	0.00	Orifice - 1 + Weir - 1
474.50	2.88	(N/A)	0.00	Orifice - 1 + Weir - 1
475.00	10.18	(N/A)	0.00	Orifice - 1 + Weir - 1
475.50	20.09	(N/A)	0.00	Orifice - 1 + Weir - 1
476.00	32.06	(N/A)	0.00	Orifice - 1 + Weir - 1

Subsection: Outlet Input Data
Label: OS #7
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Requested Pond Water Surface Elevations	
Minimum (Headwater)	483.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	488.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	488.00
Orifice-Circular	Orifice - 1	Forward	TW	485.25	488.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #7
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	485.25 ft
Orifice Diameter	2.5 in
Orifice Coefficient	0.680

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft^3/s)
0.00	0.29
0.50	0.38
1.00	0.48
1.50	0.57
2.00	0.67
2.50	0.77
3.00	0.86
3.50	0.96
4.00	1.05
4.50	1.15
5.00	1.24

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

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #7
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
483.00	0.29	(N/A)	0.00	User Defined Rating Table - 1
483.50	0.38	(N/A)	0.00	User Defined Rating Table - 1
484.00	0.48	(N/A)	0.00	User Defined Rating Table - 1
484.50	0.57	(N/A)	0.00	User Defined Rating Table - 1
485.00	0.67	(N/A)	0.00	User Defined Rating Table - 1
485.25	0.72	(N/A)	0.00	User Defined Rating Table - 1
485.50	0.84	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
486.00	1.01	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
486.50	1.16	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
487.00	1.29	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
487.50	1.42	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
488.00	1.55	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1

Subsection: Outlet Input Data
Label: OS #7
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Requested Pond Water Surface Elevations	
Minimum (Headwater)	483.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	488.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	488.00
Orifice-Circular	Orifice - 1	Forward	TW	485.25	488.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #7
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Structure ID: Orifice - 1
Structure Type: Orifice-Circular

Number of Openings	1
Elevation	485.25 ft
Orifice Diameter	2.5 in
Orifice Coefficient	0.680

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft^3/s)
0.00	0.29
0.50	0.38
1.00	0.48
1.50	0.57
2.00	0.67
2.50	0.77
3.00	0.86
3.50	0.96
4.00	1.05
4.50	1.15
5.00	1.24

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

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #7
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
483.00	0.29	(N/A)	0.00	User Defined Rating Table - 1
483.50	0.38	(N/A)	0.00	User Defined Rating Table - 1
484.00	0.48	(N/A)	0.00	User Defined Rating Table - 1
484.50	0.57	(N/A)	0.00	User Defined Rating Table - 1
485.00	0.67	(N/A)	0.00	User Defined Rating Table - 1
485.25	0.72	(N/A)	0.00	User Defined Rating Table - 1
485.50	0.84	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
486.00	1.01	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
486.50	1.16	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
487.00	1.29	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
487.50	1.42	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
488.00	1.55	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1

Subsection: Outlet Input Data
Label: OS #7
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Requested Pond Water Surface Elevations	
Minimum (Headwater)	483.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	488.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	488.00
Orifice-Circular	Orifice - 1	Forward	TW	485.25	488.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #7
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	485.25 ft
Orifice Diameter	2.5 in
Orifice Coefficient	0.680

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft^3/s)
0.00	0.29
0.50	0.38
1.00	0.48
1.50	0.57
2.00	0.67
2.50	0.77
3.00	0.86
3.50	0.96
4.00	1.05
4.50	1.15
5.00	1.24

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

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #7
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
483.00	0.29	(N/A)	0.00	User Defined Rating Table - 1
483.50	0.38	(N/A)	0.00	User Defined Rating Table - 1
484.00	0.48	(N/A)	0.00	User Defined Rating Table - 1
484.50	0.57	(N/A)	0.00	User Defined Rating Table - 1
485.00	0.67	(N/A)	0.00	User Defined Rating Table - 1
485.25	0.72	(N/A)	0.00	User Defined Rating Table - 1
485.50	0.84	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
486.00	1.01	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
486.50	1.16	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
487.00	1.29	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
487.50	1.42	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
488.00	1.55	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1

Subsection: Outlet Input Data
Label: OS #8
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Requested Pond Water Surface Elevations	
Minimum (Headwater)	458.60 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	466.60 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	Orifice - 1	Forward	TW	462.60	467.60
Rectangular Weir	Weir - 1	Forward	TW	463.40	467.60
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #8
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	462.60 ft
Orifice Diameter	2.5 in
Orifice Coefficient	0.680

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	463.40 ft
Weir Length	0.50 ft
Weir Coefficient	3.15 (ft^0.5)/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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #8
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
458.60	0.00	(N/A)	0.00	None Contributing
459.10	0.00	(N/A)	0.00	None Contributing
459.60	0.00	(N/A)	0.00	None Contributing
460.10	0.00	(N/A)	0.00	None Contributing
460.60	0.00	(N/A)	0.00	None Contributing
461.10	0.00	(N/A)	0.00	None Contributing
461.60	0.00	(N/A)	0.00	None Contributing
462.10	0.00	(N/A)	0.00	None Contributing
462.60	0.00	(N/A)	0.00	None Contributing
463.10	0.12	(N/A)	0.00	Orifice - 1
463.40	0.16	(N/A)	0.00	Orifice - 1 + Weir - 1
463.60	0.32	(N/A)	0.00	Orifice - 1 + Weir - 1
464.10	1.14	(N/A)	0.00	Orifice - 1 + Weir - 1
464.60	2.33	(N/A)	0.00	Orifice - 1 + Weir - 1
465.10	3.78	(N/A)	0.00	Orifice - 1 + Weir - 1
465.60	5.46	(N/A)	0.00	Orifice - 1 + Weir - 1
466.10	7.33	(N/A)	0.00	Orifice - 1 + Weir - 1
466.60	9.38	(N/A)	0.00	Orifice - 1 + Weir - 1
467.10	11.60	(N/A)	0.00	Orifice - 1 + Weir - 1
467.60	13.97	(N/A)	0.00	Orifice - 1 + Weir - 1

Subsection: Outlet Input Data
Label: OS #8
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Requested Pond Water Surface Elevations	
Minimum (Headwater)	458.60 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	466.60 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	Orifice - 1	Forward	TW	462.60	467.60
Rectangular Weir	Weir - 1	Forward	TW	463.40	467.60
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #8
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	462.60 ft
Orifice Diameter	2.5 in
Orifice Coefficient	0.680

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	463.40 ft
Weir Length	0.50 ft
Weir Coefficient	3.15 (ft^0.5)/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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #8
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
458.60	0.00	(N/A)	0.00	None Contributing
459.10	0.00	(N/A)	0.00	None Contributing
459.60	0.00	(N/A)	0.00	None Contributing
460.10	0.00	(N/A)	0.00	None Contributing
460.60	0.00	(N/A)	0.00	None Contributing
461.10	0.00	(N/A)	0.00	None Contributing
461.60	0.00	(N/A)	0.00	None Contributing
462.10	0.00	(N/A)	0.00	None Contributing
462.60	0.00	(N/A)	0.00	None Contributing
463.10	0.12	(N/A)	0.00	Orifice - 1
463.40	0.16	(N/A)	0.00	Orifice - 1 + Weir - 1
463.60	0.32	(N/A)	0.00	Orifice - 1 + Weir - 1
464.10	1.14	(N/A)	0.00	Orifice - 1 + Weir - 1
464.60	2.33	(N/A)	0.00	Orifice - 1 + Weir - 1
465.10	3.78	(N/A)	0.00	Orifice - 1 + Weir - 1
465.60	5.46	(N/A)	0.00	Orifice - 1 + Weir - 1
466.10	7.33	(N/A)	0.00	Orifice - 1 + Weir - 1
466.60	9.38	(N/A)	0.00	Orifice - 1 + Weir - 1
467.10	11.60	(N/A)	0.00	Orifice - 1 + Weir - 1
467.60	13.97	(N/A)	0.00	Orifice - 1 + Weir - 1

Subsection: Outlet Input Data
Label: OS #8
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Requested Pond Water Surface Elevations	
Minimum (Headwater)	458.60 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	466.60 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	Orifice - 1	Forward	TW	462.60	467.60
Rectangular Weir	Weir - 1	Forward	TW	463.40	467.60
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #8
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	462.60 ft
Orifice Diameter	2.5 in
Orifice Coefficient	0.680

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	463.40 ft
Weir Length	0.50 ft
Weir Coefficient	3.15 (ft^0.5)/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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Proposed Conditions Flood Routings

Subsection: Composite Rating Curve
Label: OS #8
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
458.60	0.00	(N/A)	0.00	None Contributing
459.10	0.00	(N/A)	0.00	None Contributing
459.60	0.00	(N/A)	0.00	None Contributing
460.10	0.00	(N/A)	0.00	None Contributing
460.60	0.00	(N/A)	0.00	None Contributing
461.10	0.00	(N/A)	0.00	None Contributing
461.60	0.00	(N/A)	0.00	None Contributing
462.10	0.00	(N/A)	0.00	None Contributing
462.60	0.00	(N/A)	0.00	None Contributing
463.10	0.12	(N/A)	0.00	Orifice - 1
463.40	0.16	(N/A)	0.00	Orifice - 1 + Weir - 1
463.60	0.32	(N/A)	0.00	Orifice - 1 + Weir - 1
464.10	1.14	(N/A)	0.00	Orifice - 1 + Weir - 1
464.60	2.33	(N/A)	0.00	Orifice - 1 + Weir - 1
465.10	3.78	(N/A)	0.00	Orifice - 1 + Weir - 1
465.60	5.46	(N/A)	0.00	Orifice - 1 + Weir - 1
466.10	7.33	(N/A)	0.00	Orifice - 1 + Weir - 1
466.60	9.38	(N/A)	0.00	Orifice - 1 + Weir - 1
467.10	11.60	(N/A)	0.00	Orifice - 1 + Weir - 1
467.60	13.97	(N/A)	0.00	Orifice - 1 + Weir - 1

1047-01 - Proposed Conditions Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #10
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	403.00 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	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
403.00	0.00	0.000	0.000	0.00	0.00	0.00
403.50	0.00	0.006	0.017	0.00	0.00	2.84
404.00	0.00	0.016	0.026	0.00	0.00	7.93
404.50	0.00	0.032	0.036	0.00	0.00	15.39
405.00	0.00	0.053	0.049	0.00	0.00	25.69
405.50	0.00	0.079	0.056	0.00	0.00	38.41
406.00	0.00	0.109	0.064	0.00	0.00	52.95
406.50	0.12	0.143	0.072	0.00	0.12	69.54
407.00	0.18	0.182	0.081	0.00	0.18	88.14
407.50	0.22	0.225	0.090	0.00	0.22	108.89
408.00	0.26	0.272	0.100	0.00	0.26	131.94
408.25	0.27	0.298	0.104	0.00	0.27	144.27
408.50	6.59	0.324	0.107	0.00	6.59	163.33
409.00	33.05	0.379	0.115	0.00	33.05	216.61
409.50	70.78	0.438	0.122	0.00	70.78	282.96
410.00	115.82	0.501	0.130	0.00	115.82	358.51

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #10
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	403.00 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	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
403.00	0.00	0.000	0.000	0.00	0.00	0.00
403.50	0.00	0.006	0.017	0.00	0.00	2.84
404.00	0.00	0.016	0.026	0.00	0.00	7.93
404.50	0.00	0.032	0.036	0.00	0.00	15.39
405.00	0.00	0.053	0.049	0.00	0.00	25.69
405.50	0.00	0.079	0.056	0.00	0.00	38.41
406.00	0.00	0.109	0.064	0.00	0.00	52.95
406.50	0.12	0.143	0.072	0.00	0.12	69.54
407.00	0.18	0.182	0.081	0.00	0.18	88.14
407.50	0.22	0.225	0.090	0.00	0.22	108.89
408.00	0.26	0.272	0.100	0.00	0.26	131.94
408.25	0.27	0.298	0.104	0.00	0.27	144.27
408.50	6.59	0.324	0.107	0.00	6.59	163.33
409.00	33.05	0.379	0.115	0.00	33.05	216.61
409.50	70.78	0.438	0.122	0.00	70.78	282.96
410.00	115.82	0.501	0.130	0.00	115.82	358.51

1047-01 - Proposed Conditions Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #10
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	403.00 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	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
403.00	0.00	0.000	0.000	0.00	0.00	0.00
403.50	0.00	0.006	0.017	0.00	0.00	2.84
404.00	0.00	0.016	0.026	0.00	0.00	7.93
404.50	0.00	0.032	0.036	0.00	0.00	15.39
405.00	0.00	0.053	0.049	0.00	0.00	25.69
405.50	0.00	0.079	0.056	0.00	0.00	38.41
406.00	0.00	0.109	0.064	0.00	0.00	52.95
406.50	0.12	0.143	0.072	0.00	0.12	69.54
407.00	0.18	0.182	0.081	0.00	0.18	88.14
407.50	0.22	0.225	0.090	0.00	0.22	108.89
408.00	0.26	0.272	0.100	0.00	0.26	131.94
408.25	0.27	0.298	0.104	0.00	0.27	144.27
408.50	6.59	0.324	0.107	0.00	6.59	163.33
409.00	33.05	0.379	0.115	0.00	33.05	216.61
409.50	70.78	0.438	0.122	0.00	70.78	282.96
410.00	115.82	0.501	0.130	0.00	115.82	358.51

1047-01 - Proposed Conditions Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #11
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	399.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.47 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.47 ft³/s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
399.00	0.47	0.000	0.000	0.00	0.47	0.47
399.50	0.51	0.010	0.029	0.00	0.51	5.46
400.00	0.55	0.029	0.045	0.00	0.55	14.47
400.50	0.59	0.056	0.065	0.00	0.59	27.80
401.00	0.63	0.094	0.088	0.00	0.63	46.27
401.25	0.65	0.118	0.103	0.00	0.65	57.83
401.50	0.74	0.146	0.119	0.00	0.74	71.35
402.00	0.86	0.214	0.155	0.00	0.86	104.55
402.50	0.95	0.294	0.166	0.00	0.95	143.44
403.00	1.03	0.380	0.177	0.00	1.03	184.95
403.50	1.10	0.471	0.188	0.00	1.10	229.18
404.00	1.17	0.568	0.200	0.00	1.17	276.22
404.10	1.19	0.589	0.206	0.00	1.19	286.05
404.50	1.64	0.675	0.229	0.00	1.64	328.53
405.00	2.65	0.797	0.260	0.00	2.65	388.61
405.50	3.98	0.935	0.292	0.00	3.98	456.68
406.00	5.55	1.090	0.327	0.00	5.55	533.16
406.50	7.35	1.256	0.336	0.00	7.35	615.18
407.00	9.33	1.426	0.345	0.00	9.33	699.60
407.50	11.48	1.601	0.355	0.00	11.48	786.43
408.00	13.80	1.781	0.364	0.00	13.80	875.69
408.50	16.26	1.965	0.372	0.00	16.26	967.16
409.00	18.86	2.152	0.379	0.00	18.86	1,060.63
409.50	21.60	2.344	0.387	0.00	21.60	1,156.11
410.00	24.46	2.540	0.395	0.00	24.46	1,253.61
410.50	27.45	2.739	0.402	0.00	27.45	1,352.99
411.00	35.00	2.941	0.408	0.00	35.00	1,458.56
411.50	46.36	3.147	0.415	0.00	46.36	1,569.57
412.00	60.23	3.356	0.422	0.00	60.23	1,684.73

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #11
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	399.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.47 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.47 ft³/s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
399.00	0.47	0.000	0.000	0.00	0.47	0.47
399.50	0.51	0.010	0.029	0.00	0.51	5.46
400.00	0.55	0.029	0.045	0.00	0.55	14.47
400.50	0.59	0.056	0.065	0.00	0.59	27.80
401.00	0.63	0.094	0.088	0.00	0.63	46.27
401.25	0.65	0.118	0.103	0.00	0.65	57.83
401.50	0.74	0.146	0.119	0.00	0.74	71.35
402.00	0.86	0.214	0.155	0.00	0.86	104.55
402.50	0.95	0.294	0.166	0.00	0.95	143.44
403.00	1.03	0.380	0.177	0.00	1.03	184.95
403.50	1.10	0.471	0.188	0.00	1.10	229.18
404.00	1.17	0.568	0.200	0.00	1.17	276.22
404.10	1.19	0.589	0.206	0.00	1.19	286.05
404.50	1.64	0.675	0.229	0.00	1.64	328.53
405.00	2.65	0.797	0.260	0.00	2.65	388.61
405.50	3.98	0.935	0.292	0.00	3.98	456.68
406.00	5.55	1.090	0.327	0.00	5.55	533.16
406.50	7.35	1.256	0.336	0.00	7.35	615.18
407.00	9.33	1.426	0.345	0.00	9.33	699.60
407.50	11.48	1.601	0.355	0.00	11.48	786.43
408.00	13.80	1.781	0.364	0.00	13.80	875.69
408.50	16.26	1.965	0.372	0.00	16.26	967.16
409.00	18.86	2.152	0.379	0.00	18.86	1,060.63
409.50	21.60	2.344	0.387	0.00	21.60	1,156.11
410.00	24.46	2.540	0.395	0.00	24.46	1,253.61
410.50	27.45	2.739	0.402	0.00	27.45	1,352.99
411.00	35.00	2.941	0.408	0.00	35.00	1,458.56
411.50	46.36	3.147	0.415	0.00	46.36	1,569.57
412.00	60.23	3.356	0.422	0.00	60.23	1,684.73

1047-01 - Proposed Conditions Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #11
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	399.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.47 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.47 ft³/s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
399.00	0.47	0.000	0.000	0.00	0.47	0.47
399.50	0.51	0.010	0.029	0.00	0.51	5.46
400.00	0.55	0.029	0.045	0.00	0.55	14.47
400.50	0.59	0.056	0.065	0.00	0.59	27.80
401.00	0.63	0.094	0.088	0.00	0.63	46.27
401.25	0.65	0.118	0.103	0.00	0.65	57.83
401.50	0.74	0.146	0.119	0.00	0.74	71.35
402.00	0.86	0.214	0.155	0.00	0.86	104.55
402.50	0.95	0.294	0.166	0.00	0.95	143.44
403.00	1.03	0.380	0.177	0.00	1.03	184.95
403.50	1.10	0.471	0.188	0.00	1.10	229.18
404.00	1.17	0.568	0.200	0.00	1.17	276.22
404.10	1.19	0.589	0.206	0.00	1.19	286.05
404.50	1.64	0.675	0.229	0.00	1.64	328.53
405.00	2.65	0.797	0.260	0.00	2.65	388.61
405.50	3.98	0.935	0.292	0.00	3.98	456.68
406.00	5.55	1.090	0.327	0.00	5.55	533.16
406.50	7.35	1.256	0.336	0.00	7.35	615.18
407.00	9.33	1.426	0.345	0.00	9.33	699.60
407.50	11.48	1.601	0.355	0.00	11.48	786.43
408.00	13.80	1.781	0.364	0.00	13.80	875.69
408.50	16.26	1.965	0.372	0.00	16.26	967.16
409.00	18.86	2.152	0.379	0.00	18.86	1,060.63
409.50	21.60	2.344	0.387	0.00	21.60	1,156.11
410.00	24.46	2.540	0.395	0.00	24.46	1,253.61
410.50	27.45	2.739	0.402	0.00	27.45	1,352.99
411.00	35.00	2.941	0.408	0.00	35.00	1,458.56
411.50	46.36	3.147	0.415	0.00	46.36	1,569.57
412.00	60.23	3.356	0.422	0.00	60.23	1,684.73

1047-01 - Proposed Conditions Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #12
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	400.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.09 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.09 ft³/s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
400.00	0.09	0.000	0.000	0.00	0.09	0.09
400.50	0.13	0.004	0.012	0.00	0.13	2.22
401.00	0.16	0.012	0.019	0.00	0.16	6.08
401.50	0.19	0.024	0.028	0.00	0.19	11.81
402.00	0.22	0.040	0.038	0.00	0.22	19.79
402.25	0.24	0.051	0.045	0.00	0.24	24.84
402.50	0.35	0.063	0.053	0.00	0.35	30.89
403.00	0.65	0.094	0.071	0.00	0.65	46.08
403.50	0.81	0.134	0.091	0.00	0.81	65.68
404.00	0.94	0.185	0.113	0.00	0.94	90.38
404.15	0.98	0.202	0.116	0.00	0.98	98.73
404.50	1.39	0.244	0.123	0.00	1.39	119.39
405.00	2.41	0.308	0.134	0.00	2.41	151.46
405.50	3.75	0.378	0.145	0.00	3.75	186.46
406.00	5.34	0.453	0.156	0.00	5.34	224.41
406.50	7.14	0.534	0.168	0.00	7.14	265.39
406.75	8.11	0.576	0.174	0.00	8.11	287.03
407.00	10.70	0.620	0.180	0.00	10.70	311.03
407.50	19.48	0.716	0.203	0.00	19.48	366.09
408.00	31.23	0.824	0.227	0.00	31.23	429.82

1047-01 - Proposed Conditions Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #12
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	400.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.09 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.09 ft³/s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
400.00	0.09	0.000	0.000	0.00	0.09	0.09
400.50	0.13	0.004	0.012	0.00	0.13	2.22
401.00	0.16	0.012	0.019	0.00	0.16	6.08
401.50	0.19	0.024	0.028	0.00	0.19	11.81
402.00	0.22	0.040	0.038	0.00	0.22	19.79
402.25	0.24	0.051	0.045	0.00	0.24	24.84
402.50	0.35	0.063	0.053	0.00	0.35	30.89
403.00	0.65	0.094	0.071	0.00	0.65	46.08
403.50	0.81	0.134	0.091	0.00	0.81	65.68
404.00	0.94	0.185	0.113	0.00	0.94	90.38
404.15	0.98	0.202	0.116	0.00	0.98	98.73
404.50	1.39	0.244	0.123	0.00	1.39	119.39
405.00	2.41	0.308	0.134	0.00	2.41	151.46
405.50	3.75	0.378	0.145	0.00	3.75	186.46
406.00	5.34	0.453	0.156	0.00	5.34	224.41
406.50	7.14	0.534	0.168	0.00	7.14	265.39
406.75	8.11	0.576	0.174	0.00	8.11	287.03
407.00	10.70	0.620	0.180	0.00	10.70	311.03
407.50	19.48	0.716	0.203	0.00	19.48	366.09
408.00	31.23	0.824	0.227	0.00	31.23	429.82

1047-01 - Proposed Conditions Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #12
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	400.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.09 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.09 ft³/s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
400.00	0.09	0.000	0.000	0.00	0.09	0.09
400.50	0.13	0.004	0.012	0.00	0.13	2.22
401.00	0.16	0.012	0.019	0.00	0.16	6.08
401.50	0.19	0.024	0.028	0.00	0.19	11.81
402.00	0.22	0.040	0.038	0.00	0.22	19.79
402.25	0.24	0.051	0.045	0.00	0.24	24.84
402.50	0.35	0.063	0.053	0.00	0.35	30.89
403.00	0.65	0.094	0.071	0.00	0.65	46.08
403.50	0.81	0.134	0.091	0.00	0.81	65.68
404.00	0.94	0.185	0.113	0.00	0.94	90.38
404.15	0.98	0.202	0.116	0.00	0.98	98.73
404.50	1.39	0.244	0.123	0.00	1.39	119.39
405.00	2.41	0.308	0.134	0.00	2.41	151.46
405.50	3.75	0.378	0.145	0.00	3.75	186.46
406.00	5.34	0.453	0.156	0.00	5.34	224.41
406.50	7.14	0.534	0.168	0.00	7.14	265.39
406.75	8.11	0.576	0.174	0.00	8.11	287.03
407.00	10.70	0.620	0.180	0.00	10.70	311.03
407.50	19.48	0.716	0.203	0.00	19.48	366.09
408.00	31.23	0.824	0.227	0.00	31.23	429.82

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #13
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	380.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.02 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.02 ft³/s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
380.00	0.02	0.000	0.000	0.00	0.02	0.02
380.50	0.03	0.001	0.002	0.00	0.03	0.31
381.00	0.04	0.002	0.003	0.00	0.04	0.86
381.50	0.05	0.003	0.004	0.00	0.05	1.72
382.00	0.06	0.006	0.006	0.00	0.06	2.97
382.50	0.06	0.010	0.009	0.00	0.06	4.75
382.65	0.07	0.011	0.010	0.00	0.07	5.42
383.00	2.68	0.015	0.012	0.00	2.68	9.86
383.50	9.95	0.022	0.016	0.00	9.95	20.48
384.00	19.85	0.031	0.020	0.00	19.85	34.69

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #13
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	380.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.02 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.02 ft³/s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
380.00	0.02	0.000	0.000	0.00	0.02	0.02
380.50	0.03	0.001	0.002	0.00	0.03	0.31
381.00	0.04	0.002	0.003	0.00	0.04	0.86
381.50	0.05	0.003	0.004	0.00	0.05	1.72
382.00	0.06	0.006	0.006	0.00	0.06	2.97
382.50	0.06	0.010	0.009	0.00	0.06	4.75
382.65	0.07	0.011	0.010	0.00	0.07	5.42
383.00	2.68	0.015	0.012	0.00	2.68	9.86
383.50	9.95	0.022	0.016	0.00	9.95	20.48
384.00	19.85	0.031	0.020	0.00	19.85	34.69

1047-01 - Proposed Conditions Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #13
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	380.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.02 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.02 ft³/s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
380.00	0.02	0.000	0.000	0.00	0.02	0.02
380.50	0.03	0.001	0.002	0.00	0.03	0.31
381.00	0.04	0.002	0.003	0.00	0.04	0.86
381.50	0.05	0.003	0.004	0.00	0.05	1.72
382.00	0.06	0.006	0.006	0.00	0.06	2.97
382.50	0.06	0.010	0.009	0.00	0.06	4.75
382.65	0.07	0.011	0.010	0.00	0.07	5.42
383.00	2.68	0.015	0.012	0.00	2.68	9.86
383.50	9.95	0.022	0.016	0.00	9.95	20.48
384.00	19.85	0.031	0.020	0.00	19.85	34.69

1047-01 - Proposed Conditions Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #5
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	409.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.14 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.14 ft³/s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
409.00	0.14	0.000	0.000	0.00	0.14	0.14
409.50	0.19	0.005	0.014	0.00	0.19	2.52
410.00	0.24	0.013	0.021	0.00	0.24	6.72
410.50	0.28	0.026	0.030	0.00	0.28	12.86
411.00	0.33	0.043	0.040	0.00	0.33	21.31
411.50	0.38	0.065	0.045	0.00	0.38	31.68
411.60	0.39	0.069	0.046	0.00	0.39	33.91
412.00	0.53	0.089	0.051	0.00	0.53	43.48
412.50	0.64	0.116	0.056	0.00	0.64	56.55
413.00	0.73	0.145	0.062	0.00	0.73	70.87
413.50	0.82	0.177	0.067	0.00	0.82	86.52
414.00	5.35	0.212	0.073	0.00	5.35	108.00
414.50	13.57	0.250	0.078	0.00	13.57	134.49
415.00	24.20	0.290	0.083	0.00	24.20	164.61
415.50	36.76	0.333	0.089	0.00	36.76	197.94
416.00	51.00	0.379	0.094	0.00	51.00	234.26

1047-01 - Proposed Conditions Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #5
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	409.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.14 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.14 ft³/s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
409.00	0.14	0.000	0.000	0.00	0.14	0.14
409.50	0.19	0.005	0.014	0.00	0.19	2.52
410.00	0.24	0.013	0.021	0.00	0.24	6.72
410.50	0.28	0.026	0.030	0.00	0.28	12.86
411.00	0.33	0.043	0.040	0.00	0.33	21.31
411.50	0.38	0.065	0.045	0.00	0.38	31.68
411.60	0.39	0.069	0.046	0.00	0.39	33.91
412.00	0.53	0.089	0.051	0.00	0.53	43.48
412.50	0.64	0.116	0.056	0.00	0.64	56.55
413.00	0.73	0.145	0.062	0.00	0.73	70.87
413.50	0.82	0.177	0.067	0.00	0.82	86.52
414.00	5.35	0.212	0.073	0.00	5.35	108.00
414.50	13.57	0.250	0.078	0.00	13.57	134.49
415.00	24.20	0.290	0.083	0.00	24.20	164.61
415.50	36.76	0.333	0.089	0.00	36.76	197.94
416.00	51.00	0.379	0.094	0.00	51.00	234.26

1047-01 - Proposed Conditions Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #5
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	409.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.14 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.14 ft³/s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
409.00	0.14	0.000	0.000	0.00	0.14	0.14
409.50	0.19	0.005	0.014	0.00	0.19	2.52
410.00	0.24	0.013	0.021	0.00	0.24	6.72
410.50	0.28	0.026	0.030	0.00	0.28	12.86
411.00	0.33	0.043	0.040	0.00	0.33	21.31
411.50	0.38	0.065	0.045	0.00	0.38	31.68
411.60	0.39	0.069	0.046	0.00	0.39	33.91
412.00	0.53	0.089	0.051	0.00	0.53	43.48
412.50	0.64	0.116	0.056	0.00	0.64	56.55
413.00	0.73	0.145	0.062	0.00	0.73	70.87
413.50	0.82	0.177	0.067	0.00	0.82	86.52
414.00	5.35	0.212	0.073	0.00	5.35	108.00
414.50	13.57	0.250	0.078	0.00	13.57	134.49
415.00	24.20	0.290	0.083	0.00	24.20	164.61
415.50	36.76	0.333	0.089	0.00	36.76	197.94
416.00	51.00	0.379	0.094	0.00	51.00	234.26

1047-01 - Proposed Conditions Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #6
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	470.00 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	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
470.00	0.00	0.000	0.000	0.00	0.00	0.00
470.50	0.00	0.004	0.011	0.00	0.00	1.81
471.00	0.00	0.010	0.016	0.00	0.00	5.04
471.50	0.00	0.020	0.023	0.00	0.00	9.76
472.00	0.00	0.034	0.031	0.00	0.00	16.28
472.25	0.00	0.042	0.034	0.00	0.00	20.23
472.50	0.07	0.051	0.038	0.00	0.07	24.65
473.00	0.15	0.071	0.045	0.00	0.15	34.75
473.50	0.20	0.096	0.053	0.00	0.20	46.70
474.00	0.24	0.125	0.062	0.00	0.24	60.67
474.15	0.25	0.134	0.063	0.00	0.25	65.21
474.50	2.88	0.157	0.065	0.00	2.88	78.67
475.00	10.18	0.190	0.068	0.00	10.18	102.02
475.50	20.09	0.224	0.071	0.00	20.09	128.73
476.00	32.06	0.261	0.074	0.00	32.06	158.23

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #6
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	470.00 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	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
470.00	0.00	0.000	0.000	0.00	0.00	0.00
470.50	0.00	0.004	0.011	0.00	0.00	1.81
471.00	0.00	0.010	0.016	0.00	0.00	5.04
471.50	0.00	0.020	0.023	0.00	0.00	9.76
472.00	0.00	0.034	0.031	0.00	0.00	16.28
472.25	0.00	0.042	0.034	0.00	0.00	20.23
472.50	0.07	0.051	0.038	0.00	0.07	24.65
473.00	0.15	0.071	0.045	0.00	0.15	34.75
473.50	0.20	0.096	0.053	0.00	0.20	46.70
474.00	0.24	0.125	0.062	0.00	0.24	60.67
474.15	0.25	0.134	0.063	0.00	0.25	65.21
474.50	2.88	0.157	0.065	0.00	2.88	78.67
475.00	10.18	0.190	0.068	0.00	10.18	102.02
475.50	20.09	0.224	0.071	0.00	20.09	128.73
476.00	32.06	0.261	0.074	0.00	32.06	158.23

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #6
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	470.00 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	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
470.00	0.00	0.000	0.000	0.00	0.00	0.00
470.50	0.00	0.004	0.011	0.00	0.00	1.81
471.00	0.00	0.010	0.016	0.00	0.00	5.04
471.50	0.00	0.020	0.023	0.00	0.00	9.76
472.00	0.00	0.034	0.031	0.00	0.00	16.28
472.25	0.00	0.042	0.034	0.00	0.00	20.23
472.50	0.07	0.051	0.038	0.00	0.07	24.65
473.00	0.15	0.071	0.045	0.00	0.15	34.75
473.50	0.20	0.096	0.053	0.00	0.20	46.70
474.00	0.24	0.125	0.062	0.00	0.24	60.67
474.15	0.25	0.134	0.063	0.00	0.25	65.21
474.50	2.88	0.157	0.065	0.00	2.88	78.67
475.00	10.18	0.190	0.068	0.00	10.18	102.02
475.50	20.09	0.224	0.071	0.00	20.09	128.73
476.00	32.06	0.261	0.074	0.00	32.06	158.23

1047-01 - Proposed Conditions Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #7
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	483.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.29 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.29 ft³/s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
483.00	0.29	0.000	0.000	0.00	0.29	0.29
483.50	0.38	0.004	0.012	0.00	0.38	2.47
484.00	0.48	0.012	0.019	0.00	0.48	6.34
484.50	0.57	0.024	0.027	0.00	0.57	12.02
485.00	0.67	0.040	0.037	0.00	0.67	19.87
485.25	0.72	0.049	0.039	0.00	0.72	24.53
485.50	0.84	0.059	0.042	0.00	0.84	29.57
486.00	1.01	0.082	0.047	0.00	1.01	40.49
486.50	1.16	0.107	0.053	0.00	1.16	52.72
487.00	1.29	0.135	0.059	0.00	1.29	66.43
487.50	1.42	0.166	0.066	0.00	1.42	81.71
488.00	1.55	0.201	0.073	0.00	1.55	98.64

1047-01 - Proposed Conditions Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #7
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	483.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.29 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.29 ft³/s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
483.00	0.29	0.000	0.000	0.00	0.29	0.29
483.50	0.38	0.004	0.012	0.00	0.38	2.47
484.00	0.48	0.012	0.019	0.00	0.48	6.34
484.50	0.57	0.024	0.027	0.00	0.57	12.02
485.00	0.67	0.040	0.037	0.00	0.67	19.87
485.25	0.72	0.049	0.039	0.00	0.72	24.53
485.50	0.84	0.059	0.042	0.00	0.84	29.57
486.00	1.01	0.082	0.047	0.00	1.01	40.49
486.50	1.16	0.107	0.053	0.00	1.16	52.72
487.00	1.29	0.135	0.059	0.00	1.29	66.43
487.50	1.42	0.166	0.066	0.00	1.42	81.71
488.00	1.55	0.201	0.073	0.00	1.55	98.64

1047-01 - Proposed Conditions Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #7
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	483.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.29 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.29 ft³/s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
483.00	0.29	0.000	0.000	0.00	0.29	0.29
483.50	0.38	0.004	0.012	0.00	0.38	2.47
484.00	0.48	0.012	0.019	0.00	0.48	6.34
484.50	0.57	0.024	0.027	0.00	0.57	12.02
485.00	0.67	0.040	0.037	0.00	0.67	19.87
485.25	0.72	0.049	0.039	0.00	0.72	24.53
485.50	0.84	0.059	0.042	0.00	0.84	29.57
486.00	1.01	0.082	0.047	0.00	1.01	40.49
486.50	1.16	0.107	0.053	0.00	1.16	52.72
487.00	1.29	0.135	0.059	0.00	1.29	66.43
487.50	1.42	0.166	0.066	0.00	1.42	81.71
488.00	1.55	0.201	0.073	0.00	1.55	98.64

1047-01 - Proposed Conditions Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: UG Basin #8
Scenario: Post-Development 2

Return Event: 2 years
Storm Event: NOAA 2 YR - D DIST.

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	458.60 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	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
458.60	0.00	0.000	0.049	0.00	0.00	0.00
459.10	0.00	0.031	0.078	0.00	0.00	15.25
459.60	0.00	0.079	0.114	0.00	0.00	38.36
460.10	0.00	0.136	0.114	0.00	0.00	65.94
460.60	0.00	0.193	0.114	0.00	0.00	93.53
461.10	0.00	0.250	0.114	0.00	0.00	121.12
461.60	0.00	0.307	0.114	0.00	0.00	148.71
462.10	0.00	0.364	0.114	0.00	0.00	176.30
462.60	0.00	0.421	0.114	0.00	0.00	203.88
463.10	0.12	0.478	0.114	0.00	0.12	231.59
463.40	0.16	0.512	0.114	0.00	0.16	248.18
463.60	0.32	0.535	0.114	0.00	0.32	259.38
464.10	1.14	0.592	0.114	0.00	1.14	287.79
464.60	2.33	0.649	0.114	0.00	2.33	316.56
465.10	3.78	0.706	0.114	0.00	3.78	345.60
465.60	5.46	0.763	0.114	0.00	5.46	374.87
466.10	7.33	0.820	0.114	0.00	7.33	404.33
466.60	9.38	0.877	0.114	0.00	9.38	433.97
467.10	11.60	0.925	0.078	0.00	11.60	459.30
467.60	13.97	0.956	0.049	0.00	13.97	476.91

1047-01 - Proposed Conditions Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: UG Basin #8
Scenario: Post-Development 10

Return Event: 10 years
Storm Event: NOAA 10 YR - D DIST.

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	458.60 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	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
458.60	0.00	0.000	0.049	0.00	0.00	0.00
459.10	0.00	0.031	0.078	0.00	0.00	15.25
459.60	0.00	0.079	0.114	0.00	0.00	38.36
460.10	0.00	0.136	0.114	0.00	0.00	65.94
460.60	0.00	0.193	0.114	0.00	0.00	93.53
461.10	0.00	0.250	0.114	0.00	0.00	121.12
461.60	0.00	0.307	0.114	0.00	0.00	148.71
462.10	0.00	0.364	0.114	0.00	0.00	176.30
462.60	0.00	0.421	0.114	0.00	0.00	203.88
463.10	0.12	0.478	0.114	0.00	0.12	231.59
463.40	0.16	0.512	0.114	0.00	0.16	248.18
463.60	0.32	0.535	0.114	0.00	0.32	259.38
464.10	1.14	0.592	0.114	0.00	1.14	287.79
464.60	2.33	0.649	0.114	0.00	2.33	316.56
465.10	3.78	0.706	0.114	0.00	3.78	345.60
465.60	5.46	0.763	0.114	0.00	5.46	374.87
466.10	7.33	0.820	0.114	0.00	7.33	404.33
466.60	9.38	0.877	0.114	0.00	9.38	433.97
467.10	11.60	0.925	0.078	0.00	11.60	459.30
467.60	13.97	0.956	0.049	0.00	13.97	476.91

Subsection: Elevation-Volume-Flow Table (Pond)
Label: UG Basin #8
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	458.60 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	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
458.60	0.00	0.000	0.049	0.00	0.00	0.00
459.10	0.00	0.031	0.078	0.00	0.00	15.25
459.60	0.00	0.079	0.114	0.00	0.00	38.36
460.10	0.00	0.136	0.114	0.00	0.00	65.94
460.60	0.00	0.193	0.114	0.00	0.00	93.53
461.10	0.00	0.250	0.114	0.00	0.00	121.12
461.60	0.00	0.307	0.114	0.00	0.00	148.71
462.10	0.00	0.364	0.114	0.00	0.00	176.30
462.60	0.00	0.421	0.114	0.00	0.00	203.88
463.10	0.12	0.478	0.114	0.00	0.12	231.59
463.40	0.16	0.512	0.114	0.00	0.16	248.18
463.60	0.32	0.535	0.114	0.00	0.32	259.38
464.10	1.14	0.592	0.114	0.00	1.14	287.79
464.60	2.33	0.649	0.114	0.00	2.33	316.56
465.10	3.78	0.706	0.114	0.00	3.78	345.60
465.60	5.46	0.763	0.114	0.00	5.46	374.87
466.10	7.33	0.820	0.114	0.00	7.33	404.33
466.60	9.38	0.877	0.114	0.00	9.38	433.97
467.10	11.60	0.925	0.078	0.00	11.60	459.30
467.60	13.97	0.956	0.049	0.00	13.97	476.91

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WATER QUALITY CALCULATIONS – APPENDIX C-1
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1047-01 - Water Quality Design Flood Routings

Subsection: Master Network Summary

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)
PR DA #1	Post-Water Quality Storm	1	0.000	0.050	0.00
PR DA #1 IMP	Post-Water Quality Storm	1	0.001	0.950	0.03
PR DA #10	Post-Water Quality Storm	1	0.000	1.700	0.00
PR DA #10 IMP	Post-Water Quality Storm	1	0.112	1.050	3.98
PR DA #11	Post-Water Quality Storm	1	0.000	0.050	0.00
PR DA #11 IMP	Post-Water Quality Storm	1	0.032	1.050	1.13
PR DA #11A IMP	Post-Water Quality Storm	1	0.074	1.050	2.63
PR DA #12	Post-Water Quality Storm	1	0.000	0.050	0.00
PR DA #12A	Post-Water Quality Storm	1	0.000	0.050	0.00
PR DA #12A IMP	Post-Water Quality Storm	1	0.115	1.050	4.02
PR DA #13	Post-Water Quality Storm	1	0.000	0.050	0.00
PR DA #13 IMP	Post-Water Quality Storm	1	0.017	1.050	0.58
PR DA #2	Post-Water Quality Storm	1	0.000	0.050	0.00
PR DA #2Z	Post-Water Quality Storm	1	0.000	0.050	0.00
PR DA #3	Post-Water Quality Storm	1	0.000	0.050	0.00
PR DA #3 IMP	Post-Water Quality Storm	1	0.035	1.100	1.21
PR DA #3Z	Post-Water Quality Storm	1	0.000	0.050	0.00
PR DA #4	Post-Water Quality Storm	1	0.000	0.050	0.00
PR DA #4 IMP	Post-Water Quality Storm	1	0.002	1.000	0.06
PR DA #5	Post-Water Quality Storm	1	0.000	0.050	0.00
PR DA #5 IMP	Post-Water Quality Storm	1	0.103	1.050	3.71
PR DA #6	Post-Water Quality Storm	1	0.000	0.050	0.00
PR DA #6 IMP	Post-Water Quality Storm	1	0.024	1.050	0.86

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)
PR DA #7	Post-Water Quality Storm	1	0.000	0.050	0.00
PR DA #7 IMP	Post-Water Quality Storm	1	0.018	1.050	0.64
PR DA #8 IMP	Post-Water Quality Storm	1	0.078	1.050	2.73
PR DA #9 IMP	Post-Water Quality Storm	1	0.083	1.050	2.88
PR DR #11A	Post-Water Quality Storm	1	0.000	0.050	0.00

Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)
POA "A"	Post-Water Quality Storm	1	0.001	0.950	0.03
POA "B"	Post-Water Quality Storm	1	0.116	3.700	0.23
POA "C"	Post-Water Quality Storm	1	0.266	1.100	1.81
POA "D"	Post-Water Quality Storm	1	0.002	1.000	0.06

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft³/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Basin #10 (IN)	Post-Water Quality Storm	1	0.112	1.050	3.98	(N/A)	(N/A)
Basin #10 (OUT)	Post-Water Quality Storm	1	0.002	1.950	0.01	406.04	0.112
Basin #11 (IN)	Post-Water Quality Storm	1	0.213	1.050	1.92	(N/A)	(N/A)
Basin #11 (OUT)	Post-Water Quality Storm	1	0.213	2.400	0.60	400.60	0.063
Basin #11A (IN)	Post-Water Quality Storm	1	0.074	1.050	2.63	(N/A)	(N/A)
Basin #11A (OUT)	Post-Water Quality Storm	1	0.074	1.200	0.49	403.27	0.038
Basin #12 (IN)	Post-Water Quality Storm	1	0.115	1.350	0.44	(N/A)	(N/A)

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Basin #12 (OUT)	Post-Water Quality Storm	1	0.116	3.700	0.23	402.15	0.046
Basin #12A (IN)	Post-Water Quality Storm	1	0.115	1.050	4.02	(N/A)	(N/A)
Basin #12A (OUT)	Post-Water Quality Storm	1	0.115	1.350	0.44	404.97	0.077
Basin #13 (IN)	Post-Water Quality Storm	1	0.017	1.050	0.58	(N/A)	(N/A)
Basin #13 (OUT)	Post-Water Quality Storm	1	0.017	1.200	0.06	382.63	0.011
Basin #5 (IN)	Post-Water Quality Storm	1	0.103	1.050	3.71	(N/A)	(N/A)
Basin #5 (OUT)	Post-Water Quality Storm	1	0.103	1.350	0.38	411.58	0.068
Basin #6 (IN)	Post-Water Quality Storm	1	0.043	1.050	1.22	(N/A)	(N/A)
Basin #6 (OUT)	Post-Water Quality Storm	1	0.001	2.000	0.01	472.28	0.043
Basin #7 (IN)	Post-Water Quality Storm	1	0.018	1.050	0.64	(N/A)	(N/A)
Basin #7 (OUT)	Post-Water Quality Storm	1	0.018	1.100	0.37	483.46	0.004
UG Basin #8 (IN)	Post-Water Quality Storm	1	0.161	1.050	5.62	(N/A)	(N/A)
UG Basin #8 (OUT)	Post-Water Quality Storm	1	0.000	0.350	0.00	460.32	0.161

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #1
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.240 hours
Area (User Defined)	2.030 acres

Computational Time Increment	0.032 hours
Time to Peak (Computed)	0.000 hours
Flow (Peak, Computed)	0.00 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	0.050 hours
Flow (Peak Interpolated Output)	0.00 ft³/s

Drainage Area	
SCS CN (Composite)	57.000
Area (User Defined)	2.030 acres
Maximum Retention (Pervious)	7.5 in
Maximum Retention (Pervious, 20 percent)	1.5 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.0 in
Runoff Volume (Pervious)	0.000 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.000 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.240 hours
Computational Time Increment	0.032 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #1
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	9.58 ft³/s
Unit peak time, Tp	0.160 hours
Unit receding limb, Tr	0.640 hours
Total unit time, Tb	0.800 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #1 IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	0.010 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	1.083 hours
Flow (Peak, Computed)	0.03 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	0.950 hours
Flow (Peak Interpolated Output)	0.03 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.010 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.0 in
Runoff Volume (Pervious)	0.001 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.001 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #1 IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	1.13 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #10
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.060 hours
Area (User Defined)	1.030 acres

Computational Time Increment	0.008 hours
Time to Peak (Computed)	1.768 hours
Flow (Peak, Computed)	0.00 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	1.700 hours
Flow (Peak Interpolated Output)	0.00 ft³/s

Drainage Area	
SCS CN (Composite)	63.000
Area (User Defined)	1.030 acres
Maximum Retention (Pervious)	5.9 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.0 in
Runoff Volume (Pervious)	0.000 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.000 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.060 hours
Computational Time Increment	0.008 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #10
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	19.45 ft³/s
Unit peak time, Tp	0.040 hours
Unit receding limb, Tr	0.160 hours
Total unit time, Tb	0.200 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #10 IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	1.300 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	1.083 hours
Flow (Peak, Computed)	4.02 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	1.050 hours
Flow (Peak Interpolated Output)	3.98 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1.300 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.0 in
Runoff Volume (Pervious)	0.112 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.112 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #10 IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	73.65 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #11
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.130 hours
Area (User Defined)	0.350 acres

Computational Time Increment	0.017 hours
Time to Peak (Computed)	0.000 hours
Flow (Peak, Computed)	0.00 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	0.050 hours
Flow (Peak Interpolated Output)	0.00 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.350 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.0 in
Runoff Volume (Pervious)	0.000 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.000 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.130 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #11
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	3.05 ft^3/s
Unit peak time, Tp	0.087 hours
Unit receding limb, Tr	0.347 hours
Total unit time, Tb	0.433 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #11 IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.370 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	1.083 hours
Flow (Peak, Computed)	1.14 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	1.050 hours
Flow (Peak Interpolated Output)	1.13 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.370 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.0 in
Runoff Volume (Pervious)	0.032 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.032 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #11 IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	20.96 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #11A IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.860 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	1.083 hours
Flow (Peak, Computed)	2.66 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	1.050 hours
Flow (Peak Interpolated Output)	2.63 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.860 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.0 in
Runoff Volume (Pervious)	0.074 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.074 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #11A IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	48.72 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #12
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.140 hours
Area (User Defined)	0.350 acres

Computational Time Increment	0.019 hours
Time to Peak (Computed)	0.000 hours
Flow (Peak, Computed)	0.00 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	0.050 hours
Flow (Peak Interpolated Output)	0.00 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.350 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.0 in
Runoff Volume (Pervious)	0.000 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.000 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.140 hours
Computational Time Increment	0.019 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #12
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	2.83 ft³/s
Unit peak time, Tp	0.093 hours
Unit receding limb, Tr	0.373 hours
Total unit time, Tb	0.467 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #12A
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.110 hours
Area (User Defined)	1.120 acres

Computational Time Increment	0.015 hours
Time to Peak (Computed)	0.000 hours
Flow (Peak, Computed)	0.00 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	0.050 hours
Flow (Peak Interpolated Output)	0.00 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	1.120 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.0 in
Runoff Volume (Pervious)	0.000 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.000 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.110 hours
Computational Time Increment	0.015 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #12A
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	11.54 ft³/s
Unit peak time, Tp	0.073 hours
Unit receding limb, Tr	0.293 hours
Total unit time, Tb	0.367 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #12A IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.030 hours
Area (User Defined)	1.320 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	1.080 hours
Flow (Peak, Computed)	4.07 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	1.050 hours
Flow (Peak Interpolated Output)	4.02 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1.320 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.0 in
Runoff Volume (Pervious)	0.114 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.115 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.030 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #12A IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	49.85 ft³/s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.080 hours
Total unit time, Tb	0.100 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #13
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.130 hours
Area (User Defined)	0.260 acres

Computational Time Increment	0.017 hours
Time to Peak (Computed)	0.000 hours
Flow (Peak, Computed)	0.00 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	0.050 hours
Flow (Peak Interpolated Output)	0.00 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.260 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.0 in
Runoff Volume (Pervious)	0.000 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.000 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.130 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #13
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	2.27 ft³/s
Unit peak time, Tp	0.087 hours
Unit receding limb, Tr	0.347 hours
Total unit time, Tb	0.433 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #13 IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.030 hours
Area (User Defined)	0.190 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	1.080 hours
Flow (Peak, Computed)	0.59 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	1.050 hours
Flow (Peak Interpolated Output)	0.58 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.190 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.0 in
Runoff Volume (Pervious)	0.016 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.017 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.030 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #13 IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	7.18 ft³/s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.080 hours
Total unit time, Tb	0.100 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #2
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.160 hours
Area (User Defined)	1.310 acres

Computational Time Increment	0.021 hours
Time to Peak (Computed)	0.000 hours
Flow (Peak, Computed)	0.00 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	0.050 hours
Flow (Peak Interpolated Output)	0.00 ft³/s

Drainage Area	
SCS CN (Composite)	59.000
Area (User Defined)	1.310 acres
Maximum Retention (Pervious)	6.9 in
Maximum Retention (Pervious, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.0 in
Runoff Volume (Pervious)	0.000 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.000 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.160 hours
Computational Time Increment	0.021 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #2
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	9.28 ft³/s
Unit peak time, Tp	0.107 hours
Unit receding limb, Tr	0.427 hours
Total unit time, Tb	0.533 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #2Z
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.220 hours
Area (User Defined)	0.290 acres

Computational Time Increment	0.029 hours
Time to Peak (Computed)	0.000 hours
Flow (Peak, Computed)	0.00 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	0.050 hours
Flow (Peak Interpolated Output)	0.00 ft³/s

Drainage Area	
SCS CN (Composite)	56.000
Area (User Defined)	0.290 acres
Maximum Retention (Pervious)	7.9 in
Maximum Retention (Pervious, 20 percent)	1.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.0 in
Runoff Volume (Pervious)	0.000 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.000 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.220 hours
Computational Time Increment	0.029 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #2Z
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	1.49 ft³/s
Unit peak time, Tp	0.147 hours
Unit receding limb, Tr	0.587 hours
Total unit time, Tb	0.733 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #3
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.170 hours
Area (User Defined)	1.140 acres

Computational Time Increment	0.023 hours
Time to Peak (Computed)	2.040 hours
Flow (Peak, Computed)	0.00 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	0.050 hours
Flow (Peak Interpolated Output)	0.00 ft³/s

Drainage Area	
SCS CN (Composite)	62.000
Area (User Defined)	1.140 acres
Maximum Retention (Pervious)	6.1 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.0 in
Runoff Volume (Pervious)	0.000 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.000 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.170 hours
Computational Time Increment	0.023 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #3
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	7.60 ft³/s
Unit peak time, Tp	0.113 hours
Unit receding limb, Tr	0.453 hours
Total unit time, Tb	0.567 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #3 IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.070 hours
Area (User Defined)	0.410 acres

Computational Time Increment	0.009 hours
Time to Peak (Computed)	1.083 hours
Flow (Peak, Computed)	1.24 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	1.100 hours
Flow (Peak Interpolated Output)	1.21 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.410 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.0 in
Runoff Volume (Pervious)	0.035 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.035 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.070 hours
Computational Time Increment	0.009 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #3 IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	6.64 ft³/s
Unit peak time, Tp	0.047 hours
Unit receding limb, Tr	0.187 hours
Total unit time, Tb	0.233 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #3Z
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.250 hours
Area (User Defined)	3.170 acres

Computational Time Increment	0.033 hours
Time to Peak (Computed)	0.000 hours
Flow (Peak, Computed)	0.00 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	0.050 hours
Flow (Peak Interpolated Output)	0.00 ft³/s

Drainage Area	
SCS CN (Composite)	55.000
Area (User Defined)	3.170 acres
Maximum Retention (Pervious)	8.2 in
Maximum Retention (Pervious, 20 percent)	1.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.0 in
Runoff Volume (Pervious)	0.000 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.000 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.250 hours
Computational Time Increment	0.033 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #3Z
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	14.37 ft³/s
Unit peak time, Tp	0.167 hours
Unit receding limb, Tr	0.667 hours
Total unit time, Tb	0.833 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #4
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.310 hours
Area (User Defined)	4.260 acres

Computational Time Increment	0.041 hours
Time to Peak (Computed)	0.000 hours
Flow (Peak, Computed)	0.00 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	0.050 hours
Flow (Peak Interpolated Output)	0.00 ft³/s

Drainage Area	
SCS CN (Composite)	56.000
Area (User Defined)	4.260 acres
Maximum Retention (Pervious)	7.9 in
Maximum Retention (Pervious, 20 percent)	1.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.0 in
Runoff Volume (Pervious)	0.000 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.000 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.310 hours
Computational Time Increment	0.041 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #4
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	15.57 ft³/s
Unit peak time, Tp	0.207 hours
Unit receding limb, Tr	0.827 hours
Total unit time, Tb	1.033 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #4 IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.020 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	1.083 hours
Flow (Peak, Computed)	0.06 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	1.000 hours
Flow (Peak Interpolated Output)	0.06 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.020 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.0 in
Runoff Volume (Pervious)	0.002 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.002 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #4 IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	1.13 ft^3/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #5
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.180 hours
Area (User Defined)	1.260 acres

Computational Time Increment	0.024 hours
Time to Peak (Computed)	0.000 hours
Flow (Peak, Computed)	0.00 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	0.050 hours
Flow (Peak Interpolated Output)	0.00 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	1.260 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.0 in
Runoff Volume (Pervious)	0.000 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.000 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.180 hours
Computational Time Increment	0.024 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #5
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	7.93 ft³/s
Unit peak time, Tp	0.120 hours
Unit receding limb, Tr	0.480 hours
Total unit time, Tb	0.600 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #5 IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	1.210 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	1.083 hours
Flow (Peak, Computed)	3.75 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	1.050 hours
Flow (Peak Interpolated Output)	3.71 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1.210 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.0 in
Runoff Volume (Pervious)	0.104 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.103 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #5 IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	137.10 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #6
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.180 hours
Area (User Defined)	0.660 acres

Computational Time Increment	0.024 hours
Time to Peak (Computed)	0.000 hours
Flow (Peak, Computed)	0.00 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	0.050 hours
Flow (Peak Interpolated Output)	0.00 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.660 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.0 in
Runoff Volume (Pervious)	0.000 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.000 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.180 hours
Computational Time Increment	0.024 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #6
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	4.15 ft³/s
Unit peak time, Tp	0.120 hours
Unit receding limb, Tr	0.480 hours
Total unit time, Tb	0.600 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #6 IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.280 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	1.083 hours
Flow (Peak, Computed)	0.87 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	1.050 hours
Flow (Peak Interpolated Output)	0.86 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.280 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.0 in
Runoff Volume (Pervious)	0.024 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.024 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #6 IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	15.86 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #7
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.160 hours
Area (User Defined)	0.230 acres

Computational Time Increment	0.021 hours
Time to Peak (Computed)	0.000 hours
Flow (Peak, Computed)	0.00 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	0.050 hours
Flow (Peak Interpolated Output)	0.00 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.230 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.0 in
Runoff Volume (Pervious)	0.000 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.000 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.160 hours
Computational Time Increment	0.021 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #7
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	1.63 ft³/s
Unit peak time, Tp	0.107 hours
Unit receding limb, Tr	0.427 hours
Total unit time, Tb	0.533 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #7 IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.210 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	1.083 hours
Flow (Peak, Computed)	0.65 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	1.050 hours
Flow (Peak Interpolated Output)	0.64 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.210 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.0 in
Runoff Volume (Pervious)	0.018 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.018 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #7 IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	11.90 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #8 IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.040 hours
Area (User Defined)	0.900 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	1.083 hours
Flow (Peak, Computed)	2.77 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	1.050 hours
Flow (Peak Interpolated Output)	2.73 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.900 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.0 in
Runoff Volume (Pervious)	0.078 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.078 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.040 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #8 IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	25.49 ft³/s
Unit peak time, Tp	0.027 hours
Unit receding limb, Tr	0.107 hours
Total unit time, Tb	0.133 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #9 IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.040 hours
Area (User Defined)	0.950 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	1.083 hours
Flow (Peak, Computed)	2.92 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	1.050 hours
Flow (Peak Interpolated Output)	2.88 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.950 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.0 in
Runoff Volume (Pervious)	0.082 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.083 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.040 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

Subsection: Unit Hydrograph Summary
Label: PR DA #9 IMP
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	26.91 ft³/s
Unit peak time, Tp	0.027 hours
Unit receding limb, Tr	0.107 hours
Total unit time, Tb	0.133 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DR #11A
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Storm Event	Water Quality Storm
Return Event	1 years
Duration	100.000 hours
Depth	1.3 in
Time of Concentration (Composite)	0.130 hours
Area (User Defined)	0.860 acres

Computational Time Increment	0.017 hours
Time to Peak (Computed)	0.000 hours
Flow (Peak, Computed)	0.00 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	0.050 hours
Flow (Peak Interpolated Output)	0.00 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.860 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	0.0 in
Runoff Volume (Pervious)	0.000 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.000 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.130 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749

1047-01 - Water Quality Design Flood Routings

Subsection: Unit Hydrograph Summary
Label: PR DR #11A
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

SCS Unit Hydrograph Parameters	
Receding/Rising, Tr/Tp	1.670
Unit peak, qp	7.50 ft³/s
Unit peak time, Tp	0.087 hours
Unit receding limb, Tr	0.347 hours
Total unit time, Tb	0.433 hours

1047-01 - Water Quality Design Flood Routings

Subsection: Outlet Input Data
Label: OS #10
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Requested Pond Water Surface Elevations	
Minimum (Headwater)	403.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	410.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Inlet Box	Riser - 1	Forward	TW	408.25	410.00
Orifice-Circular	Orifice - 1	Forward	TW	406.00	410.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

1047-01 - Water Quality Design Flood Routings

Subsection: Outlet Input Data
Label: OS #10
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	406.00 ft
Orifice Diameter	2.5 in
Orifice Coefficient	0.680

Structure ID: Riser - 1 Structure Type: Inlet Box	
Number of Openings	1
Elevation	408.25 ft
Orifice Area	16.0 ft²
Orifice Coefficient	0.680
Weir Length	16.00 ft
Weir Coefficient	3.15 (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	True

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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Water Quality Design Flood Routings

Subsection: Composite Rating Curve
Label: OS #10
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
403.00	0.00	(N/A)	0.00	None Contributing
403.50	0.00	(N/A)	0.00	None Contributing
404.00	0.00	(N/A)	0.00	None Contributing
404.50	0.00	(N/A)	0.00	None Contributing
405.00	0.00	(N/A)	0.00	None Contributing
405.50	0.00	(N/A)	0.00	None Contributing
406.00	0.00	(N/A)	0.00	None Contributing
406.50	0.12	(N/A)	0.00	Orifice - 1
407.00	0.18	(N/A)	0.00	Orifice - 1
407.50	0.22	(N/A)	0.00	Orifice - 1
408.00	0.26	(N/A)	0.00	Orifice - 1
408.25	0.27	(N/A)	0.00	Riser - 1 + Orifice - 1
408.50	6.59	(N/A)	0.00	Riser - 1 + Orifice - 1
409.00	33.05	(N/A)	0.00	Riser - 1 + Orifice - 1
409.50	70.78	(N/A)	0.00	Riser - 1 + Orifice - 1
410.00	115.82	(N/A)	0.00	Riser - 1 + Orifice - 1

1047-01 - Water Quality Design Flood Routings

Subsection: Outlet Input Data
Label: OS #11
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Requested Pond Water Surface Elevations	
Minimum (Headwater)	399.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	412.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	412.00
Orifice-Circular	Orifice - 1	Forward	TW	401.25	412.00
Rectangular Weir	Weir - 2	Forward	TW	404.10	412.00
Rectangular Weir	Weir - 1	Forward	TW	410.50	412.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #11
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Structure ID: Orifice - 1
Structure Type: Orifice-Circular

Number of Openings	1
Elevation	401.25 ft
Orifice Diameter	2.5 in
Orifice Coefficient	0.680

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft^3/s)
0.00	0.47
0.50	0.51
1.00	0.55
1.50	0.59
2.00	0.63
2.50	0.67
3.00	0.71
3.50	0.75
4.00	0.79
4.50	0.83
5.00	0.87
5.50	0.91
6.00	0.95
6.50	0.99
7.00	1.03
7.50	1.07
8.00	1.11
8.50	1.15
9.00	1.19
9.50	1.23
10.00	1.27
10.50	1.31
11.00	1.35
11.50	1.39
12.00	1.43
12.50	1.47
13.00	1.51

Structure ID: Weir - 1
Structure Type: Rectangular Weir

Number of Openings	1
Elevation	410.50 ft
Weir Length	4.00 ft

1047-01 - Water Quality Design Flood Routings

Subsection: Outlet Input Data
Label: OS #11
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Weir Coefficient	3.15 (ft^0.5)/s

Structure ID: Weir - 2 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	404.10 ft
Weir Length	0.50 ft
Weir Coefficient	3.15 (ft^0.5)/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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Water Quality Design Flood Routings

Subsection: Composite Rating Curve
Label: OS #11
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
399.00	0.47	(N/A)	0.00	User Defined Rating Table - 1
399.50	0.51	(N/A)	0.00	User Defined Rating Table - 1
400.00	0.55	(N/A)	0.00	User Defined Rating Table - 1
400.50	0.59	(N/A)	0.00	User Defined Rating Table - 1
401.00	0.63	(N/A)	0.00	User Defined Rating Table - 1
401.25	0.65	(N/A)	0.00	User Defined Rating Table - 1
401.50	0.74	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
402.00	0.86	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
402.50	0.95	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
403.00	1.03	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
403.50	1.10	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
404.00	1.17	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
404.10	1.19	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
404.50	1.64	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
405.00	2.65	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
405.50	3.98	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
406.00	5.55	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
406.50	7.35	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
407.00	9.33	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2

1047-01 - Water Quality Design Flood Routings

Subsection: Composite Rating Curve
Label: OS #11
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
407.50	11.48	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
408.00	13.80	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
408.50	16.26	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
409.00	18.86	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
409.50	21.60	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
410.00	24.46	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2
410.50	27.45	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2 + Weir - 1
411.00	35.00	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2 + Weir - 1
411.50	46.36	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2 + Weir - 1
412.00	60.23	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 2 + Weir - 1

1047-01 - Water Quality Design Flood Routings

Subsection: Outlet Input Data
Label: OS #11A
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Requested Pond Water Surface Elevations	
Minimum (Headwater)	402.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	406.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	406.00
Rectangular Weir	Weir - 1	Forward	TW	404.25	406.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

1047-01 - Water Quality Design Flood Routings

Subsection: Outlet Input Data
Label: OS #11A
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft³/s)
0.00	0.27
0.50	0.35
1.00	0.44
1.50	0.53
2.00	0.62
2.50	0.71
3.00	0.80
3.50	0.89
4.00	0.97

Structure ID: Weir - 1
Structure Type: Rectangular Weir

Number of Openings	1
Elevation	404.25 ft
Weir Length	20.00 ft
Weir Coefficient	3.15 (ft^0.5)/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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Water Quality Design Flood Routings

Subsection: Composite Rating Curve
Label: OS #11A
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
402.00	0.27	(N/A)	0.00	User Defined Rating Table - 1
402.50	0.35	(N/A)	0.00	User Defined Rating Table - 1
403.00	0.44	(N/A)	0.00	User Defined Rating Table - 1
403.50	0.53	(N/A)	0.00	User Defined Rating Table - 1
404.00	0.62	(N/A)	0.00	User Defined Rating Table - 1
404.25	0.66	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1
404.50	8.58	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1
405.00	41.72	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1
405.50	88.93	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1
406.00	146.82	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1

1047-01 - Water Quality Design Flood Routings

Subsection: Outlet Input Data
Label: OS #12
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Requested Pond Water Surface Elevations	
Minimum (Headwater)	400.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	408.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	408.00
Orifice-Circular	Orifice - 1	Forward	TW	402.25	408.00
Rectangular Weir	Weir - 1	Forward	TW	404.15	408.00
Rectangular Weir	Weir - 2	Forward	TW	406.75	408.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #12
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	402.25 ft
Orifice Diameter	4.0 in
Orifice Coefficient	0.680

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft^3/s)
0.00	0.09
0.50	0.13
1.00	0.16
1.50	0.19
2.00	0.22
2.50	0.25
3.00	0.28
3.50	0.31
4.00	0.35
4.50	0.38
5.00	0.41
5.50	0.44
6.00	0.47
6.50	0.50
7.00	0.53
7.50	0.57
8.00	0.60

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	404.15 ft
Weir Length	0.50 ft
Weir Coefficient	3.15 (ft^0.5)/s

Structure ID: Weir - 2 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	406.75 ft
Weir Length	4.00 ft
Weir Coefficient	3.15 (ft^0.5)/s

Subsection: Outlet Input Data
Label: OS #12
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Water Quality Design Flood Routings

Subsection: Composite Rating Curve
Label: OS #12
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
400.00	0.09	(N/A)	0.00	User Defined Rating Table - 1
400.50	0.13	(N/A)	0.00	User Defined Rating Table - 1
401.00	0.16	(N/A)	0.00	User Defined Rating Table - 1
401.50	0.19	(N/A)	0.00	User Defined Rating Table - 1
402.00	0.22	(N/A)	0.00	User Defined Rating Table - 1
402.25	0.24	(N/A)	0.00	User Defined Rating Table - 1
402.50	0.35	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
403.00	0.65	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
403.50	0.81	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
404.00	0.94	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
404.15	0.98	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
404.50	1.39	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
405.00	2.41	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
405.50	3.75	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
406.00	5.34	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
406.50	7.14	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
406.75	8.11	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1 + Weir - 2
407.00	10.70	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1 + Weir - 2

1047-01 - Water Quality Design Flood Routings

Subsection: Composite Rating Curve
Label: OS #12
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
407.50	19.48	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1 + Weir - 2
408.00	31.23	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1 + Weir - 2

1047-01 - Water Quality Design Flood Routings

Subsection: Outlet Input Data
Label: OS #12A
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Requested Pond Water Surface Elevations	
Minimum (Headwater)	402.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	407.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	407.00
Rectangular Weir	Weir - 1	Forward	TW	405.00	407.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

1047-01 - Water Quality Design Flood Routings

Subsection: Outlet Input Data
Label: OS #12A
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft³/s)
0.00	0.15
0.50	0.20
1.00	0.25
1.50	0.29
2.00	0.34
2.50	0.39
3.00	0.44
3.50	0.49
4.00	0.54
4.50	0.59
5.00	0.64

Structure ID: Weir - 1
Structure Type: Rectangular Weir

Number of Openings	1
Elevation	405.00 ft
Weir Length	25.00 ft
Weir Coefficient	3.15 (ft^0.5)/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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Water Quality Design Flood Routings

Subsection: Composite Rating Curve
Label: OS #12A
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
402.00	0.15	(N/A)	0.00	User Defined Rating Table - 1
402.50	0.20	(N/A)	0.00	User Defined Rating Table - 1
403.00	0.25	(N/A)	0.00	User Defined Rating Table - 1
403.50	0.29	(N/A)	0.00	User Defined Rating Table - 1
404.00	0.34	(N/A)	0.00	User Defined Rating Table - 1
404.50	0.39	(N/A)	0.00	User Defined Rating Table - 1
405.00	0.44	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1
405.50	28.33	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1
406.00	79.29	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1
406.50	145.26	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1
407.00	223.38	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1

Subsection: Outlet Input Data
Label: OS #13
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Requested Pond Water Surface Elevations	
Minimum (Headwater)	380.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	384.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	384.00
Rectangular Weir	Weir - 1	Forward	TW	382.65	384.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

1047-01 - Water Quality Design Flood Routings

Subsection: Outlet Input Data
Label: OS #13
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	382.65 ft
Weir Length	4.00 ft
Weir Coefficient	3.15 (ft^0.5)/s

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft³/s)
0.00	0.02
0.50	0.03
1.00	0.04
1.50	0.05
2.00	0.06
2.50	0.06
3.00	0.07
3.50	0.08
4.00	0.09

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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Water Quality Design Flood Routings

Subsection: Composite Rating Curve
Label: OS #13
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
380.00	0.02	(N/A)	0.00	User Defined Rating Table - 1
380.50	0.03	(N/A)	0.00	User Defined Rating Table - 1
381.00	0.04	(N/A)	0.00	User Defined Rating Table - 1
381.50	0.05	(N/A)	0.00	User Defined Rating Table - 1
382.00	0.06	(N/A)	0.00	User Defined Rating Table - 1
382.50	0.06	(N/A)	0.00	User Defined Rating Table - 1
382.65	0.07	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1
383.00	2.68	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1
383.50	9.95	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1
384.00	19.85	(N/A)	0.00	User Defined Rating Table - 1 + Weir - 1

1047-01 - Water Quality Design Flood Routings

Subsection: Outlet Input Data
Label: OS #5
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Requested Pond Water Surface Elevations	
Minimum (Headwater)	409.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	416.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	416.00
Orifice-Circular	Orifice - 1	Forward	TW	411.60	416.00
Rectangular Weir	Weir - 1	Forward	TW	413.50	416.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #5
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	411.60 ft
Orifice Diameter	2.5 in
Orifice Coefficient	0.680

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft^3/s)
0.00	0.14
0.50	0.19
1.00	0.24
1.50	0.28
2.00	0.33
2.50	0.38
3.00	0.43
3.50	0.47
4.00	0.52
4.50	0.57
5.00	0.62
5.50	0.66
6.00	0.71
6.50	0.76
7.00	0.81

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	413.50 ft
Weir Length	4.00 ft
Weir Coefficient	3.15 (ft^0.5)/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

1047-01 - Water Quality Design Flood Routings

Subsection: Outlet Input Data
Label: OS #5
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Convergence Tolerances	
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

1047-01 - Water Quality Design Flood Routings

Subsection: Composite Rating Curve
Label: OS #5
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
409.00	0.14	(N/A)	0.00	User Defined Rating Table - 1
409.50	0.19	(N/A)	0.00	User Defined Rating Table - 1
410.00	0.24	(N/A)	0.00	User Defined Rating Table - 1
410.50	0.28	(N/A)	0.00	User Defined Rating Table - 1
411.00	0.33	(N/A)	0.00	User Defined Rating Table - 1
411.50	0.38	(N/A)	0.00	User Defined Rating Table - 1
411.60	0.39	(N/A)	0.00	User Defined Rating Table - 1
412.00	0.53	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
412.50	0.64	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
413.00	0.73	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
413.50	0.82	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
414.00	5.35	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
414.50	13.57	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
415.00	24.20	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
415.50	36.76	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1
416.00	51.00	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1 + Weir - 1

1047-01 - Water Quality Design Flood Routings

Subsection: Outlet Input Data
Label: OS #6
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Requested Pond Water Surface Elevations	
Minimum (Headwater)	470.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	476.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	Orifice - 1	Forward	TW	472.25	476.00
Rectangular Weir	Weir - 1	Forward	TW	474.15	476.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

1047-01 - Water Quality Design Flood Routings

Subsection: Outlet Input Data
Label: OS #6
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	472.25 ft
Orifice Diameter	2.5 in
Orifice Coefficient	0.680

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	474.15 ft
Weir Length	4.00 ft
Weir Coefficient	3.15 (ft^0.5)/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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Water Quality Design Flood Routings

Subsection: Composite Rating Curve
Label: OS #6
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
470.00	0.00	(N/A)	0.00	None Contributing
470.50	0.00	(N/A)	0.00	None Contributing
471.00	0.00	(N/A)	0.00	None Contributing
471.50	0.00	(N/A)	0.00	None Contributing
472.00	0.00	(N/A)	0.00	None Contributing
472.25	0.00	(N/A)	0.00	None Contributing
472.50	0.07	(N/A)	0.00	Orifice - 1
473.00	0.15	(N/A)	0.00	Orifice - 1
473.50	0.20	(N/A)	0.00	Orifice - 1
474.00	0.24	(N/A)	0.00	Orifice - 1
474.15	0.25	(N/A)	0.00	Orifice - 1 + Weir - 1
474.50	2.88	(N/A)	0.00	Orifice - 1 + Weir - 1
475.00	10.18	(N/A)	0.00	Orifice - 1 + Weir - 1
475.50	20.09	(N/A)	0.00	Orifice - 1 + Weir - 1
476.00	32.06	(N/A)	0.00	Orifice - 1 + Weir - 1

1047-01 - Water Quality Design Flood Routings

Subsection: Outlet Input Data
Label: OS #7
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Requested Pond Water Surface Elevations	
Minimum (Headwater)	483.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	488.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
User Defined Table	User Defined Rating Table - 1	Forward	TW	0.00	488.00
Orifice-Circular	Orifice - 1	Forward	TW	485.25	488.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #7
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	485.25 ft
Orifice Diameter	2.5 in
Orifice Coefficient	0.680

Structure ID: User Defined Rating Table - 1
Structure Type: User Defined Table

Elevation (ft)	Flow (ft^3/s)
0.00	0.29
0.50	0.38
1.00	0.48
1.50	0.57
2.00	0.67
2.50	0.77
3.00	0.86
3.50	0.96
4.00	1.05
4.50	1.15
5.00	1.24

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

1047-01 - Water Quality Design Flood Routings

Subsection: Composite Rating Curve
Label: OS #7
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
483.00	0.29	(N/A)	0.00	User Defined Rating Table - 1
483.50	0.38	(N/A)	0.00	User Defined Rating Table - 1
484.00	0.48	(N/A)	0.00	User Defined Rating Table - 1
484.50	0.57	(N/A)	0.00	User Defined Rating Table - 1
485.00	0.67	(N/A)	0.00	User Defined Rating Table - 1
485.25	0.72	(N/A)	0.00	User Defined Rating Table - 1
485.50	0.84	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
486.00	1.01	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
486.50	1.16	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
487.00	1.29	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
487.50	1.42	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1
488.00	1.55	(N/A)	0.00	User Defined Rating Table - 1 + Orifice - 1

1047-01 - Water Quality Design Flood Routings

Subsection: Outlet Input Data
Label: OS #8
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Requested Pond Water Surface Elevations	
Minimum (Headwater)	458.60 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	466.60 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Orifice-Circular	Orifice - 1	Forward	TW	462.60	467.60
Rectangular Weir	Weir - 1	Forward	TW	463.40	467.60
Tailwater Settings	Tailwater			(N/A)	(N/A)

Subsection: Outlet Input Data
Label: OS #8
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Structure ID: Orifice - 1 Structure Type: Orifice-Circular	
Number of Openings	1
Elevation	462.60 ft
Orifice Diameter	2.5 in
Orifice Coefficient	0.680

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	463.40 ft
Weir Length	0.50 ft
Weir Coefficient	3.15 (ft^0.5)/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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Water Quality Design Flood Routings

Subsection: Composite Rating Curve
Label: OS #8
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
458.60	0.00	(N/A)	0.00	None Contributing
459.10	0.00	(N/A)	0.00	None Contributing
459.60	0.00	(N/A)	0.00	None Contributing
460.10	0.00	(N/A)	0.00	None Contributing
460.60	0.00	(N/A)	0.00	None Contributing
461.10	0.00	(N/A)	0.00	None Contributing
461.60	0.00	(N/A)	0.00	None Contributing
462.10	0.00	(N/A)	0.00	None Contributing
462.60	0.00	(N/A)	0.00	None Contributing
463.10	0.12	(N/A)	0.00	Orifice - 1
463.40	0.16	(N/A)	0.00	Orifice - 1 + Weir - 1
463.60	0.32	(N/A)	0.00	Orifice - 1 + Weir - 1
464.10	1.14	(N/A)	0.00	Orifice - 1 + Weir - 1
464.60	2.33	(N/A)	0.00	Orifice - 1 + Weir - 1
465.10	3.78	(N/A)	0.00	Orifice - 1 + Weir - 1
465.60	5.46	(N/A)	0.00	Orifice - 1 + Weir - 1
466.10	7.33	(N/A)	0.00	Orifice - 1 + Weir - 1
466.60	9.38	(N/A)	0.00	Orifice - 1 + Weir - 1
467.10	11.60	(N/A)	0.00	Orifice - 1 + Weir - 1
467.60	13.97	(N/A)	0.00	Orifice - 1 + Weir - 1

1047-01 - Water Quality Design Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #10
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	403.00 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	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
403.00	0.00	0.000	0.000	0.00	0.00	0.00
403.50	0.00	0.006	0.017	0.00	0.00	2.84
404.00	0.00	0.016	0.026	0.00	0.00	7.93
404.50	0.00	0.032	0.036	0.00	0.00	15.39
405.00	0.00	0.053	0.049	0.00	0.00	25.69
405.50	0.00	0.079	0.056	0.00	0.00	38.41
406.00	0.00	0.109	0.064	0.00	0.00	52.95
406.50	0.12	0.143	0.072	0.00	0.12	69.54
407.00	0.18	0.182	0.081	0.00	0.18	88.14
407.50	0.22	0.225	0.090	0.00	0.22	108.89
408.00	0.26	0.272	0.100	0.00	0.26	131.94
408.25	0.27	0.298	0.104	0.00	0.27	144.27
408.50	6.59	0.324	0.107	0.00	6.59	163.33
409.00	33.05	0.379	0.115	0.00	33.05	216.61
409.50	70.78	0.438	0.122	0.00	70.78	282.96
410.00	115.82	0.501	0.130	0.00	115.82	358.51

1047-01 - Water Quality Design Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #11
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	399.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.47 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.47 ft³/s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
399.00	0.47	0.000	0.000	0.00	0.47	0.47
399.50	0.51	0.010	0.029	0.00	0.51	5.46
400.00	0.55	0.029	0.045	0.00	0.55	14.47
400.50	0.59	0.056	0.065	0.00	0.59	27.80
401.00	0.63	0.094	0.088	0.00	0.63	46.27
401.25	0.65	0.118	0.103	0.00	0.65	57.83
401.50	0.74	0.146	0.119	0.00	0.74	71.35
402.00	0.86	0.214	0.155	0.00	0.86	104.55
402.50	0.95	0.294	0.166	0.00	0.95	143.44
403.00	1.03	0.380	0.177	0.00	1.03	184.95
403.50	1.10	0.471	0.188	0.00	1.10	229.18
404.00	1.17	0.568	0.200	0.00	1.17	276.22
404.10	1.19	0.589	0.206	0.00	1.19	286.05
404.50	1.64	0.675	0.229	0.00	1.64	328.53
405.00	2.65	0.797	0.260	0.00	2.65	388.61
405.50	3.98	0.935	0.292	0.00	3.98	456.68
406.00	5.55	1.090	0.327	0.00	5.55	533.16
406.50	7.35	1.256	0.336	0.00	7.35	615.18
407.00	9.33	1.426	0.345	0.00	9.33	699.60
407.50	11.48	1.601	0.355	0.00	11.48	786.43
408.00	13.80	1.781	0.364	0.00	13.80	875.69
408.50	16.26	1.965	0.372	0.00	16.26	967.16
409.00	18.86	2.152	0.379	0.00	18.86	1,060.63
409.50	21.60	2.344	0.387	0.00	21.60	1,156.11
410.00	24.46	2.540	0.395	0.00	24.46	1,253.61
410.50	27.45	2.739	0.402	0.00	27.45	1,352.99
411.00	35.00	2.941	0.408	0.00	35.00	1,458.56
411.50	46.36	3.147	0.415	0.00	46.36	1,569.57
412.00	60.23	3.356	0.422	0.00	60.23	1,684.73

1047-01 - Water Quality Design Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #11A
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	402.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.27 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.27 ft³/s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
402.00	0.27	0.000	0.000	0.00	0.27	0.27
402.50	0.35	0.009	0.026	0.00	0.35	4.77
403.00	0.44	0.026	0.040	0.00	0.44	12.85
403.50	0.53	0.050	0.058	0.00	0.53	24.74
404.00	0.62	0.084	0.078	0.00	0.62	41.18
404.25	0.66	0.104	0.080	0.00	0.66	50.77
404.50	8.58	0.124	0.082	0.00	8.58	68.45
405.00	41.72	0.165	0.085	0.00	41.72	121.79
405.50	88.93	0.209	0.089	0.00	88.93	190.11
406.00	146.82	0.255	0.093	0.00	146.82	270.04

1047-01 - Water Quality Design Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #12
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	400.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.09 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.09 ft³/s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
400.00	0.09	0.000	0.000	0.00	0.09	0.09
400.50	0.13	0.004	0.012	0.00	0.13	2.22
401.00	0.16	0.012	0.019	0.00	0.16	6.08
401.50	0.19	0.024	0.028	0.00	0.19	11.81
402.00	0.22	0.040	0.038	0.00	0.22	19.79
402.25	0.24	0.051	0.045	0.00	0.24	24.84
402.50	0.35	0.063	0.053	0.00	0.35	30.89
403.00	0.65	0.094	0.071	0.00	0.65	46.08
403.50	0.81	0.134	0.091	0.00	0.81	65.68
404.00	0.94	0.185	0.113	0.00	0.94	90.38
404.15	0.98	0.202	0.116	0.00	0.98	98.73
404.50	1.39	0.244	0.123	0.00	1.39	119.39
405.00	2.41	0.308	0.134	0.00	2.41	151.46
405.50	3.75	0.378	0.145	0.00	3.75	186.46
406.00	5.34	0.453	0.156	0.00	5.34	224.41
406.50	7.14	0.534	0.168	0.00	7.14	265.39
406.75	8.11	0.576	0.174	0.00	8.11	287.03
407.00	10.70	0.620	0.180	0.00	10.70	311.03
407.50	19.48	0.716	0.203	0.00	19.48	366.09
408.00	31.23	0.824	0.227	0.00	31.23	429.82

1047-01 - Water Quality Design Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #12A
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	402.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.15 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.15 ft³/s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
402.00	0.15	0.000	0.000	0.00	0.15	0.15
402.50	0.20	0.005	0.013	0.00	0.20	2.46
403.00	0.25	0.013	0.019	0.00	0.25	6.39
403.50	0.29	0.024	0.027	0.00	0.29	11.95
404.00	0.34	0.039	0.035	0.00	0.34	19.42
404.50	0.39	0.058	0.039	0.00	0.39	28.38
405.00	0.44	0.078	0.043	0.00	0.44	38.27
405.50	28.33	0.100	0.047	0.00	28.33	76.97
406.00	79.29	0.125	0.051	0.00	79.29	139.74
406.50	145.26	0.152	0.056	0.00	145.26	218.65
407.00	223.38	0.181	0.061	0.00	223.38	310.90

1047-01 - Water Quality Design Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #13
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	380.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.02 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.02 ft³/s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
380.00	0.02	0.000	0.000	0.00	0.02	0.02
380.50	0.03	0.001	0.002	0.00	0.03	0.31
381.00	0.04	0.002	0.003	0.00	0.04	0.86
381.50	0.05	0.003	0.004	0.00	0.05	1.72
382.00	0.06	0.006	0.006	0.00	0.06	2.97
382.50	0.06	0.010	0.009	0.00	0.06	4.75
382.65	0.07	0.011	0.010	0.00	0.07	5.42
383.00	2.68	0.015	0.012	0.00	2.68	9.86
383.50	9.95	0.022	0.016	0.00	9.95	20.48
384.00	19.85	0.031	0.020	0.00	19.85	34.69

1047-01 - Water Quality Design Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #5
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	409.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.14 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.14 ft³/s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
409.00	0.14	0.000	0.000	0.00	0.14	0.14
409.50	0.19	0.005	0.014	0.00	0.19	2.52
410.00	0.24	0.013	0.021	0.00	0.24	6.72
410.50	0.28	0.026	0.030	0.00	0.28	12.86
411.00	0.33	0.043	0.040	0.00	0.33	21.31
411.50	0.38	0.065	0.045	0.00	0.38	31.68
411.60	0.39	0.069	0.046	0.00	0.39	33.91
412.00	0.53	0.089	0.051	0.00	0.53	43.48
412.50	0.64	0.116	0.056	0.00	0.64	56.55
413.00	0.73	0.145	0.062	0.00	0.73	70.87
413.50	0.82	0.177	0.067	0.00	0.82	86.52
414.00	5.35	0.212	0.073	0.00	5.35	108.00
414.50	13.57	0.250	0.078	0.00	13.57	134.49
415.00	24.20	0.290	0.083	0.00	24.20	164.61
415.50	36.76	0.333	0.089	0.00	36.76	197.94
416.00	51.00	0.379	0.094	0.00	51.00	234.26

1047-01 - Water Quality Design Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #6
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	470.00 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	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
470.00	0.00	0.000	0.000	0.00	0.00	0.00
470.50	0.00	0.004	0.011	0.00	0.00	1.81
471.00	0.00	0.010	0.016	0.00	0.00	5.04
471.50	0.00	0.020	0.023	0.00	0.00	9.76
472.00	0.00	0.034	0.031	0.00	0.00	16.28
472.25	0.00	0.042	0.034	0.00	0.00	20.23
472.50	0.07	0.051	0.038	0.00	0.07	24.65
473.00	0.15	0.071	0.045	0.00	0.15	34.75
473.50	0.20	0.096	0.053	0.00	0.20	46.70
474.00	0.24	0.125	0.062	0.00	0.24	60.67
474.15	0.25	0.134	0.063	0.00	0.25	65.21
474.50	2.88	0.157	0.065	0.00	2.88	78.67
475.00	10.18	0.190	0.068	0.00	10.18	102.02
475.50	20.09	0.224	0.071	0.00	20.09	128.73
476.00	32.06	0.261	0.074	0.00	32.06	158.23

1047-01 - Water Quality Design Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #7
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	483.00 ft
Volume (Initial)	0.000 ac-ft
Flow (Initial Outlet)	0.29 ft³/s
Flow (Initial Infiltration)	0.00 ft³/s
Flow (Initial, Total)	0.29 ft³/s
Time Increment	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
483.00	0.29	0.000	0.000	0.00	0.29	0.29
483.50	0.38	0.004	0.012	0.00	0.38	2.47
484.00	0.48	0.012	0.019	0.00	0.48	6.34
484.50	0.57	0.024	0.027	0.00	0.57	12.02
485.00	0.67	0.040	0.037	0.00	0.67	19.87
485.25	0.72	0.049	0.039	0.00	0.72	24.53
485.50	0.84	0.059	0.042	0.00	0.84	29.57
486.00	1.01	0.082	0.047	0.00	1.01	40.49
486.50	1.16	0.107	0.053	0.00	1.16	52.72
487.00	1.29	0.135	0.059	0.00	1.29	66.43
487.50	1.42	0.166	0.066	0.00	1.42	81.71
488.00	1.55	0.201	0.073	0.00	1.55	98.64

1047-01 - Water Quality Design Flood Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: UG Basin #8
Scenario: Post-Water Quality Storm

Return Event: 1 years
Storm Event: Water Quality Storm

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	458.60 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	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
458.60	0.00	0.000	0.049	0.00	0.00	0.00
459.10	0.00	0.031	0.078	0.00	0.00	15.25
459.60	0.00	0.079	0.114	0.00	0.00	38.36
460.10	0.00	0.136	0.114	0.00	0.00	65.94
460.60	0.00	0.193	0.114	0.00	0.00	93.53
461.10	0.00	0.250	0.114	0.00	0.00	121.12
461.60	0.00	0.307	0.114	0.00	0.00	148.71
462.10	0.00	0.364	0.114	0.00	0.00	176.30
462.60	0.00	0.421	0.114	0.00	0.00	203.88
463.10	0.12	0.478	0.114	0.00	0.12	231.59
463.40	0.16	0.512	0.114	0.00	0.16	248.18
463.60	0.32	0.535	0.114	0.00	0.32	259.38
464.10	1.14	0.592	0.114	0.00	1.14	287.79
464.60	2.33	0.649	0.114	0.00	2.33	316.56
465.10	3.78	0.706	0.114	0.00	3.78	345.60
465.60	5.46	0.763	0.114	0.00	5.46	374.87
466.10	7.33	0.820	0.114	0.00	7.33	404.33
466.60	9.38	0.877	0.114	0.00	9.38	433.97
467.10	11.60	0.925	0.078	0.00	11.60	459.30
467.60	13.97	0.956	0.049	0.00	13.97	476.91

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WATER QUALITY CALCULATIONS – APPENDIX C-2
POND DRAWDOWN CHART

TIME VS. ELEVATION SUMMARY

Job No. 1047-01 Performed By: CR
Date: 5/26/2023 Check By: RCM2
Rev: -

100 YR STORM**

POND	INFILTRATION RATE USED FOR CALCULATIONS (IN/HR)	PEAK TIME (HRS.)	TIME AT WHICH BASIN IS EMPTY (HRS.)***	TOTAL DRAW DOWN TIME (HRS.)
#5	UD*	12.10	27.00	14.90
#6	1.00	12.15	54.25	42.10
#7	UD*	12.40	15.30	2.90
#8	0.50	12.15	100.00	87.85
#10	0.63	12.10	92.20	80.10
#11	UD*	12.50	36.40	23.90
#12	UD*	12.20	28.20	16.00
#13	UD*	12.10	26.50	14.40

*Underdrained
**Values taken from the routings below
***Due to limitations of the program, Basin #6 and #10 did not fully drain and the Time at Which Basin is Empty was Extrapolated

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1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #10
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
0.000	0.000	0.000	0.000	0.000	0.000
0.250	0.000	0.000	0.000	0.000	0.000
0.500	0.000	0.000	0.000	0.000	0.000
0.750	0.001	0.001	0.001	0.002	0.002
1.000	0.003	0.003	0.004	0.004	0.005
1.250	0.006	0.006	0.006	0.007	0.007
1.500	0.008	0.008	0.009	0.009	0.010
1.750	0.011	0.011	0.012	0.012	0.013
2.000	0.014	0.015	0.015	0.016	0.017
2.250	0.017	0.018	0.019	0.019	0.020
2.500	0.020	0.021	0.022	0.022	0.023
2.750	0.024	0.025	0.025	0.026	0.027
3.000	0.028	0.029	0.030	0.030	0.031
3.250	0.032	0.033	0.034	0.034	0.035
3.500	0.036	0.036	0.037	0.038	0.039
3.750	0.040	0.040	0.041	0.042	0.043
4.000	0.044	0.045	0.046	0.046	0.047
4.250	0.048	0.049	0.050	0.051	0.052
4.500	0.053	0.054	0.055	0.056	0.057
4.750	0.057	0.058	0.059	0.060	0.061
5.000	0.062	0.063	0.064	0.065	0.065
5.250	0.066	0.067	0.068	0.069	0.070
5.500	0.071	0.072	0.073	0.074	0.075
5.750	0.076	0.077	0.078	0.079	0.080
6.000	0.081	0.082	0.083	0.084	0.085
6.250	0.086	0.087	0.088	0.089	0.091
6.500	0.092	0.093	0.094	0.095	0.096
6.750	0.098	0.099	0.100	0.102	0.103
7.000	0.104	0.106	0.107	0.109	0.110
7.250	0.111	0.113	0.114	0.115	0.117
7.500	0.118	0.119	0.121	0.122	0.124
7.750	0.125	0.126	0.128	0.129	0.131
8.000	0.132	0.134	0.135	0.137	0.138
8.250	0.140	0.141	0.143	0.144	0.146
8.500	0.147	0.148	0.150	0.151	0.153
8.750	0.154	0.156	0.157	0.159	0.160
9.000	0.162	0.164	0.165	0.167	0.169
9.250	0.171	0.173	0.175	0.177	0.180
9.500	0.182	0.184	0.186	0.189	0.191
9.750	0.193	0.196	0.198	0.201	0.204

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #10
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
10.000	0.207	0.210	0.213	0.216	0.219
10.250	0.223	0.226	0.229	0.232	0.236
10.500	0.239	0.243	0.247	0.251	0.256
10.750	0.261	0.266	0.271	0.277	0.283
11.000	0.289	0.296	0.301	0.304	0.305
11.250	0.306	0.306	0.307	0.307	0.308
11.500	0.309	0.310	0.312	0.313	0.314
11.750	0.317	0.320	0.324	0.328	0.334
12.000	0.341	0.352	0.363	0.350	0.333
12.250	0.328	0.325	0.322	0.319	0.318
12.500	0.317	0.315	0.312	0.311	0.310
12.750	0.310	0.309	0.309	0.308	0.307
13.000	0.307	0.306	0.306	0.305	0.305
13.250	0.305	0.304	0.304	0.304	0.303
13.500	0.303	0.303	0.302	0.302	0.302
13.750	0.302	0.302	0.302	0.302	0.302
14.000	0.302	0.301	0.301	0.301	0.301
14.250	0.301	0.301	0.301	0.301	0.301
14.500	0.301	0.301	0.301	0.300	0.300
14.750	0.300	0.300	0.300	0.300	0.300
15.000	0.300	0.300	0.300	0.300	0.300
15.250	0.300	0.299	0.299	0.299	0.299
15.500	0.299	0.299	0.299	0.299	0.299
15.750	0.299	0.299	0.299	0.299	0.299
16.000	0.299	0.299	0.299	0.299	0.299
16.250	0.299	0.299	0.299	0.299	0.299
16.500	0.299	0.299	0.299	0.299	0.299
16.750	0.299	0.299	0.299	0.299	0.299
17.000	0.299	0.299	0.299	0.299	0.299
17.250	0.299	0.299	0.298	0.298	0.298
17.500	0.298	0.298	0.298	0.298	0.298
17.750	0.298	0.298	0.298	0.298	0.298
18.000	0.298	0.298	0.298	0.298	0.298
18.250	0.298	0.298	0.298	0.298	0.298
18.500	0.298	0.298	0.298	0.298	0.298
18.750	0.298	0.298	0.298	0.298	0.298
19.000	0.298	0.298	0.298	0.298	0.298
19.250	0.298	0.298	0.298	0.298	0.298
19.500	0.298	0.298	0.298	0.298	0.298
19.750	0.298	0.298	0.298	0.298	0.298
20.000	0.298	0.298	0.298	0.298	0.298

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #10
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
20.250	0.298	0.298	0.298	0.298	0.298
20.500	0.298	0.298	0.298	0.298	0.298
20.750	0.298	0.298	0.298	0.298	0.298
21.000	0.298	0.298	0.298	0.298	0.298
21.250	0.298	0.298	0.298	0.298	0.298
21.500	0.298	0.298	0.298	0.298	0.298
21.750	0.298	0.298	0.298	0.298	0.298
22.000	0.298	0.298	0.298	0.298	0.298
22.250	0.298	0.298	0.298	0.298	0.298
22.500	0.298	0.298	0.298	0.298	0.298
22.750	0.298	0.298	0.298	0.297	0.297
23.000	0.297	0.297	0.297	0.297	0.297
23.250	0.297	0.297	0.297	0.297	0.297
23.500	0.297	0.297	0.297	0.297	0.296
23.750	0.296	0.296	0.296	0.296	0.296
24.000	0.296	0.295	0.294	0.292	0.291
24.250	0.290	0.288	0.287	0.285	0.284
24.500	0.283	0.281	0.280	0.279	0.277
24.750	0.276	0.275	0.273	0.272	0.271
25.000	0.269	0.268	0.267	0.265	0.264
25.250	0.263	0.261	0.260	0.259	0.257
25.500	0.256	0.255	0.254	0.252	0.251
25.750	0.250	0.249	0.247	0.246	0.245
26.000	0.244	0.242	0.241	0.240	0.239
26.250	0.238	0.237	0.235	0.234	0.233
26.500	0.232	0.231	0.230	0.229	0.228
26.750	0.226	0.225	0.224	0.223	0.222
27.000	0.221	0.219	0.218	0.217	0.216
27.250	0.215	0.214	0.213	0.211	0.210
27.500	0.209	0.208	0.207	0.206	0.205
27.750	0.204	0.203	0.202	0.201	0.200
28.000	0.199	0.198	0.197	0.196	0.195
28.250	0.194	0.193	0.192	0.191	0.190
28.500	0.189	0.188	0.187	0.186	0.185
28.750	0.184	0.183	0.183	0.182	0.181
29.000	0.180	0.179	0.178	0.177	0.176
29.250	0.175	0.174	0.173	0.172	0.171
29.500	0.170	0.170	0.169	0.168	0.167
29.750	0.166	0.165	0.164	0.164	0.163
30.000	0.162	0.161	0.160	0.160	0.159
30.250	0.158	0.157	0.156	0.156	0.155

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #10
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
30.500	0.154	0.154	0.153	0.152	0.151
30.750	0.151	0.150	0.149	0.149	0.148
31.000	0.147	0.147	0.146	0.145	0.145
31.250	0.144	0.143	0.143	0.142	0.141
31.500	0.141	0.140	0.139	0.139	0.138
31.750	0.137	0.137	0.136	0.136	0.135
32.000	0.134	0.134	0.133	0.133	0.132
32.250	0.132	0.131	0.131	0.130	0.130
32.500	0.129	0.129	0.128	0.128	0.127
32.750	0.127	0.127	0.126	0.126	0.125
33.000	0.125	0.124	0.124	0.124	0.123
33.250	0.123	0.123	0.122	0.122	0.122
33.500	0.121	0.121	0.120	0.120	0.120
33.750	0.120	0.119	0.119	0.119	0.118
34.000	0.118	0.118	0.117	0.117	0.117
34.250	0.117	0.116	0.116	0.116	0.116
34.500	0.115	0.115	0.115	0.115	0.114
34.750	0.114	0.114	0.114	0.113	0.113
35.000	0.113	0.113	0.113	0.112	0.112
35.250	0.112	0.112	0.112	0.111	0.111
35.500	0.111	0.111	0.111	0.110	0.110
35.750	0.110	0.110	0.110	0.110	0.109
36.000	0.109	0.109	0.109	0.109	0.109
36.250	0.108	0.108	0.108	0.108	0.108
36.500	0.108	0.107	0.107	0.107	0.107
36.750	0.107	0.106	0.106	0.106	0.106
37.000	0.106	0.106	0.105	0.105	0.105
37.250	0.105	0.105	0.105	0.104	0.104
37.500	0.104	0.104	0.104	0.104	0.103
37.750	0.103	0.103	0.103	0.103	0.103
38.000	0.102	0.102	0.102	0.102	0.102
38.250	0.101	0.101	0.101	0.101	0.101
38.500	0.101	0.100	0.100	0.100	0.100
38.750	0.100	0.100	0.099	0.099	0.099
39.000	0.099	0.099	0.099	0.099	0.098
39.250	0.098	0.098	0.098	0.098	0.098
39.500	0.097	0.097	0.097	0.097	0.097
39.750	0.097	0.096	0.096	0.096	0.096
40.000	0.096	0.096	0.095	0.095	0.095
40.250	0.095	0.095	0.095	0.094	0.094
40.500	0.094	0.094	0.094	0.094	0.094

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #10
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
40.750	0.093	0.093	0.093	0.093	0.093
41.000	0.093	0.092	0.092	0.092	0.092
41.250	0.092	0.092	0.091	0.091	0.091
41.500	0.091	0.091	0.091	0.091	0.090
41.750	0.090	0.090	0.090	0.090	0.090
42.000	0.090	0.089	0.089	0.089	0.089
42.250	0.089	0.089	0.088	0.088	0.088
42.500	0.088	0.088	0.088	0.088	0.087
42.750	0.087	0.087	0.087	0.087	0.087
43.000	0.087	0.086	0.086	0.086	0.086
43.250	0.086	0.086	0.085	0.085	0.085
43.500	0.085	0.085	0.085	0.085	0.084
43.750	0.084	0.084	0.084	0.084	0.084
44.000	0.084	0.083	0.083	0.083	0.083
44.250	0.083	0.083	0.083	0.082	0.082
44.500	0.082	0.082	0.082	0.082	0.082
44.750	0.081	0.081	0.081	0.081	0.081
45.000	0.081	0.081	0.080	0.080	0.080
45.250	0.080	0.080	0.080	0.080	0.079
45.500	0.079	0.079	0.079	0.079	0.079
45.750	0.079	0.078	0.078	0.078	0.078
46.000	0.078	0.078	0.077	0.077	0.077
46.250	0.077	0.077	0.077	0.077	0.076
46.500	0.076	0.076	0.076	0.076	0.076
46.750	0.075	0.075	0.075	0.075	0.075
47.000	0.075	0.075	0.074	0.074	0.074
47.250	0.074	0.074	0.074	0.074	0.073
47.500	0.073	0.073	0.073	0.073	0.073
47.750	0.072	0.072	0.072	0.072	0.072
48.000	0.072	0.072	0.071	0.071	0.071
48.250	0.071	0.071	0.071	0.071	0.070
48.500	0.070	0.070	0.070	0.070	0.070
48.750	0.070	0.069	0.069	0.069	0.069
49.000	0.069	0.069	0.069	0.068	0.068
49.250	0.068	0.068	0.068	0.068	0.068
49.500	0.067	0.067	0.067	0.067	0.067
49.750	0.067	0.067	0.066	0.066	0.066
50.000	0.066	0.066	0.066	0.066	0.065
50.250	0.065	0.065	0.065	0.065	0.065
50.500	0.065	0.065	0.064	0.064	0.064
50.750	0.064	0.064	0.064	0.064	0.063

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #10
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
51.000	0.063	0.063	0.063	0.063	0.063
51.250	0.063	0.063	0.062	0.062	0.062
51.500	0.062	0.062	0.062	0.062	0.061
51.750	0.061	0.061	0.061	0.061	0.061
52.000	0.061	0.061	0.060	0.060	0.060
52.250	0.060	0.060	0.060	0.060	0.059
52.500	0.059	0.059	0.059	0.059	0.059
52.750	0.059	0.059	0.058	0.058	0.058
53.000	0.058	0.058	0.058	0.058	0.058
53.250	0.057	0.057	0.057	0.057	0.057
53.500	0.057	0.057	0.057	0.056	0.056
53.750	0.056	0.056	0.056	0.056	0.056
54.000	0.056	0.055	0.055	0.055	0.055
54.250	0.055	0.055	0.055	0.055	0.054
54.500	0.054	0.054	0.054	0.054	0.054
54.750	0.054	0.054	0.054	0.053	0.053
55.000	0.053	0.053	0.053	0.053	0.053
55.250	0.052	0.052	0.052	0.052	0.052
55.500	0.052	0.052	0.051	0.051	0.051
55.750	0.051	0.051	0.051	0.051	0.050
56.000	0.050	0.050	0.050	0.050	0.050
56.250	0.050	0.049	0.049	0.049	0.049
56.500	0.049	0.049	0.049	0.049	0.048
56.750	0.048	0.048	0.048	0.048	0.048
57.000	0.048	0.047	0.047	0.047	0.047
57.250	0.047	0.047	0.047	0.047	0.046
57.500	0.046	0.046	0.046	0.046	0.046
57.750	0.046	0.046	0.045	0.045	0.045
58.000	0.045	0.045	0.045	0.045	0.045
58.250	0.044	0.044	0.044	0.044	0.044
58.500	0.044	0.044	0.044	0.044	0.043
58.750	0.043	0.043	0.043	0.043	0.043
59.000	0.043	0.043	0.042	0.042	0.042
59.250	0.042	0.042	0.042	0.042	0.042
59.500	0.042	0.041	0.041	0.041	0.041
59.750	0.041	0.041	0.041	0.041	0.041
60.000	0.040	0.040	0.040	0.040	0.040
60.250	0.040	0.040	0.040	0.040	0.039
60.500	0.039	0.039	0.039	0.039	0.039
60.750	0.039	0.039	0.039	0.039	0.038
61.000	0.038	0.038	0.038	0.038	0.038

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #10
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
61.250	0.038	0.038	0.038	0.038	0.037
61.500	0.037	0.037	0.037	0.037	0.037
61.750	0.037	0.037	0.037	0.037	0.036
62.000	0.036	0.036	0.036	0.036	0.036
62.250	0.036	0.036	0.036	0.036	0.036
62.500	0.035	0.035	0.035	0.035	0.035
62.750	0.035	0.035	0.035	0.035	0.035
63.000	0.035	0.034	0.034	0.034	0.034
63.250	0.034	0.034	0.034	0.034	0.034
63.500	0.034	0.034	0.033	0.033	0.033
63.750	0.033	0.033	0.033	0.033	0.033
64.000	0.033	0.033	0.033	0.033	0.032
64.250	0.032	0.032	0.032	0.032	0.032
64.500	0.032	0.032	0.032	0.032	0.032
64.750	0.031	0.031	0.031	0.031	0.031
65.000	0.031	0.031	0.031	0.031	0.030
65.250	0.030	0.030	0.030	0.030	0.030
65.500	0.030	0.030	0.030	0.029	0.029
65.750	0.029	0.029	0.029	0.029	0.029
66.000	0.029	0.029	0.029	0.028	0.028
66.250	0.028	0.028	0.028	0.028	0.028
66.500	0.028	0.028	0.028	0.028	0.027
66.750	0.027	0.027	0.027	0.027	0.027
67.000	0.027	0.027	0.027	0.027	0.026
67.250	0.026	0.026	0.026	0.026	0.026
67.500	0.026	0.026	0.026	0.026	0.026
67.750	0.025	0.025	0.025	0.025	0.025
68.000	0.025	0.025	0.025	0.025	0.025
68.250	0.025	0.025	0.024	0.024	0.024
68.500	0.024	0.024	0.024	0.024	0.024
68.750	0.024	0.024	0.024	0.024	0.023
69.000	0.023	0.023	0.023	0.023	0.023
69.250	0.023	0.023	0.023	0.023	0.023
69.500	0.023	0.022	0.022	0.022	0.022
69.750	0.022	0.022	0.022	0.022	0.022
70.000	0.022	0.022	0.022	0.022	0.021
70.250	0.021	0.021	0.021	0.021	0.021
70.500	0.021	0.021	0.021	0.021	0.021
70.750	0.021	0.021	0.021	0.020	0.020
71.000	0.020	0.020	0.020	0.020	0.020
71.250	0.020	0.020	0.020	0.020	0.020

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #10
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
71.500	0.020	0.020	0.020	0.019	0.019
71.750	0.019	0.019	0.019	0.019	0.019
72.000	0.019	0.019	0.019	0.019	0.019
72.250	0.019	0.019	0.019	0.018	0.018
72.500	0.018	0.018	0.018	0.018	0.018
72.750	0.018	0.018	0.018	0.018	0.018
73.000	0.018	0.018	0.018	0.018	0.017
73.250	0.017	0.017	0.017	0.017	0.017
73.500	0.017	0.017	0.017	0.017	0.017
73.750	0.017	0.017	0.017	0.017	0.017
74.000	0.017	0.017	0.016	0.016	0.016
74.250	0.016	0.016	0.016	0.016	0.016
74.500	0.016	0.016	0.016	0.016	0.016
74.750	0.015	0.015	0.015	0.015	0.015
75.000	0.015	0.015	0.015	0.015	0.015
75.250	0.015	0.015	0.015	0.014	0.014
75.500	0.014	0.014	0.014	0.014	0.014
75.750	0.014	0.014	0.014	0.014	0.014
76.000	0.014	0.014	0.013	0.013	0.013
76.250	0.013	0.013	0.013	0.013	0.013
76.500	0.013	0.013	0.013	0.013	0.013
76.750	0.013	0.013	0.012	0.012	0.012
77.000	0.012	0.012	0.012	0.012	0.012
77.250	0.012	0.012	0.012	0.012	0.012
77.500	0.012	0.012	0.012	0.012	0.011
77.750	0.011	0.011	0.011	0.011	0.011
78.000	0.011	0.011	0.011	0.011	0.011
78.250	0.011	0.011	0.011	0.011	0.011
78.500	0.011	0.010	0.010	0.010	0.010
78.750	0.010	0.010	0.010	0.010	0.010
79.000	0.010	0.010	0.010	0.010	0.010
79.250	0.010	0.010	0.010	0.010	0.010
79.500	0.009	0.009	0.009	0.009	0.009
79.750	0.009	0.009	0.009	0.009	0.009
80.000	0.009	0.009	0.009	0.009	0.009
80.250	0.009	0.009	0.009	0.009	0.009
80.500	0.008	0.008	0.008	0.008	0.008
80.750	0.008	0.008	0.008	0.008	0.008
81.000	0.008	0.008	0.008	0.008	0.008
81.250	0.008	0.008	0.008	0.008	0.008
81.500	0.008	0.008	0.008	0.007	0.007

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #10
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
81.750	0.007	0.007	0.007	0.007	0.007
82.000	0.007	0.007	0.007	0.007	0.007
82.250	0.007	0.007	0.007	0.007	0.007
82.500	0.007	0.007	0.007	0.007	0.007
82.750	0.007	0.007	0.007	0.006	0.006
83.000	0.006	0.006	0.006	0.006	0.006
83.250	0.006	0.006	0.006	0.006	0.006
83.500	0.006	0.006	0.006	0.006	0.006
83.750	0.006	0.006	0.006	0.006	0.006
84.000	0.006	0.006	0.005	0.005	0.005
84.250	0.005	0.005	0.005	0.005	0.005
84.500	0.005	0.005	0.005	0.005	0.005
84.750	0.005	0.005	0.005	0.005	0.005
85.000	0.004	0.004	0.004	0.004	0.004
85.250	0.004	0.004	0.004	0.004	0.004
85.500	0.004	0.004	0.004	0.004	0.004
85.750	0.004	0.004	0.004	0.004	0.004
86.000	0.004	0.004	0.004	0.004	0.003
86.250	0.003	0.003	0.003	0.003	0.003
86.500	0.003	0.003	0.003	0.003	0.003
86.750	0.003	0.003	0.003	0.003	0.003
87.000	0.003	0.003	0.003	0.003	0.003
87.250	0.003	0.003	0.003	0.003	0.003
87.500	0.003	0.003	0.003	0.003	0.003
87.750	0.003	0.002	0.002	0.002	0.002
88.000	0.002	0.002	0.002	0.002	0.002
88.250	0.002	0.002	0.002	0.002	0.002
88.500	0.002	0.002	0.002	0.002	0.002
88.750	0.002	0.002	0.002	0.002	0.002
89.000	0.002	0.002	0.002	0.002	0.002
89.250	0.002	0.002	0.002	0.002	0.002
89.500	0.002	0.002	0.002	0.002	0.002
89.750	0.002	0.002	0.002	0.002	0.002
90.000	0.001	0.001	0.001	0.001	0.001
90.250	0.001	0.001	0.001	0.001	0.001
90.500	0.001	0.001	0.001	0.001	0.001
90.750	0.001	0.001	0.001	0.001	0.001
91.000	0.001	0.001	0.001	0.001	0.001
91.250	0.001	0.001	0.001	0.001	0.001
91.500	0.001	0.001	0.001	0.001	0.001
91.750	0.001	0.001	0.001	0.001	0.001

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #10
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
92.000	0.001	0.001	0.001	0.001	0.001
92.250	0.001	0.001	0.001	0.001	0.001
92.500	0.001	0.001	0.001	0.001	0.001
92.750	0.001	0.001	0.001	0.001	0.001
93.000	0.001	0.001	0.001	0.001	0.001
93.250	0.001	0.001	0.001	0.001	0.001
93.500	0.001	0.001	0.001	0.001	0.001
93.750	0.001	0.001	0.001	0.001	0.001
94.000	0.001	0.001	0.001	0.001	0.001
94.250	0.001	0.001	0.001	0.001	0.001
94.500	0.001	0.001	0.001	0.001	0.001
94.750	0.001	0.001	0.001	0.001	0.001
95.000	0.001	0.001	0.001	0.001	0.001
95.250	0.001	0.001	0.001	0.001	0.001
95.500	0.001	0.001	0.001	0.001	0.001
95.750	0.001	0.001	0.001	0.001	0.001
96.000	0.001	0.001	0.001	0.001	0.001
96.250	0.001	0.001	0.001	0.001	0.001
96.500	0.001	0.001	0.001	0.001	0.001
96.750	0.001	0.001	0.001	0.001	0.001
97.000	0.001	0.001	0.001	0.001	0.001
97.250	0.001	0.001	0.001	0.001	0.001
97.500	0.001	0.001	0.001	0.001	0.001
97.750	0.001	0.001	0.001	0.001	0.001
98.000	0.001	0.001	0.001	0.001	0.001
98.250	0.001	0.001	0.001	0.001	0.001
98.500	0.001	0.001	0.001	0.001	0.001
98.750	0.001	0.001	0.001	0.001	0.001
99.000	0.001	0.001	0.001	0.001	0.001
99.250	0.001	0.001	0.001	0.001	0.001
99.500	0.001	0.001	0.001	0.001	0.001
99.750	0.001	0.001	0.001	0.001	0.001
100.000	0.001	(N/A)	(N/A)	(N/A)	(N/A)

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #11
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
0.000	0.000	0.000	0.000	0.000	0.000
0.250	0.000	0.000	0.000	0.000	0.000
0.500	0.000	0.000	0.000	0.000	0.000
0.750	0.000	0.000	0.000	0.000	0.000
1.000	0.000	0.000	0.000	0.000	0.000
1.250	0.000	0.000	0.000	0.000	0.000
1.500	0.000	0.000	0.000	0.000	0.000
1.750	0.000	0.000	0.000	0.000	0.000
2.000	0.000	0.000	0.000	0.000	0.000
2.250	0.000	0.000	0.000	0.000	0.000
2.500	0.000	0.000	0.000	0.000	0.000
2.750	0.000	0.000	0.000	0.000	0.000
3.000	0.000	0.000	0.000	0.000	0.000
3.250	0.000	0.000	0.000	0.000	0.000
3.500	0.000	0.000	0.000	0.000	0.000
3.750	0.000	0.000	0.000	0.000	0.000
4.000	0.000	0.000	0.000	0.000	0.000
4.250	0.000	0.000	0.000	0.000	0.000
4.500	0.000	0.000	0.000	0.000	0.000
4.750	0.000	0.000	0.000	0.000	0.000
5.000	0.000	0.000	0.000	0.000	0.000
5.250	0.000	0.000	0.000	0.000	0.000
5.500	0.000	0.000	0.000	0.000	0.000
5.750	0.000	0.000	0.000	0.000	0.000
6.000	0.000	0.000	0.000	0.000	0.000
6.250	0.000	0.000	0.000	0.000	0.001
6.500	0.001	0.001	0.001	0.001	0.002
6.750	0.002	0.002	0.002	0.003	0.003
7.000	0.004	0.004	0.004	0.005	0.005
7.250	0.006	0.006	0.007	0.008	0.009
7.500	0.010	0.010	0.011	0.012	0.012
7.750	0.013	0.014	0.015	0.016	0.017
8.000	0.018	0.019	0.020	0.022	0.023
8.250	0.025	0.027	0.029	0.030	0.031
8.500	0.033	0.035	0.036	0.038	0.040
8.750	0.042	0.045	0.047	0.049	0.052
9.000	0.055	0.057	0.060	0.062	0.065
9.250	0.067	0.070	0.074	0.077	0.081
9.500	0.084	0.088	0.093	0.097	0.101
9.750	0.105	0.110	0.114	0.119	0.124

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #11
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
10.000	0.129	0.134	0.140	0.145	0.150
10.250	0.156	0.161	0.167	0.173	0.180
10.500	0.187	0.194	0.202	0.211	0.220
10.750	0.228	0.237	0.247	0.257	0.268
11.000	0.279	0.292	0.306	0.324	0.346
11.250	0.369	0.394	0.421	0.449	0.480
11.500	0.515	0.558	0.607	0.664	0.724
11.750	0.794	0.869	0.959	1.066	1.204
12.000	1.382	1.617	1.924	2.228	2.463
12.250	2.637	2.763	2.844	2.887	2.905
12.500	2.907	2.897	2.877	2.851	2.822
12.750	2.792	2.761	2.730	2.697	2.663
13.000	2.627	2.590	2.553	2.514	2.475
13.250	2.436	2.397	2.358	2.320	2.281
13.500	2.243	2.205	2.168	2.131	2.095
13.750	2.059	2.025	1.992	1.961	1.930
14.000	1.899	1.870	1.843	1.816	1.789
14.250	1.764	1.739	1.715	1.692	1.669
14.500	1.647	1.626	1.605	1.585	1.564
14.750	1.545	1.526	1.507	1.489	1.472
15.000	1.454	1.437	1.421	1.404	1.388
15.250	1.372	1.357	1.342	1.328	1.314
15.500	1.300	1.287	1.274	1.262	1.249
15.750	1.238	1.226	1.215	1.204	1.194
16.000	1.184	1.174	1.164	1.155	1.146
16.250	1.138	1.130	1.121	1.114	1.106
16.500	1.099	1.091	1.084	1.077	1.070
16.750	1.063	1.056	1.050	1.043	1.037
17.000	1.031	1.025	1.020	1.014	1.009
17.250	1.003	0.998	0.993	0.988	0.983
17.500	0.978	0.973	0.969	0.964	0.960
17.750	0.955	0.951	0.947	0.943	0.939
18.000	0.935	0.931	0.926	0.922	0.918
18.250	0.914	0.910	0.906	0.903	0.899
18.500	0.896	0.892	0.889	0.886	0.882
18.750	0.879	0.876	0.874	0.871	0.868
19.000	0.865	0.863	0.860	0.858	0.855
19.250	0.853	0.851	0.849	0.846	0.844
19.500	0.842	0.840	0.838	0.836	0.834
19.750	0.832	0.830	0.829	0.827	0.825
20.000	0.824	0.822	0.820	0.819	0.817

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #11
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
20.250	0.815	0.814	0.812	0.811	0.810
20.500	0.808	0.807	0.805	0.804	0.803
20.750	0.801	0.800	0.799	0.797	0.796
21.000	0.795	0.793	0.792	0.790	0.789
21.250	0.788	0.786	0.785	0.784	0.782
21.500	0.781	0.780	0.778	0.777	0.776
21.750	0.775	0.773	0.772	0.771	0.770
22.000	0.768	0.767	0.766	0.765	0.763
22.250	0.762	0.761	0.760	0.758	0.757
22.500	0.756	0.755	0.753	0.752	0.751
22.750	0.750	0.748	0.747	0.746	0.745
23.000	0.744	0.742	0.741	0.740	0.739
23.250	0.738	0.737	0.735	0.734	0.733
23.500	0.732	0.731	0.730	0.729	0.728
23.750	0.727	0.726	0.724	0.723	0.722
24.000	0.721	0.720	0.718	0.715	0.713
24.250	0.709	0.706	0.703	0.700	0.696
24.500	0.693	0.690	0.687	0.684	0.681
24.750	0.678	0.675	0.672	0.669	0.666
25.000	0.663	0.660	0.658	0.655	0.652
25.250	0.649	0.647	0.644	0.641	0.639
25.500	0.636	0.634	0.631	0.629	0.626
25.750	0.624	0.622	0.619	0.617	0.614
26.000	0.612	0.610	0.608	0.605	0.603
26.250	0.601	0.599	0.597	0.595	0.592
26.500	0.590	0.588	0.586	0.584	0.581
26.750	0.579	0.577	0.574	0.572	0.569
27.000	0.567	0.564	0.561	0.558	0.555
27.250	0.552	0.548	0.545	0.542	0.539
27.500	0.535	0.532	0.529	0.525	0.522
27.750	0.519	0.515	0.512	0.509	0.505
28.000	0.502	0.499	0.495	0.492	0.489
28.250	0.485	0.482	0.479	0.475	0.472
28.500	0.469	0.465	0.461	0.458	0.454
28.750	0.451	0.447	0.444	0.440	0.437
29.000	0.433	0.430	0.426	0.423	0.420
29.250	0.416	0.413	0.409	0.406	0.402
29.500	0.399	0.396	0.392	0.389	0.386
29.750	0.382	0.379	0.375	0.372	0.368
30.000	0.365	0.361	0.358	0.354	0.351
30.250	0.347	0.344	0.341	0.337	0.334

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #11
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
30.500	0.331	0.327	0.324	0.321	0.317
30.750	0.314	0.311	0.307	0.304	0.301
31.000	0.298	0.294	0.291	0.288	0.284
31.250	0.281	0.278	0.274	0.271	0.268
31.500	0.264	0.261	0.258	0.254	0.251
31.750	0.248	0.245	0.242	0.238	0.235
32.000	0.232	0.229	0.226	0.223	0.219
32.250	0.216	0.213	0.209	0.206	0.203
32.500	0.199	0.196	0.192	0.189	0.186
32.750	0.183	0.180	0.177	0.174	0.171
33.000	0.168	0.165	0.162	0.159	0.157
33.250	0.154	0.151	0.149	0.146	0.143
33.500	0.140	0.137	0.134	0.132	0.129
33.750	0.126	0.124	0.121	0.119	0.116
34.000	0.114	0.111	0.108	0.106	0.103
34.250	0.101	0.098	0.096	0.093	0.091
34.500	0.088	0.085	0.082	0.080	0.077
34.750	0.075	0.072	0.070	0.068	0.065
35.000	0.063	0.061	0.059	0.057	0.054
35.250	0.051	0.049	0.046	0.044	0.041
35.500	0.039	0.037	0.035	0.033	0.031
35.750	0.029	0.026	0.023	0.021	0.019
36.000	0.016	0.014	0.013	0.011	0.008
36.250	0.006	0.003	0.001	0.000	0.000
36.500	0.000	0.000	0.000	0.000	0.000
36.750	0.000	0.000	0.000	0.000	0.000
37.000	0.000	0.000	0.000	0.000	0.000
37.250	0.000	0.000	0.000	0.000	0.000
37.500	0.000	0.000	0.000	0.000	0.000
37.750	0.000	0.000	0.000	0.000	0.000
38.000	0.000	0.000	0.000	0.000	0.000
38.250	0.000	0.000	0.000	0.000	0.000
38.500	0.000	0.000	0.000	0.000	0.000
38.750	0.000	0.000	0.000	0.000	0.000
39.000	0.000	0.000	0.000	0.000	0.000
39.250	0.000	0.000	0.000	0.000	0.000
39.500	0.000	0.000	0.000	0.000	0.000
39.750	0.000	0.000	0.000	0.000	0.000
40.000	0.000	0.000	0.000	0.000	0.000
40.250	0.000	0.000	0.000	0.000	0.000
40.500	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #11
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
40.750	0.000	0.000	0.000	0.000	0.000
41.000	0.000	0.000	0.000	0.000	0.000
41.250	0.000	0.000	0.000	0.000	0.000
41.500	0.000	0.000	0.000	0.000	0.000
41.750	0.000	0.000	0.000	0.000	0.000
42.000	0.000	0.000	0.000	0.000	0.000
42.250	0.000	0.000	0.000	0.000	0.000
42.500	0.000	0.000	0.000	0.000	0.000
42.750	0.000	0.000	0.000	0.000	0.000
43.000	0.000	0.000	0.000	0.000	0.000
43.250	0.000	0.000	0.000	0.000	0.000
43.500	0.000	0.000	0.000	0.000	0.000
43.750	0.000	0.000	0.000	0.000	0.000
44.000	0.000	0.000	0.000	0.000	0.000
44.250	0.000	0.000	0.000	0.000	0.000
44.500	0.000	0.000	0.000	0.000	0.000
44.750	0.000	0.000	0.000	0.000	0.000
45.000	0.000	0.000	0.000	0.000	0.000
45.250	0.000	0.000	0.000	0.000	0.000
45.500	0.000	0.000	0.000	0.000	0.000
45.750	0.000	0.000	0.000	0.000	0.000
46.000	0.000	0.000	0.000	0.000	0.000
46.250	0.000	0.000	0.000	0.000	0.000
46.500	0.000	0.000	0.000	0.000	0.000
46.750	0.000	0.000	0.000	0.000	0.000
47.000	0.000	0.000	0.000	0.000	0.000
47.250	0.000	0.000	0.000	0.000	0.000
47.500	0.000	0.000	0.000	0.000	0.000
47.750	0.000	0.000	0.000	0.000	0.000
48.000	0.000	0.000	0.000	0.000	0.000
48.250	0.000	0.000	0.000	0.000	0.000
48.500	0.000	0.000	0.000	0.000	0.000
48.750	0.000	0.000	0.000	0.000	0.000
49.000	0.000	0.000	0.000	0.000	0.000
49.250	0.000	0.000	0.000	0.000	0.000
49.500	0.000	0.000	0.000	0.000	0.000
49.750	0.000	0.000	0.000	0.000	0.000
50.000	0.000	0.000	0.000	0.000	0.000
50.250	0.000	0.000	0.000	0.000	0.000
50.500	0.000	0.000	0.000	0.000	0.000
50.750	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #11
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
51.000	0.000	0.000	0.000	0.000	0.000
51.250	0.000	0.000	0.000	0.000	0.000
51.500	0.000	0.000	0.000	0.000	0.000
51.750	0.000	0.000	0.000	0.000	0.000
52.000	0.000	0.000	0.000	0.000	0.000
52.250	0.000	0.000	0.000	0.000	0.000
52.500	0.000	0.000	0.000	0.000	0.000
52.750	0.000	0.000	0.000	0.000	0.000
53.000	0.000	0.000	0.000	0.000	0.000
53.250	0.000	0.000	0.000	0.000	0.000
53.500	0.000	0.000	0.000	0.000	0.000
53.750	0.000	0.000	0.000	0.000	0.000
54.000	0.000	0.000	0.000	0.000	0.000
54.250	0.000	0.000	0.000	0.000	0.000
54.500	0.000	0.000	0.000	0.000	0.000
54.750	0.000	0.000	0.000	0.000	0.000
55.000	0.000	0.000	0.000	0.000	0.000
55.250	0.000	0.000	0.000	0.000	0.000
55.500	0.000	0.000	0.000	0.000	0.000
55.750	0.000	0.000	0.000	0.000	0.000
56.000	0.000	0.000	0.000	0.000	0.000
56.250	0.000	0.000	0.000	0.000	0.000
56.500	0.000	0.000	0.000	0.000	0.000
56.750	0.000	0.000	0.000	0.000	0.000
57.000	0.000	0.000	0.000	0.000	0.000
57.250	0.000	0.000	0.000	0.000	0.000
57.500	0.000	0.000	0.000	0.000	0.000
57.750	0.000	0.000	0.000	0.000	0.000
58.000	0.000	0.000	0.000	0.000	0.000
58.250	0.000	0.000	0.000	0.000	0.000
58.500	0.000	0.000	0.000	0.000	0.000
58.750	0.000	0.000	0.000	0.000	0.000
59.000	0.000	0.000	0.000	0.000	0.000
59.250	0.000	0.000	0.000	0.000	0.000
59.500	0.000	0.000	0.000	0.000	0.000
59.750	0.000	0.000	0.000	0.000	0.000
60.000	0.000	0.000	0.000	0.000	0.000
60.250	0.000	0.000	0.000	0.000	0.000
60.500	0.000	0.000	0.000	0.000	0.000
60.750	0.000	0.000	0.000	0.000	0.000
61.000	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #11
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
61.250	0.000	0.000	0.000	0.000	0.000
61.500	0.000	0.000	0.000	0.000	0.000
61.750	0.000	0.000	0.000	0.000	0.000
62.000	0.000	0.000	0.000	0.000	0.000
62.250	0.000	0.000	0.000	0.000	0.000
62.500	0.000	0.000	0.000	0.000	0.000
62.750	0.000	0.000	0.000	0.000	0.000
63.000	0.000	0.000	0.000	0.000	0.000
63.250	0.000	0.000	0.000	0.000	0.000
63.500	0.000	0.000	0.000	0.000	0.000
63.750	0.000	0.000	0.000	0.000	0.000
64.000	0.000	0.000	0.000	0.000	0.000
64.250	0.000	0.000	0.000	0.000	0.000
64.500	0.000	0.000	0.000	0.000	0.000
64.750	0.000	0.000	0.000	0.000	0.000
65.000	0.000	0.000	0.000	0.000	0.000
65.250	0.000	0.000	0.000	0.000	0.000
65.500	0.000	0.000	0.000	0.000	0.000
65.750	0.000	0.000	0.000	0.000	0.000
66.000	0.000	0.000	0.000	0.000	0.000
66.250	0.000	0.000	0.000	0.000	0.000
66.500	0.000	0.000	0.000	0.000	0.000
66.750	0.000	0.000	0.000	0.000	0.000
67.000	0.000	0.000	0.000	0.000	0.000
67.250	0.000	0.000	0.000	0.000	0.000
67.500	0.000	0.000	0.000	0.000	0.000
67.750	0.000	0.000	0.000	0.000	0.000
68.000	0.000	0.000	0.000	0.000	0.000
68.250	0.000	0.000	0.000	0.000	0.000
68.500	0.000	0.000	0.000	0.000	0.000
68.750	0.000	0.000	0.000	0.000	0.000
69.000	0.000	0.000	0.000	0.000	0.000
69.250	0.000	0.000	0.000	0.000	0.000
69.500	0.000	0.000	0.000	0.000	0.000
69.750	0.000	0.000	0.000	0.000	0.000
70.000	0.000	0.000	0.000	0.000	0.000
70.250	0.000	0.000	0.000	0.000	0.000
70.500	0.000	0.000	0.000	0.000	0.000
70.750	0.000	0.000	0.000	0.000	0.000
71.000	0.000	0.000	0.000	0.000	0.000
71.250	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #11
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
71.500	0.000	0.000	0.000	0.000	0.000
71.750	0.000	0.000	0.000	0.000	0.000
72.000	0.000	0.000	0.000	0.000	0.000
72.250	0.000	0.000	0.000	0.000	0.000
72.500	0.000	0.000	0.000	0.000	0.000
72.750	0.000	0.000	0.000	0.000	0.000
73.000	0.000	0.000	0.000	0.000	0.000
73.250	0.000	0.000	0.000	0.000	0.000
73.500	0.000	0.000	0.000	0.000	0.000
73.750	0.000	0.000	0.000	0.000	0.000
74.000	0.000	0.000	0.000	0.000	0.000
74.250	0.000	0.000	0.000	0.000	0.000
74.500	0.000	0.000	0.000	0.000	0.000
74.750	0.000	0.000	0.000	0.000	0.000
75.000	0.000	0.000	0.000	0.000	0.000
75.250	0.000	0.000	0.000	0.000	0.000
75.500	0.000	0.000	0.000	0.000	0.000
75.750	0.000	0.000	0.000	0.000	0.000
76.000	0.000	0.000	0.000	0.000	0.000
76.250	0.000	0.000	0.000	0.000	0.000
76.500	0.000	0.000	0.000	0.000	0.000
76.750	0.000	0.000	0.000	0.000	0.000
77.000	0.000	0.000	0.000	0.000	0.000
77.250	0.000	0.000	0.000	0.000	0.000
77.500	0.000	0.000	0.000	0.000	0.000
77.750	0.000	0.000	0.000	0.000	0.000
78.000	0.000	0.000	0.000	0.000	0.000
78.250	0.000	0.000	0.000	0.000	0.000
78.500	0.000	0.000	0.000	0.000	0.000
78.750	0.000	0.000	0.000	0.000	0.000
79.000	0.000	0.000	0.000	0.000	0.000
79.250	0.000	0.000	0.000	0.000	0.000
79.500	0.000	0.000	0.000	0.000	0.000
79.750	0.000	0.000	0.000	0.000	0.000
80.000	0.000	0.000	0.000	0.000	0.000
80.250	0.000	0.000	0.000	0.000	0.000
80.500	0.000	0.000	0.000	0.000	0.000
80.750	0.000	0.000	0.000	0.000	0.000
81.000	0.000	0.000	0.000	0.000	0.000
81.250	0.000	0.000	0.000	0.000	0.000
81.500	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #11
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
81.750	0.000	0.000	0.000	0.000	0.000
82.000	0.000	0.000	0.000	0.000	0.000
82.250	0.000	0.000	0.000	0.000	0.000
82.500	0.000	0.000	0.000	0.000	0.000
82.750	0.000	0.000	0.000	0.000	0.000
83.000	0.000	0.000	0.000	0.000	0.000
83.250	0.000	0.000	0.000	0.000	0.000
83.500	0.000	0.000	0.000	0.000	0.000
83.750	0.000	0.000	0.000	0.000	0.000
84.000	0.000	0.000	0.000	0.000	0.000
84.250	0.000	0.000	0.000	0.000	0.000
84.500	0.000	0.000	0.000	0.000	0.000
84.750	0.000	0.000	0.000	0.000	0.000
85.000	0.000	0.000	0.000	0.000	0.000
85.250	0.000	0.000	0.000	0.000	0.000
85.500	0.000	0.000	0.000	0.000	0.000
85.750	0.000	0.000	0.000	0.000	0.000
86.000	0.000	0.000	0.000	0.000	0.000
86.250	0.000	0.000	0.000	0.000	0.000
86.500	0.000	0.000	0.000	0.000	0.000
86.750	0.000	0.000	0.000	0.000	0.000
87.000	0.000	0.000	0.000	0.000	0.000
87.250	0.000	0.000	0.000	0.000	0.000
87.500	0.000	0.000	0.000	0.000	0.000
87.750	0.000	0.000	0.000	0.000	0.000
88.000	0.000	0.000	0.000	0.000	0.000
88.250	0.000	0.000	0.000	0.000	0.000
88.500	0.000	0.000	0.000	0.000	0.000
88.750	0.000	0.000	0.000	0.000	0.000
89.000	0.000	0.000	0.000	0.000	0.000
89.250	0.000	0.000	0.000	0.000	0.000
89.500	0.000	0.000	0.000	0.000	0.000
89.750	0.000	0.000	0.000	0.000	0.000
90.000	0.000	0.000	0.000	0.000	0.000
90.250	0.000	0.000	0.000	0.000	0.000
90.500	0.000	0.000	0.000	0.000	0.000
90.750	0.000	0.000	0.000	0.000	0.000
91.000	0.000	0.000	0.000	0.000	0.000
91.250	0.000	0.000	0.000	0.000	0.000
91.500	0.000	0.000	0.000	0.000	0.000
91.750	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #11
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
92.000	0.000	0.000	0.000	0.000	0.000
92.250	0.000	0.000	0.000	0.000	0.000
92.500	0.000	0.000	0.000	0.000	0.000
92.750	0.000	0.000	0.000	0.000	0.000
93.000	0.000	0.000	0.000	0.000	0.000
93.250	0.000	0.000	0.000	0.000	0.000
93.500	0.000	0.000	0.000	0.000	0.000
93.750	0.000	0.000	0.000	0.000	0.000
94.000	0.000	0.000	0.000	0.000	0.000
94.250	0.000	0.000	0.000	0.000	0.000
94.500	0.000	0.000	0.000	0.000	0.000
94.750	0.000	0.000	0.000	0.000	0.000
95.000	0.000	0.000	0.000	0.000	0.000
95.250	0.000	0.000	0.000	0.000	0.000
95.500	0.000	0.000	0.000	0.000	0.000
95.750	0.000	0.000	0.000	0.000	0.000
96.000	0.000	0.000	0.000	0.000	0.000
96.250	0.000	0.000	0.000	0.000	0.000
96.500	0.000	0.000	0.000	0.000	0.000
96.750	0.000	0.000	0.000	0.000	0.000
97.000	0.000	0.000	0.000	0.000	0.000
97.250	0.000	0.000	0.000	0.000	0.000
97.500	0.000	0.000	0.000	0.000	0.000
97.750	0.000	0.000	0.000	0.000	0.000
98.000	0.000	0.000	0.000	0.000	0.000
98.250	0.000	0.000	0.000	0.000	0.000
98.500	0.000	0.000	0.000	0.000	0.000
98.750	0.000	0.000	0.000	0.000	0.000
99.000	0.000	0.000	0.000	0.000	0.000
99.250	0.000	0.000	0.000	0.000	0.000
99.500	0.000	0.000	0.000	0.000	0.000
99.750	0.000	0.000	0.000	0.000	0.000
100.000	0.000	(N/A)	(N/A)	(N/A)	(N/A)

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #12
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
0.000	0.000	0.000	0.000	0.000	0.000
0.250	0.000	0.000	0.000	0.000	0.000
0.500	0.000	0.000	0.000	0.000	0.000
0.750	0.000	0.000	0.000	0.000	0.000
1.000	0.000	0.000	0.000	0.000	0.000
1.250	0.000	0.000	0.000	0.001	0.001
1.500	0.001	0.001	0.001	0.001	0.002
1.750	0.002	0.002	0.002	0.003	0.003
2.000	0.003	0.003	0.004	0.004	0.004
2.250	0.005	0.005	0.005	0.005	0.005
2.500	0.006	0.006	0.006	0.006	0.007
2.750	0.007	0.007	0.007	0.008	0.008
3.000	0.008	0.008	0.009	0.009	0.009
3.250	0.010	0.010	0.010	0.011	0.011
3.500	0.011	0.012	0.012	0.012	0.012
3.750	0.013	0.013	0.013	0.013	0.014
4.000	0.014	0.014	0.015	0.015	0.015
4.250	0.015	0.016	0.016	0.016	0.017
4.500	0.017	0.017	0.018	0.018	0.018
4.750	0.019	0.019	0.019	0.020	0.020
5.000	0.020	0.021	0.021	0.021	0.022
5.250	0.022	0.023	0.023	0.023	0.024
5.500	0.024	0.024	0.025	0.025	0.025
5.750	0.026	0.026	0.026	0.027	0.027
6.000	0.027	0.028	0.028	0.028	0.029
6.250	0.029	0.029	0.030	0.030	0.031
6.500	0.031	0.032	0.032	0.033	0.033
6.750	0.034	0.034	0.035	0.036	0.036
7.000	0.037	0.037	0.038	0.039	0.040
7.250	0.040	0.041	0.042	0.042	0.043
7.500	0.044	0.045	0.045	0.046	0.047
7.750	0.048	0.049	0.050	0.051	0.052
8.000	0.053	0.054	0.054	0.055	0.056
8.250	0.057	0.058	0.059	0.060	0.060
8.500	0.061	0.062	0.063	0.064	0.065
8.750	0.065	0.066	0.067	0.067	0.068
9.000	0.069	0.070	0.070	0.071	0.072
9.250	0.073	0.074	0.075	0.076	0.077
9.500	0.079	0.080	0.081	0.082	0.084
9.750	0.085	0.087	0.088	0.090	0.091

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #12
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
10.000	0.093	0.095	0.096	0.098	0.099
10.250	0.101	0.102	0.104	0.106	0.108
10.500	0.110	0.112	0.115	0.118	0.121
10.750	0.125	0.128	0.133	0.137	0.140
11.000	0.145	0.150	0.155	0.161	0.168
11.250	0.175	0.183	0.191	0.200	0.209
11.500	0.218	0.229	0.241	0.254	0.267
11.750	0.283	0.301	0.322	0.347	0.383
12.000	0.428	0.491	0.572	0.626	0.641
12.250	0.638	0.628	0.616	0.602	0.589
12.500	0.577	0.565	0.552	0.539	0.526
12.750	0.513	0.501	0.489	0.478	0.468
13.000	0.457	0.447	0.437	0.427	0.418
13.250	0.409	0.401	0.393	0.386	0.378
13.500	0.371	0.364	0.357	0.350	0.344
13.750	0.338	0.333	0.328	0.323	0.319
14.000	0.315	0.311	0.307	0.303	0.299
14.250	0.296	0.292	0.289	0.286	0.283
14.500	0.280	0.277	0.274	0.272	0.269
14.750	0.267	0.264	0.262	0.260	0.257
15.000	0.255	0.253	0.251	0.249	0.247
15.250	0.245	0.243	0.242	0.240	0.238
15.500	0.236	0.235	0.233	0.232	0.230
15.750	0.229	0.227	0.226	0.224	0.223
16.000	0.222	0.220	0.219	0.218	0.217
16.250	0.215	0.214	0.213	0.212	0.211
16.500	0.210	0.209	0.208	0.207	0.206
16.750	0.204	0.203	0.203	0.201	0.200
17.000	0.199	0.198	0.197	0.196	0.195
17.250	0.194	0.193	0.191	0.190	0.189
17.500	0.188	0.187	0.185	0.184	0.182
17.750	0.181	0.180	0.178	0.177	0.175
18.000	0.174	0.172	0.171	0.169	0.168
18.250	0.166	0.165	0.163	0.162	0.161
18.500	0.159	0.158	0.156	0.155	0.154
18.750	0.152	0.151	0.150	0.149	0.147
19.000	0.146	0.145	0.144	0.143	0.141
19.250	0.140	0.139	0.138	0.137	0.136
19.500	0.135	0.133	0.132	0.131	0.129
19.750	0.128	0.127	0.126	0.124	0.123
20.000	0.122	0.121	0.120	0.119	0.117

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #12
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
20.250	0.116	0.115	0.114	0.113	0.112
20.500	0.111	0.110	0.109	0.108	0.107
20.750	0.106	0.106	0.105	0.104	0.103
21.000	0.102	0.101	0.100	0.100	0.099
21.250	0.098	0.097	0.096	0.096	0.095
21.500	0.094	0.093	0.092	0.091	0.091
21.750	0.090	0.089	0.088	0.087	0.087
22.000	0.086	0.085	0.085	0.084	0.084
22.250	0.083	0.082	0.082	0.081	0.081
22.500	0.080	0.080	0.079	0.079	0.078
22.750	0.078	0.078	0.077	0.077	0.076
23.000	0.076	0.076	0.075	0.075	0.074
23.250	0.074	0.074	0.073	0.073	0.073
23.500	0.072	0.072	0.072	0.072	0.071
23.750	0.071	0.071	0.070	0.070	0.070
24.000	0.070	0.069	0.068	0.067	0.065
24.250	0.064	0.063	0.061	0.060	0.058
24.500	0.057	0.056	0.055	0.054	0.053
24.750	0.052	0.051	0.050	0.049	0.048
25.000	0.047	0.046	0.045	0.044	0.043
25.250	0.042	0.041	0.040	0.039	0.038
25.500	0.037	0.036	0.035	0.034	0.034
25.750	0.033	0.032	0.031	0.030	0.029
26.000	0.029	0.028	0.027	0.026	0.026
26.250	0.025	0.024	0.023	0.023	0.022
26.500	0.021	0.020	0.019	0.019	0.018
26.750	0.017	0.016	0.016	0.015	0.015
27.000	0.014	0.013	0.013	0.012	0.011
27.250	0.011	0.010	0.009	0.009	0.008
27.500	0.008	0.007	0.006	0.006	0.005
27.750	0.005	0.005	0.004	0.003	0.003
28.000	0.002	0.002	0.001	0.001	0.000
28.250	0.000	0.000	0.000	0.000	0.000
28.500	0.000	0.000	0.000	0.000	0.000
28.750	0.000	0.000	0.000	0.000	0.000
29.000	0.000	0.000	0.000	0.000	0.000
29.250	0.000	0.000	0.000	0.000	0.000
29.500	0.000	0.000	0.000	0.000	0.000
29.750	0.000	0.000	0.000	0.000	0.000
30.000	0.000	0.000	0.000	0.000	0.000
30.250	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #12
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
30.500	0.000	0.000	0.000	0.000	0.000
30.750	0.000	0.000	0.000	0.000	0.000
31.000	0.000	0.000	0.000	0.000	0.000
31.250	0.000	0.000	0.000	0.000	0.000
31.500	0.000	0.000	0.000	0.000	0.000
31.750	0.000	0.000	0.000	0.000	0.000
32.000	0.000	0.000	0.000	0.000	0.000
32.250	0.000	0.000	0.000	0.000	0.000
32.500	0.000	0.000	0.000	0.000	0.000
32.750	0.000	0.000	0.000	0.000	0.000
33.000	0.000	0.000	0.000	0.000	0.000
33.250	0.000	0.000	0.000	0.000	0.000
33.500	0.000	0.000	0.000	0.000	0.000
33.750	0.000	0.000	0.000	0.000	0.000
34.000	0.000	0.000	0.000	0.000	0.000
34.250	0.000	0.000	0.000	0.000	0.000
34.500	0.000	0.000	0.000	0.000	0.000
34.750	0.000	0.000	0.000	0.000	0.000
35.000	0.000	0.000	0.000	0.000	0.000
35.250	0.000	0.000	0.000	0.000	0.000
35.500	0.000	0.000	0.000	0.000	0.000
35.750	0.000	0.000	0.000	0.000	0.000
36.000	0.000	0.000	0.000	0.000	0.000
36.250	0.000	0.000	0.000	0.000	0.000
36.500	0.000	0.000	0.000	0.000	0.000
36.750	0.000	0.000	0.000	0.000	0.000
37.000	0.000	0.000	0.000	0.000	0.000
37.250	0.000	0.000	0.000	0.000	0.000
37.500	0.000	0.000	0.000	0.000	0.000
37.750	0.000	0.000	0.000	0.000	0.000
38.000	0.000	0.000	0.000	0.000	0.000
38.250	0.000	0.000	0.000	0.000	0.000
38.500	0.000	0.000	0.000	0.000	0.000
38.750	0.000	0.000	0.000	0.000	0.000
39.000	0.000	0.000	0.000	0.000	0.000
39.250	0.000	0.000	0.000	0.000	0.000
39.500	0.000	0.000	0.000	0.000	0.000
39.750	0.000	0.000	0.000	0.000	0.000
40.000	0.000	0.000	0.000	0.000	0.000
40.250	0.000	0.000	0.000	0.000	0.000
40.500	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #12
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
40.750	0.000	0.000	0.000	0.000	0.000
41.000	0.000	0.000	0.000	0.000	0.000
41.250	0.000	0.000	0.000	0.000	0.000
41.500	0.000	0.000	0.000	0.000	0.000
41.750	0.000	0.000	0.000	0.000	0.000
42.000	0.000	0.000	0.000	0.000	0.000
42.250	0.000	0.000	0.000	0.000	0.000
42.500	0.000	0.000	0.000	0.000	0.000
42.750	0.000	0.000	0.000	0.000	0.000
43.000	0.000	0.000	0.000	0.000	0.000
43.250	0.000	0.000	0.000	0.000	0.000
43.500	0.000	0.000	0.000	0.000	0.000
43.750	0.000	0.000	0.000	0.000	0.000
44.000	0.000	0.000	0.000	0.000	0.000
44.250	0.000	0.000	0.000	0.000	0.000
44.500	0.000	0.000	0.000	0.000	0.000
44.750	0.000	0.000	0.000	0.000	0.000
45.000	0.000	0.000	0.000	0.000	0.000
45.250	0.000	0.000	0.000	0.000	0.000
45.500	0.000	0.000	0.000	0.000	0.000
45.750	0.000	0.000	0.000	0.000	0.000
46.000	0.000	0.000	0.000	0.000	0.000
46.250	0.000	0.000	0.000	0.000	0.000
46.500	0.000	0.000	0.000	0.000	0.000
46.750	0.000	0.000	0.000	0.000	0.000
47.000	0.000	0.000	0.000	0.000	0.000
47.250	0.000	0.000	0.000	0.000	0.000
47.500	0.000	0.000	0.000	0.000	0.000
47.750	0.000	0.000	0.000	0.000	0.000
48.000	0.000	0.000	0.000	0.000	0.000
48.250	0.000	0.000	0.000	0.000	0.000
48.500	0.000	0.000	0.000	0.000	0.000
48.750	0.000	0.000	0.000	0.000	0.000
49.000	0.000	0.000	0.000	0.000	0.000
49.250	0.000	0.000	0.000	0.000	0.000
49.500	0.000	0.000	0.000	0.000	0.000
49.750	0.000	0.000	0.000	0.000	0.000
50.000	0.000	0.000	0.000	0.000	0.000
50.250	0.000	0.000	0.000	0.000	0.000
50.500	0.000	0.000	0.000	0.000	0.000
50.750	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #12
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
51.000	0.000	0.000	0.000	0.000	0.000
51.250	0.000	0.000	0.000	0.000	0.000
51.500	0.000	0.000	0.000	0.000	0.000
51.750	0.000	0.000	0.000	0.000	0.000
52.000	0.000	0.000	0.000	0.000	0.000
52.250	0.000	0.000	0.000	0.000	0.000
52.500	0.000	0.000	0.000	0.000	0.000
52.750	0.000	0.000	0.000	0.000	0.000
53.000	0.000	0.000	0.000	0.000	0.000
53.250	0.000	0.000	0.000	0.000	0.000
53.500	0.000	0.000	0.000	0.000	0.000
53.750	0.000	0.000	0.000	0.000	0.000
54.000	0.000	0.000	0.000	0.000	0.000
54.250	0.000	0.000	0.000	0.000	0.000
54.500	0.000	0.000	0.000	0.000	0.000
54.750	0.000	0.000	0.000	0.000	0.000
55.000	0.000	0.000	0.000	0.000	0.000
55.250	0.000	0.000	0.000	0.000	0.000
55.500	0.000	0.000	0.000	0.000	0.000
55.750	0.000	0.000	0.000	0.000	0.000
56.000	0.000	0.000	0.000	0.000	0.000
56.250	0.000	0.000	0.000	0.000	0.000
56.500	0.000	0.000	0.000	0.000	0.000
56.750	0.000	0.000	0.000	0.000	0.000
57.000	0.000	0.000	0.000	0.000	0.000
57.250	0.000	0.000	0.000	0.000	0.000
57.500	0.000	0.000	0.000	0.000	0.000
57.750	0.000	0.000	0.000	0.000	0.000
58.000	0.000	0.000	0.000	0.000	0.000
58.250	0.000	0.000	0.000	0.000	0.000
58.500	0.000	0.000	0.000	0.000	0.000
58.750	0.000	0.000	0.000	0.000	0.000
59.000	0.000	0.000	0.000	0.000	0.000
59.250	0.000	0.000	0.000	0.000	0.000
59.500	0.000	0.000	0.000	0.000	0.000
59.750	0.000	0.000	0.000	0.000	0.000
60.000	0.000	0.000	0.000	0.000	0.000
60.250	0.000	0.000	0.000	0.000	0.000
60.500	0.000	0.000	0.000	0.000	0.000
60.750	0.000	0.000	0.000	0.000	0.000
61.000	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #12
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
61.250	0.000	0.000	0.000	0.000	0.000
61.500	0.000	0.000	0.000	0.000	0.000
61.750	0.000	0.000	0.000	0.000	0.000
62.000	0.000	0.000	0.000	0.000	0.000
62.250	0.000	0.000	0.000	0.000	0.000
62.500	0.000	0.000	0.000	0.000	0.000
62.750	0.000	0.000	0.000	0.000	0.000
63.000	0.000	0.000	0.000	0.000	0.000
63.250	0.000	0.000	0.000	0.000	0.000
63.500	0.000	0.000	0.000	0.000	0.000
63.750	0.000	0.000	0.000	0.000	0.000
64.000	0.000	0.000	0.000	0.000	0.000
64.250	0.000	0.000	0.000	0.000	0.000
64.500	0.000	0.000	0.000	0.000	0.000
64.750	0.000	0.000	0.000	0.000	0.000
65.000	0.000	0.000	0.000	0.000	0.000
65.250	0.000	0.000	0.000	0.000	0.000
65.500	0.000	0.000	0.000	0.000	0.000
65.750	0.000	0.000	0.000	0.000	0.000
66.000	0.000	0.000	0.000	0.000	0.000
66.250	0.000	0.000	0.000	0.000	0.000
66.500	0.000	0.000	0.000	0.000	0.000
66.750	0.000	0.000	0.000	0.000	0.000
67.000	0.000	0.000	0.000	0.000	0.000
67.250	0.000	0.000	0.000	0.000	0.000
67.500	0.000	0.000	0.000	0.000	0.000
67.750	0.000	0.000	0.000	0.000	0.000
68.000	0.000	0.000	0.000	0.000	0.000
68.250	0.000	0.000	0.000	0.000	0.000
68.500	0.000	0.000	0.000	0.000	0.000
68.750	0.000	0.000	0.000	0.000	0.000
69.000	0.000	0.000	0.000	0.000	0.000
69.250	0.000	0.000	0.000	0.000	0.000
69.500	0.000	0.000	0.000	0.000	0.000
69.750	0.000	0.000	0.000	0.000	0.000
70.000	0.000	0.000	0.000	0.000	0.000
70.250	0.000	0.000	0.000	0.000	0.000
70.500	0.000	0.000	0.000	0.000	0.000
70.750	0.000	0.000	0.000	0.000	0.000
71.000	0.000	0.000	0.000	0.000	0.000
71.250	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #12
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
71.500	0.000	0.000	0.000	0.000	0.000
71.750	0.000	0.000	0.000	0.000	0.000
72.000	0.000	0.000	0.000	0.000	0.000
72.250	0.000	0.000	0.000	0.000	0.000
72.500	0.000	0.000	0.000	0.000	0.000
72.750	0.000	0.000	0.000	0.000	0.000
73.000	0.000	0.000	0.000	0.000	0.000
73.250	0.000	0.000	0.000	0.000	0.000
73.500	0.000	0.000	0.000	0.000	0.000
73.750	0.000	0.000	0.000	0.000	0.000
74.000	0.000	0.000	0.000	0.000	0.000
74.250	0.000	0.000	0.000	0.000	0.000
74.500	0.000	0.000	0.000	0.000	0.000
74.750	0.000	0.000	0.000	0.000	0.000
75.000	0.000	0.000	0.000	0.000	0.000
75.250	0.000	0.000	0.000	0.000	0.000
75.500	0.000	0.000	0.000	0.000	0.000
75.750	0.000	0.000	0.000	0.000	0.000
76.000	0.000	0.000	0.000	0.000	0.000
76.250	0.000	0.000	0.000	0.000	0.000
76.500	0.000	0.000	0.000	0.000	0.000
76.750	0.000	0.000	0.000	0.000	0.000
77.000	0.000	0.000	0.000	0.000	0.000
77.250	0.000	0.000	0.000	0.000	0.000
77.500	0.000	0.000	0.000	0.000	0.000
77.750	0.000	0.000	0.000	0.000	0.000
78.000	0.000	0.000	0.000	0.000	0.000
78.250	0.000	0.000	0.000	0.000	0.000
78.500	0.000	0.000	0.000	0.000	0.000
78.750	0.000	0.000	0.000	0.000	0.000
79.000	0.000	0.000	0.000	0.000	0.000
79.250	0.000	0.000	0.000	0.000	0.000
79.500	0.000	0.000	0.000	0.000	0.000
79.750	0.000	0.000	0.000	0.000	0.000
80.000	0.000	0.000	0.000	0.000	0.000
80.250	0.000	0.000	0.000	0.000	0.000
80.500	0.000	0.000	0.000	0.000	0.000
80.750	0.000	0.000	0.000	0.000	0.000
81.000	0.000	0.000	0.000	0.000	0.000
81.250	0.000	0.000	0.000	0.000	0.000
81.500	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #12
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
81.750	0.000	0.000	0.000	0.000	0.000
82.000	0.000	0.000	0.000	0.000	0.000
82.250	0.000	0.000	0.000	0.000	0.000
82.500	0.000	0.000	0.000	0.000	0.000
82.750	0.000	0.000	0.000	0.000	0.000
83.000	0.000	0.000	0.000	0.000	0.000
83.250	0.000	0.000	0.000	0.000	0.000
83.500	0.000	0.000	0.000	0.000	0.000
83.750	0.000	0.000	0.000	0.000	0.000
84.000	0.000	0.000	0.000	0.000	0.000
84.250	0.000	0.000	0.000	0.000	0.000
84.500	0.000	0.000	0.000	0.000	0.000
84.750	0.000	0.000	0.000	0.000	0.000
85.000	0.000	0.000	0.000	0.000	0.000
85.250	0.000	0.000	0.000	0.000	0.000
85.500	0.000	0.000	0.000	0.000	0.000
85.750	0.000	0.000	0.000	0.000	0.000
86.000	0.000	0.000	0.000	0.000	0.000
86.250	0.000	0.000	0.000	0.000	0.000
86.500	0.000	0.000	0.000	0.000	0.000
86.750	0.000	0.000	0.000	0.000	0.000
87.000	0.000	0.000	0.000	0.000	0.000
87.250	0.000	0.000	0.000	0.000	0.000
87.500	0.000	0.000	0.000	0.000	0.000
87.750	0.000	0.000	0.000	0.000	0.000
88.000	0.000	0.000	0.000	0.000	0.000
88.250	0.000	0.000	0.000	0.000	0.000
88.500	0.000	0.000	0.000	0.000	0.000
88.750	0.000	0.000	0.000	0.000	0.000
89.000	0.000	0.000	0.000	0.000	0.000
89.250	0.000	0.000	0.000	0.000	0.000
89.500	0.000	0.000	0.000	0.000	0.000
89.750	0.000	0.000	0.000	0.000	0.000
90.000	0.000	0.000	0.000	0.000	0.000
90.250	0.000	0.000	0.000	0.000	0.000
90.500	0.000	0.000	0.000	0.000	0.000
90.750	0.000	0.000	0.000	0.000	0.000
91.000	0.000	0.000	0.000	0.000	0.000
91.250	0.000	0.000	0.000	0.000	0.000
91.500	0.000	0.000	0.000	0.000	0.000
91.750	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #12
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
92.000	0.000	0.000	0.000	0.000	0.000
92.250	0.000	0.000	0.000	0.000	0.000
92.500	0.000	0.000	0.000	0.000	0.000
92.750	0.000	0.000	0.000	0.000	0.000
93.000	0.000	0.000	0.000	0.000	0.000
93.250	0.000	0.000	0.000	0.000	0.000
93.500	0.000	0.000	0.000	0.000	0.000
93.750	0.000	0.000	0.000	0.000	0.000
94.000	0.000	0.000	0.000	0.000	0.000
94.250	0.000	0.000	0.000	0.000	0.000
94.500	0.000	0.000	0.000	0.000	0.000
94.750	0.000	0.000	0.000	0.000	0.000
95.000	0.000	0.000	0.000	0.000	0.000
95.250	0.000	0.000	0.000	0.000	0.000
95.500	0.000	0.000	0.000	0.000	0.000
95.750	0.000	0.000	0.000	0.000	0.000
96.000	0.000	0.000	0.000	0.000	0.000
96.250	0.000	0.000	0.000	0.000	0.000
96.500	0.000	0.000	0.000	0.000	0.000
96.750	0.000	0.000	0.000	0.000	0.000
97.000	0.000	0.000	0.000	0.000	0.000
97.250	0.000	0.000	0.000	0.000	0.000
97.500	0.000	0.000	0.000	0.000	0.000
97.750	0.000	0.000	0.000	0.000	0.000
98.000	0.000	0.000	0.000	0.000	0.000
98.250	0.000	0.000	0.000	0.000	0.000
98.500	0.000	0.000	0.000	0.000	0.000
98.750	0.000	0.000	0.000	0.000	0.000
99.000	0.000	0.000	0.000	0.000	0.000
99.250	0.000	0.000	0.000	0.000	0.000
99.500	0.000	0.000	0.000	0.000	0.000
99.750	0.000	0.000	0.000	0.000	0.000
100.000	0.000	(N/A)	(N/A)	(N/A)	(N/A)

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #13
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
0.000	0.000	0.000	0.000	0.000	0.000
0.250	0.000	0.000	0.000	0.000	0.000
0.500	0.000	0.000	0.000	0.000	0.000
0.750	0.000	0.000	0.000	0.000	0.000
1.000	0.000	0.000	0.000	0.000	0.000
1.250	0.000	0.000	0.000	0.000	0.000
1.500	0.000	0.000	0.000	0.000	0.000
1.750	0.000	0.000	0.000	0.000	0.000
2.000	0.000	0.000	0.000	0.000	0.000
2.250	0.000	0.000	0.000	0.000	0.000
2.500	0.000	0.000	0.000	0.000	0.000
2.750	0.000	0.000	0.000	0.000	0.000
3.000	0.000	0.000	0.000	0.000	0.000
3.250	0.000	0.000	0.000	0.000	0.000
3.500	0.000	0.000	0.000	0.000	0.000
3.750	0.000	0.000	0.000	0.000	0.000
4.000	0.000	0.000	0.000	0.001	0.001
4.250	0.001	0.001	0.001	0.001	0.001
4.500	0.001	0.001	0.001	0.001	0.001
4.750	0.001	0.001	0.001	0.001	0.001
5.000	0.001	0.001	0.001	0.001	0.001
5.250	0.001	0.001	0.001	0.001	0.001
5.500	0.001	0.001	0.001	0.001	0.001
5.750	0.001	0.001	0.001	0.001	0.001
6.000	0.001	0.001	0.001	0.001	0.001
6.250	0.001	0.001	0.001	0.001	0.001
6.500	0.001	0.001	0.001	0.001	0.002
6.750	0.002	0.002	0.002	0.002	0.002
7.000	0.002	0.002	0.002	0.002	0.002
7.250	0.002	0.002	0.002	0.002	0.002
7.500	0.002	0.002	0.002	0.003	0.003
7.750	0.003	0.003	0.003	0.003	0.003
8.000	0.003	0.003	0.003	0.004	0.004
8.250	0.004	0.004	0.004	0.004	0.004
8.500	0.004	0.004	0.004	0.005	0.005
8.750	0.005	0.005	0.005	0.005	0.005
9.000	0.006	0.006	0.006	0.006	0.006
9.250	0.006	0.007	0.007	0.007	0.007
9.500	0.008	0.008	0.008	0.008	0.009
9.750	0.009	0.009	0.010	0.010	0.010

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #13
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
10.000	0.011	0.011	0.011	0.011	0.011
10.250	0.011	0.011	0.011	0.011	0.011
10.500	0.011	0.011	0.011	0.011	0.011
10.750	0.011	0.011	0.011	0.011	0.011
11.000	0.011	0.011	0.011	0.011	0.011
11.250	0.012	0.012	0.012	0.012	0.012
11.500	0.012	0.012	0.012	0.012	0.012
11.750	0.012	0.012	0.013	0.013	0.014
12.000	0.014	0.015	0.016	0.015	0.014
12.250	0.014	0.013	0.013	0.012	0.012
12.500	0.012	0.012	0.012	0.012	0.012
12.750	0.012	0.012	0.012	0.012	0.012
13.000	0.012	0.012	0.012	0.012	0.012
13.250	0.011	0.011	0.011	0.011	0.011
13.500	0.011	0.011	0.011	0.011	0.011
13.750	0.011	0.011	0.011	0.011	0.011
14.000	0.011	0.011	0.011	0.011	0.011
14.250	0.011	0.011	0.011	0.011	0.011
14.500	0.011	0.011	0.011	0.011	0.011
14.750	0.011	0.011	0.011	0.011	0.011
15.000	0.011	0.011	0.011	0.011	0.011
15.250	0.011	0.011	0.011	0.011	0.011
15.500	0.011	0.011	0.011	0.011	0.011
15.750	0.011	0.011	0.011	0.011	0.011
16.000	0.011	0.011	0.011	0.011	0.011
16.250	0.011	0.011	0.011	0.011	0.011
16.500	0.011	0.011	0.011	0.011	0.011
16.750	0.011	0.011	0.011	0.011	0.011
17.000	0.011	0.011	0.011	0.011	0.011
17.250	0.011	0.011	0.011	0.011	0.011
17.500	0.011	0.011	0.011	0.011	0.011
17.750	0.011	0.011	0.011	0.011	0.011
18.000	0.011	0.011	0.011	0.011	0.011
18.250	0.011	0.011	0.011	0.011	0.011
18.500	0.011	0.011	0.011	0.011	0.011
18.750	0.011	0.011	0.011	0.011	0.011
19.000	0.011	0.011	0.011	0.011	0.011
19.250	0.011	0.011	0.011	0.011	0.011
19.500	0.011	0.011	0.011	0.011	0.011
19.750	0.011	0.011	0.011	0.011	0.011
20.000	0.011	0.011	0.011	0.011	0.011

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #13
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
20.250	0.011	0.011	0.011	0.011	0.011
20.500	0.011	0.011	0.011	0.011	0.011
20.750	0.011	0.011	0.011	0.011	0.011
21.000	0.011	0.011	0.011	0.011	0.011
21.250	0.011	0.011	0.011	0.011	0.011
21.500	0.011	0.011	0.011	0.011	0.011
21.750	0.011	0.011	0.011	0.011	0.011
22.000	0.011	0.011	0.011	0.011	0.011
22.250	0.011	0.011	0.011	0.011	0.011
22.500	0.011	0.011	0.011	0.011	0.011
22.750	0.011	0.011	0.011	0.011	0.011
23.000	0.011	0.011	0.011	0.011	0.011
23.250	0.011	0.011	0.011	0.011	0.011
23.500	0.011	0.011	0.011	0.011	0.011
23.750	0.011	0.011	0.011	0.011	0.011
24.000	0.011	0.010	0.010	0.010	0.010
24.250	0.010	0.009	0.009	0.009	0.008
24.500	0.008	0.008	0.008	0.007	0.007
24.750	0.007	0.007	0.007	0.006	0.006
25.000	0.006	0.006	0.005	0.005	0.005
25.250	0.005	0.005	0.004	0.004	0.004
25.500	0.004	0.004	0.003	0.003	0.003
25.750	0.003	0.003	0.002	0.002	0.002
26.000	0.002	0.002	0.002	0.001	0.001
26.250	0.001	0.001	0.001	0.001	0.001
26.500	0.000	0.000	0.000	0.000	0.000
26.750	0.000	0.000	0.000	0.000	0.000
27.000	0.000	0.000	0.000	0.000	0.000
27.250	0.000	0.000	0.000	0.000	0.000
27.500	0.000	0.000	0.000	0.000	0.000
27.750	0.000	0.000	0.000	0.000	0.000
28.000	0.000	0.000	0.000	0.000	0.000
28.250	0.000	0.000	0.000	0.000	0.000
28.500	0.000	0.000	0.000	0.000	0.000
28.750	0.000	0.000	0.000	0.000	0.000
29.000	0.000	0.000	0.000	0.000	0.000
29.250	0.000	0.000	0.000	0.000	0.000
29.500	0.000	0.000	0.000	0.000	0.000
29.750	0.000	0.000	0.000	0.000	0.000
30.000	0.000	0.000	0.000	0.000	0.000
30.250	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #13
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
30.500	0.000	0.000	0.000	0.000	0.000
30.750	0.000	0.000	0.000	0.000	0.000
31.000	0.000	0.000	0.000	0.000	0.000
31.250	0.000	0.000	0.000	0.000	0.000
31.500	0.000	0.000	0.000	0.000	0.000
31.750	0.000	0.000	0.000	0.000	0.000
32.000	0.000	0.000	0.000	0.000	0.000
32.250	0.000	0.000	0.000	0.000	0.000
32.500	0.000	0.000	0.000	0.000	0.000
32.750	0.000	0.000	0.000	0.000	0.000
33.000	0.000	0.000	0.000	0.000	0.000
33.250	0.000	0.000	0.000	0.000	0.000
33.500	0.000	0.000	0.000	0.000	0.000
33.750	0.000	0.000	0.000	0.000	0.000
34.000	0.000	0.000	0.000	0.000	0.000
34.250	0.000	0.000	0.000	0.000	0.000
34.500	0.000	0.000	0.000	0.000	0.000
34.750	0.000	0.000	0.000	0.000	0.000
35.000	0.000	0.000	0.000	0.000	0.000
35.250	0.000	0.000	0.000	0.000	0.000
35.500	0.000	0.000	0.000	0.000	0.000
35.750	0.000	0.000	0.000	0.000	0.000
36.000	0.000	0.000	0.000	0.000	0.000
36.250	0.000	0.000	0.000	0.000	0.000
36.500	0.000	0.000	0.000	0.000	0.000
36.750	0.000	0.000	0.000	0.000	0.000
37.000	0.000	0.000	0.000	0.000	0.000
37.250	0.000	0.000	0.000	0.000	0.000
37.500	0.000	0.000	0.000	0.000	0.000
37.750	0.000	0.000	0.000	0.000	0.000
38.000	0.000	0.000	0.000	0.000	0.000
38.250	0.000	0.000	0.000	0.000	0.000
38.500	0.000	0.000	0.000	0.000	0.000
38.750	0.000	0.000	0.000	0.000	0.000
39.000	0.000	0.000	0.000	0.000	0.000
39.250	0.000	0.000	0.000	0.000	0.000
39.500	0.000	0.000	0.000	0.000	0.000
39.750	0.000	0.000	0.000	0.000	0.000
40.000	0.000	0.000	0.000	0.000	0.000
40.250	0.000	0.000	0.000	0.000	0.000
40.500	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #13
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
40.750	0.000	0.000	0.000	0.000	0.000
41.000	0.000	0.000	0.000	0.000	0.000
41.250	0.000	0.000	0.000	0.000	0.000
41.500	0.000	0.000	0.000	0.000	0.000
41.750	0.000	0.000	0.000	0.000	0.000
42.000	0.000	0.000	0.000	0.000	0.000
42.250	0.000	0.000	0.000	0.000	0.000
42.500	0.000	0.000	0.000	0.000	0.000
42.750	0.000	0.000	0.000	0.000	0.000
43.000	0.000	0.000	0.000	0.000	0.000
43.250	0.000	0.000	0.000	0.000	0.000
43.500	0.000	0.000	0.000	0.000	0.000
43.750	0.000	0.000	0.000	0.000	0.000
44.000	0.000	0.000	0.000	0.000	0.000
44.250	0.000	0.000	0.000	0.000	0.000
44.500	0.000	0.000	0.000	0.000	0.000
44.750	0.000	0.000	0.000	0.000	0.000
45.000	0.000	0.000	0.000	0.000	0.000
45.250	0.000	0.000	0.000	0.000	0.000
45.500	0.000	0.000	0.000	0.000	0.000
45.750	0.000	0.000	0.000	0.000	0.000
46.000	0.000	0.000	0.000	0.000	0.000
46.250	0.000	0.000	0.000	0.000	0.000
46.500	0.000	0.000	0.000	0.000	0.000
46.750	0.000	0.000	0.000	0.000	0.000
47.000	0.000	0.000	0.000	0.000	0.000
47.250	0.000	0.000	0.000	0.000	0.000
47.500	0.000	0.000	0.000	0.000	0.000
47.750	0.000	0.000	0.000	0.000	0.000
48.000	0.000	0.000	0.000	0.000	0.000
48.250	0.000	0.000	0.000	0.000	0.000
48.500	0.000	0.000	0.000	0.000	0.000
48.750	0.000	0.000	0.000	0.000	0.000
49.000	0.000	0.000	0.000	0.000	0.000
49.250	0.000	0.000	0.000	0.000	0.000
49.500	0.000	0.000	0.000	0.000	0.000
49.750	0.000	0.000	0.000	0.000	0.000
50.000	0.000	0.000	0.000	0.000	0.000
50.250	0.000	0.000	0.000	0.000	0.000
50.500	0.000	0.000	0.000	0.000	0.000
50.750	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #13
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
51.000	0.000	0.000	0.000	0.000	0.000
51.250	0.000	0.000	0.000	0.000	0.000
51.500	0.000	0.000	0.000	0.000	0.000
51.750	0.000	0.000	0.000	0.000	0.000
52.000	0.000	0.000	0.000	0.000	0.000
52.250	0.000	0.000	0.000	0.000	0.000
52.500	0.000	0.000	0.000	0.000	0.000
52.750	0.000	0.000	0.000	0.000	0.000
53.000	0.000	0.000	0.000	0.000	0.000
53.250	0.000	0.000	0.000	0.000	0.000
53.500	0.000	0.000	0.000	0.000	0.000
53.750	0.000	0.000	0.000	0.000	0.000
54.000	0.000	0.000	0.000	0.000	0.000
54.250	0.000	0.000	0.000	0.000	0.000
54.500	0.000	0.000	0.000	0.000	0.000
54.750	0.000	0.000	0.000	0.000	0.000
55.000	0.000	0.000	0.000	0.000	0.000
55.250	0.000	0.000	0.000	0.000	0.000
55.500	0.000	0.000	0.000	0.000	0.000
55.750	0.000	0.000	0.000	0.000	0.000
56.000	0.000	0.000	0.000	0.000	0.000
56.250	0.000	0.000	0.000	0.000	0.000
56.500	0.000	0.000	0.000	0.000	0.000
56.750	0.000	0.000	0.000	0.000	0.000
57.000	0.000	0.000	0.000	0.000	0.000
57.250	0.000	0.000	0.000	0.000	0.000
57.500	0.000	0.000	0.000	0.000	0.000
57.750	0.000	0.000	0.000	0.000	0.000
58.000	0.000	0.000	0.000	0.000	0.000
58.250	0.000	0.000	0.000	0.000	0.000
58.500	0.000	0.000	0.000	0.000	0.000
58.750	0.000	0.000	0.000	0.000	0.000
59.000	0.000	0.000	0.000	0.000	0.000
59.250	0.000	0.000	0.000	0.000	0.000
59.500	0.000	0.000	0.000	0.000	0.000
59.750	0.000	0.000	0.000	0.000	0.000
60.000	0.000	0.000	0.000	0.000	0.000
60.250	0.000	0.000	0.000	0.000	0.000
60.500	0.000	0.000	0.000	0.000	0.000
60.750	0.000	0.000	0.000	0.000	0.000
61.000	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #13
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
61.250	0.000	0.000	0.000	0.000	0.000
61.500	0.000	0.000	0.000	0.000	0.000
61.750	0.000	0.000	0.000	0.000	0.000
62.000	0.000	0.000	0.000	0.000	0.000
62.250	0.000	0.000	0.000	0.000	0.000
62.500	0.000	0.000	0.000	0.000	0.000
62.750	0.000	0.000	0.000	0.000	0.000
63.000	0.000	0.000	0.000	0.000	0.000
63.250	0.000	0.000	0.000	0.000	0.000
63.500	0.000	0.000	0.000	0.000	0.000
63.750	0.000	0.000	0.000	0.000	0.000
64.000	0.000	0.000	0.000	0.000	0.000
64.250	0.000	0.000	0.000	0.000	0.000
64.500	0.000	0.000	0.000	0.000	0.000
64.750	0.000	0.000	0.000	0.000	0.000
65.000	0.000	0.000	0.000	0.000	0.000
65.250	0.000	0.000	0.000	0.000	0.000
65.500	0.000	0.000	0.000	0.000	0.000
65.750	0.000	0.000	0.000	0.000	0.000
66.000	0.000	0.000	0.000	0.000	0.000
66.250	0.000	0.000	0.000	0.000	0.000
66.500	0.000	0.000	0.000	0.000	0.000
66.750	0.000	0.000	0.000	0.000	0.000
67.000	0.000	0.000	0.000	0.000	0.000
67.250	0.000	0.000	0.000	0.000	0.000
67.500	0.000	0.000	0.000	0.000	0.000
67.750	0.000	0.000	0.000	0.000	0.000
68.000	0.000	0.000	0.000	0.000	0.000
68.250	0.000	0.000	0.000	0.000	0.000
68.500	0.000	0.000	0.000	0.000	0.000
68.750	0.000	0.000	0.000	0.000	0.000
69.000	0.000	0.000	0.000	0.000	0.000
69.250	0.000	0.000	0.000	0.000	0.000
69.500	0.000	0.000	0.000	0.000	0.000
69.750	0.000	0.000	0.000	0.000	0.000
70.000	0.000	0.000	0.000	0.000	0.000
70.250	0.000	0.000	0.000	0.000	0.000
70.500	0.000	0.000	0.000	0.000	0.000
70.750	0.000	0.000	0.000	0.000	0.000
71.000	0.000	0.000	0.000	0.000	0.000
71.250	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #13
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
71.500	0.000	0.000	0.000	0.000	0.000
71.750	0.000	0.000	0.000	0.000	0.000
72.000	0.000	0.000	0.000	0.000	0.000
72.250	0.000	0.000	0.000	0.000	0.000
72.500	0.000	0.000	0.000	0.000	0.000
72.750	0.000	0.000	0.000	0.000	0.000
73.000	0.000	0.000	0.000	0.000	0.000
73.250	0.000	0.000	0.000	0.000	0.000
73.500	0.000	0.000	0.000	0.000	0.000
73.750	0.000	0.000	0.000	0.000	0.000
74.000	0.000	0.000	0.000	0.000	0.000
74.250	0.000	0.000	0.000	0.000	0.000
74.500	0.000	0.000	0.000	0.000	0.000
74.750	0.000	0.000	0.000	0.000	0.000
75.000	0.000	0.000	0.000	0.000	0.000
75.250	0.000	0.000	0.000	0.000	0.000
75.500	0.000	0.000	0.000	0.000	0.000
75.750	0.000	0.000	0.000	0.000	0.000
76.000	0.000	0.000	0.000	0.000	0.000
76.250	0.000	0.000	0.000	0.000	0.000
76.500	0.000	0.000	0.000	0.000	0.000
76.750	0.000	0.000	0.000	0.000	0.000
77.000	0.000	0.000	0.000	0.000	0.000
77.250	0.000	0.000	0.000	0.000	0.000
77.500	0.000	0.000	0.000	0.000	0.000
77.750	0.000	0.000	0.000	0.000	0.000
78.000	0.000	0.000	0.000	0.000	0.000
78.250	0.000	0.000	0.000	0.000	0.000
78.500	0.000	0.000	0.000	0.000	0.000
78.750	0.000	0.000	0.000	0.000	0.000
79.000	0.000	0.000	0.000	0.000	0.000
79.250	0.000	0.000	0.000	0.000	0.000
79.500	0.000	0.000	0.000	0.000	0.000
79.750	0.000	0.000	0.000	0.000	0.000
80.000	0.000	0.000	0.000	0.000	0.000
80.250	0.000	0.000	0.000	0.000	0.000
80.500	0.000	0.000	0.000	0.000	0.000
80.750	0.000	0.000	0.000	0.000	0.000
81.000	0.000	0.000	0.000	0.000	0.000
81.250	0.000	0.000	0.000	0.000	0.000
81.500	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #13
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
81.750	0.000	0.000	0.000	0.000	0.000
82.000	0.000	0.000	0.000	0.000	0.000
82.250	0.000	0.000	0.000	0.000	0.000
82.500	0.000	0.000	0.000	0.000	0.000
82.750	0.000	0.000	0.000	0.000	0.000
83.000	0.000	0.000	0.000	0.000	0.000
83.250	0.000	0.000	0.000	0.000	0.000
83.500	0.000	0.000	0.000	0.000	0.000
83.750	0.000	0.000	0.000	0.000	0.000
84.000	0.000	0.000	0.000	0.000	0.000
84.250	0.000	0.000	0.000	0.000	0.000
84.500	0.000	0.000	0.000	0.000	0.000
84.750	0.000	0.000	0.000	0.000	0.000
85.000	0.000	0.000	0.000	0.000	0.000
85.250	0.000	0.000	0.000	0.000	0.000
85.500	0.000	0.000	0.000	0.000	0.000
85.750	0.000	0.000	0.000	0.000	0.000
86.000	0.000	0.000	0.000	0.000	0.000
86.250	0.000	0.000	0.000	0.000	0.000
86.500	0.000	0.000	0.000	0.000	0.000
86.750	0.000	0.000	0.000	0.000	0.000
87.000	0.000	0.000	0.000	0.000	0.000
87.250	0.000	0.000	0.000	0.000	0.000
87.500	0.000	0.000	0.000	0.000	0.000
87.750	0.000	0.000	0.000	0.000	0.000
88.000	0.000	0.000	0.000	0.000	0.000
88.250	0.000	0.000	0.000	0.000	0.000
88.500	0.000	0.000	0.000	0.000	0.000
88.750	0.000	0.000	0.000	0.000	0.000
89.000	0.000	0.000	0.000	0.000	0.000
89.250	0.000	0.000	0.000	0.000	0.000
89.500	0.000	0.000	0.000	0.000	0.000
89.750	0.000	0.000	0.000	0.000	0.000
90.000	0.000	0.000	0.000	0.000	0.000
90.250	0.000	0.000	0.000	0.000	0.000
90.500	0.000	0.000	0.000	0.000	0.000
90.750	0.000	0.000	0.000	0.000	0.000
91.000	0.000	0.000	0.000	0.000	0.000
91.250	0.000	0.000	0.000	0.000	0.000
91.500	0.000	0.000	0.000	0.000	0.000
91.750	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #13
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
92.000	0.000	0.000	0.000	0.000	0.000
92.250	0.000	0.000	0.000	0.000	0.000
92.500	0.000	0.000	0.000	0.000	0.000
92.750	0.000	0.000	0.000	0.000	0.000
93.000	0.000	0.000	0.000	0.000	0.000
93.250	0.000	0.000	0.000	0.000	0.000
93.500	0.000	0.000	0.000	0.000	0.000
93.750	0.000	0.000	0.000	0.000	0.000
94.000	0.000	0.000	0.000	0.000	0.000
94.250	0.000	0.000	0.000	0.000	0.000
94.500	0.000	0.000	0.000	0.000	0.000
94.750	0.000	0.000	0.000	0.000	0.000
95.000	0.000	0.000	0.000	0.000	0.000
95.250	0.000	0.000	0.000	0.000	0.000
95.500	0.000	0.000	0.000	0.000	0.000
95.750	0.000	0.000	0.000	0.000	0.000
96.000	0.000	0.000	0.000	0.000	0.000
96.250	0.000	0.000	0.000	0.000	0.000
96.500	0.000	0.000	0.000	0.000	0.000
96.750	0.000	0.000	0.000	0.000	0.000
97.000	0.000	0.000	0.000	0.000	0.000
97.250	0.000	0.000	0.000	0.000	0.000
97.500	0.000	0.000	0.000	0.000	0.000
97.750	0.000	0.000	0.000	0.000	0.000
98.000	0.000	0.000	0.000	0.000	0.000
98.250	0.000	0.000	0.000	0.000	0.000
98.500	0.000	0.000	0.000	0.000	0.000
98.750	0.000	0.000	0.000	0.000	0.000
99.000	0.000	0.000	0.000	0.000	0.000
99.250	0.000	0.000	0.000	0.000	0.000
99.500	0.000	0.000	0.000	0.000	0.000
99.750	0.000	0.000	0.000	0.000	0.000
100.000	0.000	(N/A)	(N/A)	(N/A)	(N/A)

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #5
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
0.000	0.000	0.000	0.000	0.000	0.000
0.250	0.000	0.000	0.000	0.000	0.000
0.500	0.000	0.000	0.000	0.000	0.000
0.750	0.000	0.000	0.000	0.000	0.000
1.000	0.000	0.000	0.000	0.000	0.000
1.250	0.000	0.000	0.000	0.000	0.000
1.500	0.000	0.000	0.000	0.000	0.000
1.750	0.000	0.000	0.000	0.000	0.000
2.000	0.000	0.000	0.000	0.000	0.000
2.250	0.000	0.000	0.000	0.000	0.000
2.500	0.001	0.001	0.001	0.001	0.001
2.750	0.001	0.001	0.001	0.001	0.002
3.000	0.002	0.002	0.002	0.002	0.002
3.250	0.002	0.002	0.003	0.003	0.003
3.500	0.003	0.003	0.003	0.003	0.004
3.750	0.004	0.004	0.004	0.004	0.004
4.000	0.005	0.005	0.005	0.005	0.005
4.250	0.005	0.005	0.005	0.005	0.006
4.500	0.006	0.006	0.006	0.006	0.006
4.750	0.006	0.006	0.007	0.007	0.007
5.000	0.007	0.007	0.007	0.007	0.007
5.250	0.008	0.008	0.008	0.008	0.008
5.500	0.008	0.008	0.009	0.009	0.009
5.750	0.009	0.009	0.009	0.010	0.010
6.000	0.010	0.010	0.010	0.010	0.011
6.250	0.011	0.011	0.011	0.012	0.012
6.500	0.012	0.013	0.013	0.013	0.013
6.750	0.014	0.014	0.014	0.015	0.015
7.000	0.015	0.015	0.016	0.016	0.016
7.250	0.017	0.017	0.018	0.018	0.019
7.500	0.019	0.019	0.020	0.021	0.021
7.750	0.022	0.022	0.023	0.024	0.024
8.000	0.025	0.026	0.026	0.027	0.027
8.250	0.028	0.029	0.029	0.030	0.031
8.500	0.031	0.032	0.033	0.034	0.035
8.750	0.035	0.036	0.037	0.038	0.039
9.000	0.040	0.041	0.042	0.044	0.045
9.250	0.046	0.047	0.048	0.049	0.051
9.500	0.052	0.054	0.055	0.057	0.059
9.750	0.061	0.063	0.065	0.067	0.069

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #5
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
10.000	0.071	0.073	0.075	0.077	0.079
10.250	0.081	0.083	0.086	0.088	0.090
10.500	0.092	0.095	0.097	0.100	0.103
10.750	0.106	0.110	0.114	0.118	0.122
11.000	0.126	0.131	0.136	0.142	0.148
11.250	0.154	0.161	0.168	0.176	0.183
11.500	0.187	0.191	0.195	0.198	0.200
11.750	0.204	0.208	0.214	0.219	0.229
12.000	0.240	0.256	0.274	0.270	0.256
12.250	0.247	0.237	0.229	0.222	0.217
12.500	0.214	0.211	0.208	0.205	0.202
12.750	0.200	0.198	0.197	0.196	0.194
13.000	0.193	0.192	0.191	0.190	0.189
13.250	0.188	0.188	0.187	0.186	0.186
13.500	0.185	0.184	0.184	0.183	0.183
13.750	0.183	0.182	0.182	0.182	0.182
14.000	0.181	0.181	0.181	0.181	0.181
14.250	0.181	0.180	0.180	0.180	0.180
14.500	0.180	0.180	0.179	0.179	0.179
14.750	0.179	0.179	0.179	0.179	0.178
15.000	0.178	0.178	0.178	0.178	0.178
15.250	0.178	0.177	0.177	0.177	0.177
15.500	0.177	0.177	0.177	0.177	0.177
15.750	0.177	0.177	0.177	0.177	0.176
16.000	0.176	0.176	0.176	0.175	0.175
16.250	0.175	0.174	0.174	0.174	0.173
16.500	0.173	0.172	0.172	0.171	0.171
16.750	0.170	0.170	0.169	0.169	0.168
17.000	0.167	0.167	0.166	0.165	0.165
17.250	0.164	0.163	0.162	0.162	0.161
17.500	0.160	0.159	0.158	0.158	0.157
17.750	0.156	0.155	0.154	0.153	0.152
18.000	0.151	0.150	0.149	0.148	0.147
18.250	0.147	0.146	0.145	0.144	0.143
18.500	0.142	0.141	0.140	0.139	0.138
18.750	0.137	0.136	0.135	0.134	0.133
19.000	0.132	0.131	0.130	0.129	0.128
19.250	0.127	0.127	0.126	0.125	0.124
19.500	0.123	0.122	0.121	0.121	0.120
19.750	0.119	0.118	0.117	0.117	0.116
20.000	0.115	0.114	0.113	0.113	0.112

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #5
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
20.250	0.111	0.110	0.109	0.109	0.108
20.500	0.107	0.106	0.106	0.105	0.104
20.750	0.103	0.103	0.102	0.101	0.101
21.000	0.100	0.099	0.099	0.098	0.097
21.250	0.097	0.096	0.095	0.095	0.094
21.500	0.093	0.093	0.092	0.092	0.091
21.750	0.090	0.090	0.089	0.089	0.088
22.000	0.087	0.087	0.086	0.086	0.085
22.250	0.085	0.084	0.083	0.083	0.082
22.500	0.082	0.081	0.081	0.081	0.080
22.750	0.080	0.079	0.079	0.078	0.078
23.000	0.077	0.077	0.077	0.076	0.076
23.250	0.075	0.075	0.075	0.074	0.074
23.500	0.074	0.073	0.073	0.073	0.072
23.750	0.072	0.071	0.071	0.071	0.071
24.000	0.070	0.070	0.068	0.067	0.066
24.250	0.064	0.063	0.061	0.060	0.058
24.500	0.056	0.055	0.053	0.052	0.051
24.750	0.049	0.048	0.046	0.045	0.044
25.000	0.042	0.041	0.039	0.038	0.037
25.250	0.035	0.034	0.033	0.031	0.030
25.500	0.029	0.028	0.027	0.026	0.025
25.750	0.023	0.022	0.021	0.020	0.019
26.000	0.018	0.017	0.016	0.015	0.014
26.250	0.013	0.012	0.011	0.010	0.009
26.500	0.008	0.007	0.007	0.006	0.005
26.750	0.004	0.003	0.002	0.002	0.001
27.000	0.000	0.000	0.000	0.000	0.000
27.250	0.000	0.000	0.000	0.000	0.000
27.500	0.000	0.000	0.000	0.000	0.000
27.750	0.000	0.000	0.000	0.000	0.000
28.000	0.000	0.000	0.000	0.000	0.000
28.250	0.000	0.000	0.000	0.000	0.000
28.500	0.000	0.000	0.000	0.000	0.000
28.750	0.000	0.000	0.000	0.000	0.000
29.000	0.000	0.000	0.000	0.000	0.000
29.250	0.000	0.000	0.000	0.000	0.000
29.500	0.000	0.000	0.000	0.000	0.000
29.750	0.000	0.000	0.000	0.000	0.000
30.000	0.000	0.000	0.000	0.000	0.000
30.250	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #5
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
30.500	0.000	0.000	0.000	0.000	0.000
30.750	0.000	0.000	0.000	0.000	0.000
31.000	0.000	0.000	0.000	0.000	0.000
31.250	0.000	0.000	0.000	0.000	0.000
31.500	0.000	0.000	0.000	0.000	0.000
31.750	0.000	0.000	0.000	0.000	0.000
32.000	0.000	0.000	0.000	0.000	0.000
32.250	0.000	0.000	0.000	0.000	0.000
32.500	0.000	0.000	0.000	0.000	0.000
32.750	0.000	0.000	0.000	0.000	0.000
33.000	0.000	0.000	0.000	0.000	0.000
33.250	0.000	0.000	0.000	0.000	0.000
33.500	0.000	0.000	0.000	0.000	0.000
33.750	0.000	0.000	0.000	0.000	0.000
34.000	0.000	0.000	0.000	0.000	0.000
34.250	0.000	0.000	0.000	0.000	0.000
34.500	0.000	0.000	0.000	0.000	0.000
34.750	0.000	0.000	0.000	0.000	0.000
35.000	0.000	0.000	0.000	0.000	0.000
35.250	0.000	0.000	0.000	0.000	0.000
35.500	0.000	0.000	0.000	0.000	0.000
35.750	0.000	0.000	0.000	0.000	0.000
36.000	0.000	0.000	0.000	0.000	0.000
36.250	0.000	0.000	0.000	0.000	0.000
36.500	0.000	0.000	0.000	0.000	0.000
36.750	0.000	0.000	0.000	0.000	0.000
37.000	0.000	0.000	0.000	0.000	0.000
37.250	0.000	0.000	0.000	0.000	0.000
37.500	0.000	0.000	0.000	0.000	0.000
37.750	0.000	0.000	0.000	0.000	0.000
38.000	0.000	0.000	0.000	0.000	0.000
38.250	0.000	0.000	0.000	0.000	0.000
38.500	0.000	0.000	0.000	0.000	0.000
38.750	0.000	0.000	0.000	0.000	0.000
39.000	0.000	0.000	0.000	0.000	0.000
39.250	0.000	0.000	0.000	0.000	0.000
39.500	0.000	0.000	0.000	0.000	0.000
39.750	0.000	0.000	0.000	0.000	0.000
40.000	0.000	0.000	0.000	0.000	0.000
40.250	0.000	0.000	0.000	0.000	0.000
40.500	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #5
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
40.750	0.000	0.000	0.000	0.000	0.000
41.000	0.000	0.000	0.000	0.000	0.000
41.250	0.000	0.000	0.000	0.000	0.000
41.500	0.000	0.000	0.000	0.000	0.000
41.750	0.000	0.000	0.000	0.000	0.000
42.000	0.000	0.000	0.000	0.000	0.000
42.250	0.000	0.000	0.000	0.000	0.000
42.500	0.000	0.000	0.000	0.000	0.000
42.750	0.000	0.000	0.000	0.000	0.000
43.000	0.000	0.000	0.000	0.000	0.000
43.250	0.000	0.000	0.000	0.000	0.000
43.500	0.000	0.000	0.000	0.000	0.000
43.750	0.000	0.000	0.000	0.000	0.000
44.000	0.000	0.000	0.000	0.000	0.000
44.250	0.000	0.000	0.000	0.000	0.000
44.500	0.000	0.000	0.000	0.000	0.000
44.750	0.000	0.000	0.000	0.000	0.000
45.000	0.000	0.000	0.000	0.000	0.000
45.250	0.000	0.000	0.000	0.000	0.000
45.500	0.000	0.000	0.000	0.000	0.000
45.750	0.000	0.000	0.000	0.000	0.000
46.000	0.000	0.000	0.000	0.000	0.000
46.250	0.000	0.000	0.000	0.000	0.000
46.500	0.000	0.000	0.000	0.000	0.000
46.750	0.000	0.000	0.000	0.000	0.000
47.000	0.000	0.000	0.000	0.000	0.000
47.250	0.000	0.000	0.000	0.000	0.000
47.500	0.000	0.000	0.000	0.000	0.000
47.750	0.000	0.000	0.000	0.000	0.000
48.000	0.000	0.000	0.000	0.000	0.000
48.250	0.000	0.000	0.000	0.000	0.000
48.500	0.000	0.000	0.000	0.000	0.000
48.750	0.000	0.000	0.000	0.000	0.000
49.000	0.000	0.000	0.000	0.000	0.000
49.250	0.000	0.000	0.000	0.000	0.000
49.500	0.000	0.000	0.000	0.000	0.000
49.750	0.000	0.000	0.000	0.000	0.000
50.000	0.000	0.000	0.000	0.000	0.000
50.250	0.000	0.000	0.000	0.000	0.000
50.500	0.000	0.000	0.000	0.000	0.000
50.750	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #5
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
51.000	0.000	0.000	0.000	0.000	0.000
51.250	0.000	0.000	0.000	0.000	0.000
51.500	0.000	0.000	0.000	0.000	0.000
51.750	0.000	0.000	0.000	0.000	0.000
52.000	0.000	0.000	0.000	0.000	0.000
52.250	0.000	0.000	0.000	0.000	0.000
52.500	0.000	0.000	0.000	0.000	0.000
52.750	0.000	0.000	0.000	0.000	0.000
53.000	0.000	0.000	0.000	0.000	0.000
53.250	0.000	0.000	0.000	0.000	0.000
53.500	0.000	0.000	0.000	0.000	0.000
53.750	0.000	0.000	0.000	0.000	0.000
54.000	0.000	0.000	0.000	0.000	0.000
54.250	0.000	0.000	0.000	0.000	0.000
54.500	0.000	0.000	0.000	0.000	0.000
54.750	0.000	0.000	0.000	0.000	0.000
55.000	0.000	0.000	0.000	0.000	0.000
55.250	0.000	0.000	0.000	0.000	0.000
55.500	0.000	0.000	0.000	0.000	0.000
55.750	0.000	0.000	0.000	0.000	0.000
56.000	0.000	0.000	0.000	0.000	0.000
56.250	0.000	0.000	0.000	0.000	0.000
56.500	0.000	0.000	0.000	0.000	0.000
56.750	0.000	0.000	0.000	0.000	0.000
57.000	0.000	0.000	0.000	0.000	0.000
57.250	0.000	0.000	0.000	0.000	0.000
57.500	0.000	0.000	0.000	0.000	0.000
57.750	0.000	0.000	0.000	0.000	0.000
58.000	0.000	0.000	0.000	0.000	0.000
58.250	0.000	0.000	0.000	0.000	0.000
58.500	0.000	0.000	0.000	0.000	0.000
58.750	0.000	0.000	0.000	0.000	0.000
59.000	0.000	0.000	0.000	0.000	0.000
59.250	0.000	0.000	0.000	0.000	0.000
59.500	0.000	0.000	0.000	0.000	0.000
59.750	0.000	0.000	0.000	0.000	0.000
60.000	0.000	0.000	0.000	0.000	0.000
60.250	0.000	0.000	0.000	0.000	0.000
60.500	0.000	0.000	0.000	0.000	0.000
60.750	0.000	0.000	0.000	0.000	0.000
61.000	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #5
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
61.250	0.000	0.000	0.000	0.000	0.000
61.500	0.000	0.000	0.000	0.000	0.000
61.750	0.000	0.000	0.000	0.000	0.000
62.000	0.000	0.000	0.000	0.000	0.000
62.250	0.000	0.000	0.000	0.000	0.000
62.500	0.000	0.000	0.000	0.000	0.000
62.750	0.000	0.000	0.000	0.000	0.000
63.000	0.000	0.000	0.000	0.000	0.000
63.250	0.000	0.000	0.000	0.000	0.000
63.500	0.000	0.000	0.000	0.000	0.000
63.750	0.000	0.000	0.000	0.000	0.000
64.000	0.000	0.000	0.000	0.000	0.000
64.250	0.000	0.000	0.000	0.000	0.000
64.500	0.000	0.000	0.000	0.000	0.000
64.750	0.000	0.000	0.000	0.000	0.000
65.000	0.000	0.000	0.000	0.000	0.000
65.250	0.000	0.000	0.000	0.000	0.000
65.500	0.000	0.000	0.000	0.000	0.000
65.750	0.000	0.000	0.000	0.000	0.000
66.000	0.000	0.000	0.000	0.000	0.000
66.250	0.000	0.000	0.000	0.000	0.000
66.500	0.000	0.000	0.000	0.000	0.000
66.750	0.000	0.000	0.000	0.000	0.000
67.000	0.000	0.000	0.000	0.000	0.000
67.250	0.000	0.000	0.000	0.000	0.000
67.500	0.000	0.000	0.000	0.000	0.000
67.750	0.000	0.000	0.000	0.000	0.000
68.000	0.000	0.000	0.000	0.000	0.000
68.250	0.000	0.000	0.000	0.000	0.000
68.500	0.000	0.000	0.000	0.000	0.000
68.750	0.000	0.000	0.000	0.000	0.000
69.000	0.000	0.000	0.000	0.000	0.000
69.250	0.000	0.000	0.000	0.000	0.000
69.500	0.000	0.000	0.000	0.000	0.000
69.750	0.000	0.000	0.000	0.000	0.000
70.000	0.000	0.000	0.000	0.000	0.000
70.250	0.000	0.000	0.000	0.000	0.000
70.500	0.000	0.000	0.000	0.000	0.000
70.750	0.000	0.000	0.000	0.000	0.000
71.000	0.000	0.000	0.000	0.000	0.000
71.250	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #5
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
71.500	0.000	0.000	0.000	0.000	0.000
71.750	0.000	0.000	0.000	0.000	0.000
72.000	0.000	0.000	0.000	0.000	0.000
72.250	0.000	0.000	0.000	0.000	0.000
72.500	0.000	0.000	0.000	0.000	0.000
72.750	0.000	0.000	0.000	0.000	0.000
73.000	0.000	0.000	0.000	0.000	0.000
73.250	0.000	0.000	0.000	0.000	0.000
73.500	0.000	0.000	0.000	0.000	0.000
73.750	0.000	0.000	0.000	0.000	0.000
74.000	0.000	0.000	0.000	0.000	0.000
74.250	0.000	0.000	0.000	0.000	0.000
74.500	0.000	0.000	0.000	0.000	0.000
74.750	0.000	0.000	0.000	0.000	0.000
75.000	0.000	0.000	0.000	0.000	0.000
75.250	0.000	0.000	0.000	0.000	0.000
75.500	0.000	0.000	0.000	0.000	0.000
75.750	0.000	0.000	0.000	0.000	0.000
76.000	0.000	0.000	0.000	0.000	0.000
76.250	0.000	0.000	0.000	0.000	0.000
76.500	0.000	0.000	0.000	0.000	0.000
76.750	0.000	0.000	0.000	0.000	0.000
77.000	0.000	0.000	0.000	0.000	0.000
77.250	0.000	0.000	0.000	0.000	0.000
77.500	0.000	0.000	0.000	0.000	0.000
77.750	0.000	0.000	0.000	0.000	0.000
78.000	0.000	0.000	0.000	0.000	0.000
78.250	0.000	0.000	0.000	0.000	0.000
78.500	0.000	0.000	0.000	0.000	0.000
78.750	0.000	0.000	0.000	0.000	0.000
79.000	0.000	0.000	0.000	0.000	0.000
79.250	0.000	0.000	0.000	0.000	0.000
79.500	0.000	0.000	0.000	0.000	0.000
79.750	0.000	0.000	0.000	0.000	0.000
80.000	0.000	0.000	0.000	0.000	0.000
80.250	0.000	0.000	0.000	0.000	0.000
80.500	0.000	0.000	0.000	0.000	0.000
80.750	0.000	0.000	0.000	0.000	0.000
81.000	0.000	0.000	0.000	0.000	0.000
81.250	0.000	0.000	0.000	0.000	0.000
81.500	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #5
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
81.750	0.000	0.000	0.000	0.000	0.000
82.000	0.000	0.000	0.000	0.000	0.000
82.250	0.000	0.000	0.000	0.000	0.000
82.500	0.000	0.000	0.000	0.000	0.000
82.750	0.000	0.000	0.000	0.000	0.000
83.000	0.000	0.000	0.000	0.000	0.000
83.250	0.000	0.000	0.000	0.000	0.000
83.500	0.000	0.000	0.000	0.000	0.000
83.750	0.000	0.000	0.000	0.000	0.000
84.000	0.000	0.000	0.000	0.000	0.000
84.250	0.000	0.000	0.000	0.000	0.000
84.500	0.000	0.000	0.000	0.000	0.000
84.750	0.000	0.000	0.000	0.000	0.000
85.000	0.000	0.000	0.000	0.000	0.000
85.250	0.000	0.000	0.000	0.000	0.000
85.500	0.000	0.000	0.000	0.000	0.000
85.750	0.000	0.000	0.000	0.000	0.000
86.000	0.000	0.000	0.000	0.000	0.000
86.250	0.000	0.000	0.000	0.000	0.000
86.500	0.000	0.000	0.000	0.000	0.000
86.750	0.000	0.000	0.000	0.000	0.000
87.000	0.000	0.000	0.000	0.000	0.000
87.250	0.000	0.000	0.000	0.000	0.000
87.500	0.000	0.000	0.000	0.000	0.000
87.750	0.000	0.000	0.000	0.000	0.000
88.000	0.000	0.000	0.000	0.000	0.000
88.250	0.000	0.000	0.000	0.000	0.000
88.500	0.000	0.000	0.000	0.000	0.000
88.750	0.000	0.000	0.000	0.000	0.000
89.000	0.000	0.000	0.000	0.000	0.000
89.250	0.000	0.000	0.000	0.000	0.000
89.500	0.000	0.000	0.000	0.000	0.000
89.750	0.000	0.000	0.000	0.000	0.000
90.000	0.000	0.000	0.000	0.000	0.000
90.250	0.000	0.000	0.000	0.000	0.000
90.500	0.000	0.000	0.000	0.000	0.000
90.750	0.000	0.000	0.000	0.000	0.000
91.000	0.000	0.000	0.000	0.000	0.000
91.250	0.000	0.000	0.000	0.000	0.000
91.500	0.000	0.000	0.000	0.000	0.000
91.750	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #5
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
92.000	0.000	0.000	0.000	0.000	0.000
92.250	0.000	0.000	0.000	0.000	0.000
92.500	0.000	0.000	0.000	0.000	0.000
92.750	0.000	0.000	0.000	0.000	0.000
93.000	0.000	0.000	0.000	0.000	0.000
93.250	0.000	0.000	0.000	0.000	0.000
93.500	0.000	0.000	0.000	0.000	0.000
93.750	0.000	0.000	0.000	0.000	0.000
94.000	0.000	0.000	0.000	0.000	0.000
94.250	0.000	0.000	0.000	0.000	0.000
94.500	0.000	0.000	0.000	0.000	0.000
94.750	0.000	0.000	0.000	0.000	0.000
95.000	0.000	0.000	0.000	0.000	0.000
95.250	0.000	0.000	0.000	0.000	0.000
95.500	0.000	0.000	0.000	0.000	0.000
95.750	0.000	0.000	0.000	0.000	0.000
96.000	0.000	0.000	0.000	0.000	0.000
96.250	0.000	0.000	0.000	0.000	0.000
96.500	0.000	0.000	0.000	0.000	0.000
96.750	0.000	0.000	0.000	0.000	0.000
97.000	0.000	0.000	0.000	0.000	0.000
97.250	0.000	0.000	0.000	0.000	0.000
97.500	0.000	0.000	0.000	0.000	0.000
97.750	0.000	0.000	0.000	0.000	0.000
98.000	0.000	0.000	0.000	0.000	0.000
98.250	0.000	0.000	0.000	0.000	0.000
98.500	0.000	0.000	0.000	0.000	0.000
98.750	0.000	0.000	0.000	0.000	0.000
99.000	0.000	0.000	0.000	0.000	0.000
99.250	0.000	0.000	0.000	0.000	0.000
99.500	0.000	0.000	0.000	0.000	0.000
99.750	0.000	0.000	0.000	0.000	0.000
100.000	0.000	(N/A)	(N/A)	(N/A)	(N/A)

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #6
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
0.000	0.000	0.000	0.000	0.000	0.000
0.250	0.000	0.000	0.000	0.000	0.000
0.500	0.000	0.000	0.000	0.000	0.000
0.750	0.000	0.000	0.000	0.000	0.001
1.000	0.001	0.001	0.001	0.001	0.001
1.250	0.002	0.002	0.002	0.002	0.002
1.500	0.003	0.003	0.003	0.003	0.004
1.750	0.004	0.004	0.004	0.004	0.005
2.000	0.005	0.005	0.005	0.005	0.006
2.250	0.006	0.006	0.006	0.006	0.007
2.500	0.007	0.007	0.007	0.008	0.008
2.750	0.008	0.008	0.009	0.009	0.009
3.000	0.010	0.010	0.010	0.010	0.011
3.250	0.011	0.011	0.011	0.012	0.012
3.500	0.012	0.012	0.013	0.013	0.013
3.750	0.013	0.014	0.014	0.014	0.014
4.000	0.015	0.015	0.015	0.016	0.016
4.250	0.016	0.016	0.017	0.017	0.017
4.500	0.018	0.018	0.018	0.019	0.019
4.750	0.019	0.020	0.020	0.020	0.021
5.000	0.021	0.021	0.021	0.022	0.022
5.250	0.022	0.022	0.023	0.023	0.023
5.500	0.024	0.024	0.024	0.024	0.025
5.750	0.025	0.025	0.026	0.026	0.026
6.000	0.027	0.027	0.027	0.028	0.028
6.250	0.028	0.029	0.029	0.029	0.030
6.500	0.030	0.031	0.031	0.031	0.032
6.750	0.032	0.033	0.033	0.034	0.034
7.000	0.034	0.035	0.035	0.036	0.036
7.250	0.037	0.037	0.037	0.038	0.038
7.500	0.039	0.040	0.040	0.041	0.041
7.750	0.042	0.042	0.043	0.043	0.044
8.000	0.044	0.045	0.045	0.046	0.046
8.250	0.047	0.047	0.048	0.048	0.049
8.500	0.049	0.050	0.050	0.051	0.051
8.750	0.052	0.052	0.053	0.053	0.054
9.000	0.054	0.055	0.055	0.056	0.056
9.250	0.057	0.057	0.058	0.059	0.059
9.500	0.060	0.061	0.062	0.062	0.063
9.750	0.064	0.065	0.066	0.067	0.068

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #6
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
10.000	0.069	0.070	0.071	0.072	0.073
10.250	0.074	0.075	0.076	0.077	0.079
10.500	0.080	0.081	0.083	0.084	0.086
10.750	0.088	0.090	0.092	0.094	0.096
11.000	0.099	0.101	0.104	0.106	0.109
11.250	0.113	0.116	0.120	0.124	0.128
11.500	0.132	0.136	0.140	0.142	0.144
11.750	0.146	0.148	0.150	0.153	0.157
12.000	0.162	0.167	0.174	0.176	0.174
12.250	0.171	0.167	0.164	0.161	0.159
12.500	0.158	0.157	0.156	0.154	0.153
12.750	0.152	0.151	0.151	0.150	0.149
13.000	0.149	0.148	0.148	0.147	0.147
13.250	0.146	0.146	0.145	0.145	0.144
13.500	0.144	0.144	0.143	0.143	0.143
13.750	0.142	0.142	0.142	0.142	0.142
14.000	0.141	0.141	0.141	0.141	0.141
14.250	0.141	0.141	0.140	0.140	0.140
14.500	0.140	0.140	0.140	0.139	0.139
14.750	0.139	0.139	0.139	0.139	0.138
15.000	0.138	0.138	0.138	0.138	0.138
15.250	0.137	0.137	0.137	0.137	0.136
15.500	0.136	0.136	0.136	0.135	0.135
15.750	0.135	0.135	0.135	0.135	0.135
16.000	0.135	0.135	0.135	0.135	0.135
16.250	0.135	0.135	0.135	0.135	0.135
16.500	0.135	0.135	0.135	0.135	0.135
16.750	0.135	0.135	0.135	0.135	0.135
17.000	0.135	0.135	0.135	0.135	0.134
17.250	0.134	0.134	0.134	0.134	0.134
17.500	0.134	0.134	0.134	0.134	0.134
17.750	0.134	0.134	0.134	0.134	0.134
18.000	0.134	0.134	0.133	0.133	0.133
18.250	0.133	0.133	0.133	0.133	0.132
18.500	0.132	0.132	0.132	0.132	0.131
18.750	0.131	0.131	0.131	0.131	0.130
19.000	0.130	0.130	0.130	0.130	0.129
19.250	0.129	0.129	0.129	0.129	0.128
19.500	0.128	0.128	0.128	0.127	0.127
19.750	0.127	0.127	0.126	0.126	0.126
20.000	0.126	0.125	0.125	0.125	0.125

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #6
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
20.250	0.124	0.124	0.124	0.124	0.123
20.500	0.123	0.123	0.122	0.122	0.122
20.750	0.122	0.121	0.121	0.121	0.120
21.000	0.120	0.120	0.119	0.119	0.119
21.250	0.119	0.118	0.118	0.118	0.117
21.500	0.117	0.117	0.116	0.116	0.116
21.750	0.115	0.115	0.115	0.115	0.114
22.000	0.114	0.114	0.113	0.113	0.113
22.250	0.112	0.112	0.112	0.111	0.111
22.500	0.111	0.110	0.110	0.110	0.109
22.750	0.109	0.109	0.108	0.108	0.108
23.000	0.107	0.107	0.107	0.106	0.106
23.250	0.106	0.105	0.105	0.105	0.104
23.500	0.104	0.104	0.103	0.103	0.103
23.750	0.102	0.102	0.102	0.101	0.101
24.000	0.101	0.100	0.099	0.099	0.098
24.250	0.097	0.096	0.095	0.094	0.093
24.500	0.092	0.091	0.090	0.088	0.088
24.750	0.087	0.086	0.085	0.084	0.083
25.000	0.082	0.081	0.080	0.079	0.078
25.250	0.078	0.077	0.076	0.075	0.074
25.500	0.073	0.073	0.072	0.071	0.070
25.750	0.069	0.069	0.068	0.067	0.066
26.000	0.066	0.065	0.064	0.063	0.063
26.250	0.062	0.061	0.061	0.060	0.060
26.500	0.059	0.058	0.058	0.057	0.057
26.750	0.056	0.056	0.055	0.055	0.054
27.000	0.054	0.053	0.053	0.052	0.052
27.250	0.051	0.051	0.051	0.050	0.050
27.500	0.049	0.049	0.048	0.048	0.048
27.750	0.047	0.047	0.047	0.046	0.046
28.000	0.046	0.046	0.045	0.045	0.045
28.250	0.045	0.044	0.044	0.044	0.044
28.500	0.043	0.043	0.043	0.043	0.043
28.750	0.043	0.042	0.042	0.042	0.042
29.000	0.042	0.042	0.042	0.041	0.041
29.250	0.041	0.041	0.041	0.041	0.040
29.500	0.040	0.040	0.040	0.040	0.040
29.750	0.040	0.039	0.039	0.039	0.039
30.000	0.039	0.039	0.039	0.038	0.038
30.250	0.038	0.038	0.038	0.038	0.038

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #6
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
30.500	0.038	0.037	0.037	0.037	0.037
30.750	0.037	0.037	0.037	0.036	0.036
31.000	0.036	0.036	0.036	0.036	0.036
31.250	0.036	0.035	0.035	0.035	0.035
31.500	0.035	0.035	0.035	0.035	0.034
31.750	0.034	0.034	0.034	0.034	0.034
32.000	0.034	0.033	0.033	0.033	0.033
32.250	0.033	0.033	0.033	0.032	0.032
32.500	0.032	0.032	0.032	0.032	0.032
32.750	0.031	0.031	0.031	0.031	0.031
33.000	0.031	0.031	0.031	0.030	0.030
33.250	0.030	0.030	0.030	0.030	0.030
33.500	0.029	0.029	0.029	0.029	0.029
33.750	0.029	0.029	0.029	0.029	0.028
34.000	0.028	0.028	0.028	0.028	0.028
34.250	0.028	0.028	0.027	0.027	0.027
34.500	0.027	0.027	0.027	0.027	0.027
34.750	0.026	0.026	0.026	0.026	0.026
35.000	0.026	0.026	0.026	0.026	0.026
35.250	0.025	0.025	0.025	0.025	0.025
35.500	0.025	0.025	0.025	0.025	0.024
35.750	0.024	0.024	0.024	0.024	0.024
36.000	0.024	0.024	0.024	0.024	0.023
36.250	0.023	0.023	0.023	0.023	0.023
36.500	0.023	0.023	0.023	0.023	0.022
36.750	0.022	0.022	0.022	0.022	0.022
37.000	0.022	0.022	0.022	0.022	0.022
37.250	0.022	0.021	0.021	0.021	0.021
37.500	0.021	0.021	0.021	0.021	0.021
37.750	0.021	0.021	0.020	0.020	0.020
38.000	0.020	0.020	0.020	0.020	0.020
38.250	0.020	0.020	0.019	0.019	0.019
38.500	0.019	0.019	0.019	0.019	0.019
38.750	0.019	0.019	0.018	0.018	0.018
39.000	0.018	0.018	0.018	0.018	0.018
39.250	0.018	0.018	0.017	0.017	0.017
39.500	0.017	0.017	0.017	0.017	0.017
39.750	0.017	0.017	0.016	0.016	0.016
40.000	0.016	0.016	0.016	0.016	0.016
40.250	0.016	0.016	0.016	0.015	0.015
40.500	0.015	0.015	0.015	0.015	0.015

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #6
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
40.750	0.015	0.015	0.015	0.015	0.015
41.000	0.015	0.014	0.014	0.014	0.014
41.250	0.014	0.014	0.014	0.014	0.014
41.500	0.014	0.014	0.014	0.014	0.013
41.750	0.013	0.013	0.013	0.013	0.013
42.000	0.013	0.013	0.013	0.013	0.013
42.250	0.013	0.013	0.013	0.012	0.012
42.500	0.012	0.012	0.012	0.012	0.012
42.750	0.012	0.012	0.012	0.012	0.012
43.000	0.012	0.012	0.012	0.011	0.011
43.250	0.011	0.011	0.011	0.011	0.011
43.500	0.011	0.011	0.011	0.011	0.011
43.750	0.011	0.011	0.011	0.011	0.011
44.000	0.010	0.010	0.010	0.010	0.010
44.250	0.010	0.010	0.010	0.010	0.010
44.500	0.010	0.010	0.010	0.009	0.009
44.750	0.009	0.009	0.009	0.009	0.009
45.000	0.009	0.009	0.009	0.009	0.009
45.250	0.009	0.009	0.008	0.008	0.008
45.500	0.008	0.008	0.008	0.008	0.008
45.750	0.008	0.008	0.008	0.008	0.008
46.000	0.008	0.008	0.008	0.007	0.007
46.250	0.007	0.007	0.007	0.007	0.007
46.500	0.007	0.007	0.007	0.007	0.007
46.750	0.007	0.007	0.007	0.007	0.007
47.000	0.006	0.006	0.006	0.006	0.006
47.250	0.006	0.006	0.006	0.006	0.006
47.500	0.006	0.006	0.006	0.006	0.006
47.750	0.006	0.006	0.006	0.006	0.006
48.000	0.005	0.005	0.005	0.005	0.005
48.250	0.005	0.005	0.005	0.005	0.005
48.500	0.005	0.005	0.005	0.005	0.005
48.750	0.005	0.005	0.005	0.005	0.005
49.000	0.005	0.005	0.004	0.004	0.004
49.250	0.004	0.004	0.004	0.004	0.004
49.500	0.004	0.004	0.004	0.004	0.004
49.750	0.004	0.004	0.004	0.004	0.004
50.000	0.004	0.004	0.004	0.004	0.004
50.250	0.004	0.003	0.003	0.003	0.003
50.500	0.003	0.003	0.003	0.003	0.003
50.750	0.003	0.003	0.003	0.003	0.003

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #6
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
51.000	0.003	0.003	0.003	0.003	0.003
51.250	0.003	0.003	0.002	0.002	0.002
51.500	0.002	0.002	0.002	0.002	0.002
51.750	0.002	0.002	0.002	0.002	0.002
52.000	0.002	0.002	0.002	0.002	0.002
52.250	0.002	0.002	0.002	0.002	0.002
52.500	0.002	0.002	0.002	0.002	0.002
52.750	0.002	0.001	0.001	0.001	0.001
53.000	0.001	0.001	0.001	0.001	0.001
53.250	0.001	0.001	0.001	0.001	0.001
53.500	0.001	0.001	0.001	0.001	0.001
53.750	0.001	0.001	0.001	0.001	0.001
54.000	0.001	0.001	0.001	0.001	0.001
54.250	0.001	0.001	0.001	0.001	0.001
54.500	0.001	0.001	0.001	0.001	0.001
54.750	0.001	0.001	0.001	0.001	0.001
55.000	0.001	0.001	0.001	0.001	0.001
55.250	0.001	0.001	0.001	0.001	0.001
55.500	0.001	0.001	0.001	0.001	0.001
55.750	0.001	0.001	0.001	0.001	0.001
56.000	0.001	0.001	0.001	0.001	0.001
56.250	0.001	0.001	0.001	0.001	0.001
56.500	0.001	0.001	0.001	0.001	0.001
56.750	0.001	0.001	0.001	0.001	0.001
57.000	0.001	0.001	0.001	0.001	0.001
57.250	0.001	0.001	0.001	0.001	0.001
57.500	0.001	0.001	0.001	0.001	0.001
57.750	0.001	0.001	0.001	0.001	0.001
58.000	0.001	0.001	0.001	0.001	0.001
58.250	0.001	0.001	0.001	0.001	0.001
58.500	0.001	0.001	0.001	0.001	0.001
58.750	0.001	0.001	0.001	0.001	0.001
59.000	0.001	0.001	0.001	0.001	0.001
59.250	0.001	0.001	0.001	0.001	0.001
59.500	0.001	0.001	0.001	0.001	0.001
59.750	0.001	0.001	0.001	0.001	0.001
60.000	0.001	0.001	0.001	0.001	0.001
60.250	0.001	0.001	0.001	0.001	0.001
60.500	0.001	0.001	0.001	0.001	0.001
60.750	0.001	0.001	0.001	0.001	0.001
61.000	0.001	0.001	0.001	0.001	0.001

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #6
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
61.250	0.001	0.001	0.001	0.001	0.001
61.500	0.001	0.001	0.001	0.001	0.001
61.750	0.001	0.001	0.001	0.001	0.001
62.000	0.001	0.001	0.001	0.001	0.001
62.250	0.001	0.001	0.001	0.001	0.001
62.500	0.001	0.001	0.001	0.001	0.001
62.750	0.001	0.001	0.001	0.001	0.001
63.000	0.001	0.001	0.001	0.001	0.001
63.250	0.001	0.001	0.001	0.001	0.001
63.500	0.001	0.001	0.001	0.001	0.001
63.750	0.001	0.001	0.001	0.001	0.001
64.000	0.001	0.001	0.001	0.001	0.001
64.250	0.001	0.001	0.001	0.001	0.001
64.500	0.001	0.001	0.001	0.001	0.001
64.750	0.001	0.001	0.001	0.001	0.001
65.000	0.001	0.001	0.001	0.001	0.001
65.250	0.001	0.001	0.001	0.001	0.001
65.500	0.001	0.001	0.001	0.001	0.001
65.750	0.001	0.001	0.001	0.001	0.001
66.000	0.001	0.001	0.001	0.001	0.001
66.250	0.001	0.001	0.001	0.001	0.001
66.500	0.001	0.001	0.001	0.001	0.001
66.750	0.001	0.001	0.001	0.001	0.001
67.000	0.001	0.001	0.001	0.001	0.001
67.250	0.001	0.001	0.001	0.001	0.001
67.500	0.001	0.001	0.001	0.001	0.001
67.750	0.001	0.001	0.001	0.001	0.001
68.000	0.001	0.001	0.001	0.001	0.001
68.250	0.001	0.001	0.001	0.001	0.001
68.500	0.001	0.001	0.001	0.001	0.001
68.750	0.001	0.001	0.001	0.001	0.001
69.000	0.001	0.001	0.001	0.001	0.001
69.250	0.001	0.001	0.001	0.001	0.001
69.500	0.001	0.001	0.001	0.001	0.001
69.750	0.001	0.001	0.001	0.001	0.001
70.000	0.001	0.001	0.001	0.001	0.001
70.250	0.001	0.001	0.001	0.001	0.001
70.500	0.001	0.001	0.001	0.001	0.001
70.750	0.001	0.001	0.001	0.001	0.001
71.000	0.001	0.001	0.001	0.001	0.001
71.250	0.001	0.001	0.001	0.001	0.001

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #6
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
71.500	0.001	0.001	0.001	0.001	0.001
71.750	0.001	0.001	0.001	0.001	0.001
72.000	0.001	0.001	0.001	0.001	0.001
72.250	0.001	0.001	0.001	0.001	0.001
72.500	0.001	0.001	0.001	0.001	0.001
72.750	0.001	0.001	0.001	0.001	0.001
73.000	0.001	0.001	0.001	0.001	0.001
73.250	0.001	0.001	0.001	0.001	0.001
73.500	0.001	0.001	0.001	0.001	0.001
73.750	0.001	0.001	0.001	0.001	0.001
74.000	0.001	0.001	0.001	0.001	0.001
74.250	0.001	0.001	0.001	0.001	0.001
74.500	0.001	0.001	0.001	0.001	0.001
74.750	0.001	0.001	0.001	0.001	0.001
75.000	0.001	0.001	0.001	0.001	0.001
75.250	0.001	0.001	0.001	0.001	0.001
75.500	0.001	0.001	0.001	0.001	0.001
75.750	0.001	0.001	0.001	0.001	0.001
76.000	0.001	0.001	0.001	0.001	0.001
76.250	0.001	0.001	0.001	0.001	0.001
76.500	0.001	0.001	0.001	0.001	0.001
76.750	0.001	0.001	0.001	0.001	0.001
77.000	0.001	0.001	0.001	0.001	0.001
77.250	0.001	0.001	0.001	0.001	0.001
77.500	0.001	0.001	0.001	0.001	0.001
77.750	0.001	0.001	0.001	0.001	0.001
78.000	0.001	0.001	0.001	0.001	0.001
78.250	0.001	0.001	0.001	0.001	0.001
78.500	0.001	0.001	0.001	0.001	0.001
78.750	0.001	0.001	0.001	0.001	0.001
79.000	0.001	0.001	0.001	0.001	0.001
79.250	0.001	0.001	0.001	0.001	0.001
79.500	0.001	0.001	0.001	0.001	0.001
79.750	0.001	0.001	0.001	0.001	0.001
80.000	0.001	0.001	0.001	0.001	0.001
80.250	0.001	0.001	0.001	0.001	0.001
80.500	0.001	0.001	0.001	0.001	0.001
80.750	0.001	0.001	0.001	0.001	0.001
81.000	0.001	0.001	0.001	0.001	0.001
81.250	0.001	0.001	0.001	0.001	0.001
81.500	0.001	0.001	0.001	0.001	0.001

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #6
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
81.750	0.001	0.001	0.001	0.001	0.001
82.000	0.001	0.001	0.001	0.001	0.001
82.250	0.001	0.001	0.001	0.001	0.001
82.500	0.001	0.001	0.001	0.001	0.001
82.750	0.001	0.001	0.001	0.001	0.001
83.000	0.001	0.001	0.001	0.001	0.001
83.250	0.001	0.001	0.001	0.001	0.001
83.500	0.001	0.001	0.001	0.001	0.001
83.750	0.001	0.001	0.001	0.001	0.001
84.000	0.001	0.001	0.001	0.001	0.001
84.250	0.001	0.001	0.001	0.001	0.001
84.500	0.001	0.001	0.001	0.001	0.001
84.750	0.001	0.001	0.001	0.001	0.001
85.000	0.001	0.001	0.001	0.001	0.001
85.250	0.001	0.001	0.001	0.001	0.001
85.500	0.001	0.001	0.001	0.001	0.001
85.750	0.001	0.001	0.001	0.001	0.001
86.000	0.001	0.001	0.001	0.001	0.001
86.250	0.001	0.001	0.001	0.001	0.001
86.500	0.001	0.001	0.001	0.001	0.001
86.750	0.001	0.001	0.001	0.001	0.001
87.000	0.001	0.001	0.001	0.001	0.001
87.250	0.001	0.001	0.001	0.001	0.001
87.500	0.001	0.001	0.001	0.001	0.001
87.750	0.001	0.001	0.001	0.001	0.001
88.000	0.001	0.001	0.001	0.001	0.001
88.250	0.001	0.001	0.001	0.001	0.001
88.500	0.001	0.001	0.001	0.001	0.001
88.750	0.001	0.001	0.001	0.001	0.001
89.000	0.001	0.001	0.001	0.001	0.001
89.250	0.001	0.001	0.001	0.001	0.001
89.500	0.001	0.001	0.001	0.001	0.001
89.750	0.001	0.001	0.001	0.001	0.001
90.000	0.001	0.001	0.001	0.001	0.001
90.250	0.001	0.001	0.001	0.001	0.001
90.500	0.001	0.001	0.001	0.001	0.001
90.750	0.001	0.001	0.001	0.001	0.001
91.000	0.001	0.001	0.001	0.001	0.001
91.250	0.001	0.001	0.001	0.001	0.001
91.500	0.001	0.001	0.001	0.001	0.001
91.750	0.001	0.001	0.001	0.001	0.001

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #6
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
92.000	0.001	0.001	0.001	0.001	0.001
92.250	0.001	0.001	0.001	0.001	0.001
92.500	0.001	0.001	0.001	0.001	0.001
92.750	0.001	0.001	0.001	0.001	0.001
93.000	0.001	0.001	0.001	0.001	0.001
93.250	0.001	0.001	0.001	0.001	0.001
93.500	0.001	0.001	0.001	0.001	0.001
93.750	0.001	0.001	0.001	0.001	0.001
94.000	0.001	0.001	0.001	0.001	0.001
94.250	0.001	0.001	0.001	0.001	0.001
94.500	0.001	0.001	0.001	0.001	0.001
94.750	0.001	0.001	0.001	0.001	0.001
95.000	0.001	0.001	0.001	0.001	0.001
95.250	0.001	0.001	0.001	0.001	0.001
95.500	0.001	0.001	0.001	0.001	0.001
95.750	0.001	0.001	0.001	0.001	0.001
96.000	0.001	0.001	0.001	0.001	0.001
96.250	0.001	0.001	0.001	0.001	0.001
96.500	0.001	0.001	0.001	0.001	0.001
96.750	0.001	0.001	0.001	0.001	0.001
97.000	0.001	0.001	0.001	0.001	0.001
97.250	0.001	0.001	0.001	0.001	0.001
97.500	0.001	0.001	0.001	0.001	0.001
97.750	0.001	0.001	0.001	0.001	0.001
98.000	0.001	0.001	0.001	0.001	0.001
98.250	0.001	0.001	0.001	0.001	0.001
98.500	0.001	0.001	0.001	0.001	0.001
98.750	0.001	0.001	0.001	0.001	0.001
99.000	0.001	0.001	0.001	0.001	0.001
99.250	0.001	0.001	0.001	0.001	0.001
99.500	0.001	0.001	0.001	0.001	0.001
99.750	0.001	0.001	0.001	0.001	0.001
100.000	0.001	(N/A)	(N/A)	(N/A)	(N/A)

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #7
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
0.000	0.000	0.000	0.000	0.000	0.000
0.250	0.000	0.000	0.000	0.000	0.000
0.500	0.000	0.000	0.000	0.000	0.000
0.750	0.000	0.000	0.000	0.000	0.000
1.000	0.000	0.000	0.000	0.000	0.000
1.250	0.000	0.000	0.000	0.000	0.000
1.500	0.000	0.000	0.000	0.000	0.000
1.750	0.000	0.000	0.000	0.000	0.000
2.000	0.000	0.000	0.000	0.000	0.000
2.250	0.000	0.000	0.000	0.000	0.000
2.500	0.000	0.000	0.000	0.000	0.000
2.750	0.000	0.000	0.000	0.000	0.000
3.000	0.000	0.000	0.000	0.000	0.000
3.250	0.000	0.000	0.000	0.000	0.000
3.500	0.000	0.000	0.000	0.000	0.000
3.750	0.000	0.000	0.000	0.000	0.000
4.000	0.000	0.000	0.000	0.000	0.000
4.250	0.000	0.000	0.000	0.000	0.000
4.500	0.000	0.000	0.000	0.000	0.000
4.750	0.000	0.000	0.000	0.000	0.000
5.000	0.000	0.000	0.000	0.000	0.000
5.250	0.000	0.000	0.000	0.000	0.000
5.500	0.000	0.000	0.000	0.000	0.000
5.750	0.000	0.000	0.000	0.000	0.000
6.000	0.000	0.000	0.000	0.000	0.000
6.250	0.000	0.000	0.000	0.000	0.000
6.500	0.000	0.000	0.000	0.000	0.000
6.750	0.000	0.000	0.000	0.000	0.000
7.000	0.000	0.000	0.000	0.000	0.000
7.250	0.000	0.000	0.000	0.000	0.000
7.500	0.000	0.000	0.000	0.000	0.000
7.750	0.000	0.000	0.000	0.000	0.000
8.000	0.000	0.000	0.000	0.000	0.000
8.250	0.000	0.000	0.000	0.000	0.000
8.500	0.000	0.000	0.000	0.000	0.000
8.750	0.000	0.000	0.000	0.000	0.000
9.000	0.000	0.000	0.000	0.000	0.000
9.250	0.000	0.000	0.000	0.000	0.000
9.500	0.000	0.000	0.000	0.000	0.000
9.750	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #7
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
10.000	0.000	0.000	0.000	0.000	0.000
10.250	0.000	0.000	0.000	0.000	0.000
10.500	0.000	0.000	0.000	0.000	0.000
10.750	0.000	0.000	0.000	0.000	0.000
11.000	0.000	0.000	0.000	0.001	0.001
11.250	0.001	0.002	0.002	0.003	0.003
11.500	0.004	0.005	0.006	0.007	0.008
11.750	0.010	0.013	0.015	0.019	0.024
12.000	0.031	0.042	0.055	0.066	0.072
12.250	0.077	0.080	0.081	0.082	0.082
12.500	0.082	0.081	0.080	0.078	0.077
12.750	0.076	0.074	0.072	0.071	0.069
13.000	0.067	0.065	0.064	0.062	0.060
13.250	0.058	0.056	0.055	0.053	0.051
13.500	0.049	0.048	0.046	0.044	0.042
13.750	0.041	0.039	0.037	0.035	0.034
14.000	0.032	0.030	0.029	0.027	0.026
14.250	0.025	0.023	0.022	0.020	0.019
14.500	0.017	0.016	0.015	0.014	0.013
14.750	0.011	0.010	0.009	0.008	0.007
15.000	0.006	0.005	0.004	0.003	0.002
15.250	0.001	0.000	0.000	0.000	0.000
15.500	0.000	0.000	0.000	0.000	0.000
15.750	0.000	0.000	0.000	0.000	0.000
16.000	0.000	0.000	0.000	0.000	0.000
16.250	0.000	0.000	0.000	0.000	0.000
16.500	0.000	0.000	0.000	0.000	0.000
16.750	0.000	0.000	0.000	0.000	0.000
17.000	0.000	0.000	0.000	0.000	0.000
17.250	0.000	0.000	0.000	0.000	0.000
17.500	0.000	0.000	0.000	0.000	0.000
17.750	0.000	0.000	0.000	0.000	0.000
18.000	0.000	0.000	0.000	0.000	0.000
18.250	0.000	0.000	0.000	0.000	0.000
18.500	0.000	0.000	0.000	0.000	0.000
18.750	0.000	0.000	0.000	0.000	0.000
19.000	0.000	0.000	0.000	0.000	0.000
19.250	0.000	0.000	0.000	0.000	0.000
19.500	0.000	0.000	0.000	0.000	0.000
19.750	0.000	0.000	0.000	0.000	0.000
20.000	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #7
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
20.250	0.000	0.000	0.000	0.000	0.000
20.500	0.000	0.000	0.000	0.000	0.000
20.750	0.000	0.000	0.000	0.000	0.000
21.000	0.000	0.000	0.000	0.000	0.000
21.250	0.000	0.000	0.000	0.000	0.000
21.500	0.000	0.000	0.000	0.000	0.000
21.750	0.000	0.000	0.000	0.000	0.000
22.000	0.000	0.000	0.000	0.000	0.000
22.250	0.000	0.000	0.000	0.000	0.000
22.500	0.000	0.000	0.000	0.000	0.000
22.750	0.000	0.000	0.000	0.000	0.000
23.000	0.000	0.000	0.000	0.000	0.000
23.250	0.000	0.000	0.000	0.000	0.000
23.500	0.000	0.000	0.000	0.000	0.000
23.750	0.000	0.000	0.000	0.000	0.000
24.000	0.000	0.000	0.000	0.000	0.000
24.250	0.000	0.000	0.000	0.000	0.000
24.500	0.000	0.000	0.000	0.000	0.000
24.750	0.000	0.000	0.000	0.000	0.000
25.000	0.000	0.000	0.000	0.000	0.000
25.250	0.000	0.000	0.000	0.000	0.000
25.500	0.000	0.000	0.000	0.000	0.000
25.750	0.000	0.000	0.000	0.000	0.000
26.000	0.000	0.000	0.000	0.000	0.000
26.250	0.000	0.000	0.000	0.000	0.000
26.500	0.000	0.000	0.000	0.000	0.000
26.750	0.000	0.000	0.000	0.000	0.000
27.000	0.000	0.000	0.000	0.000	0.000
27.250	0.000	0.000	0.000	0.000	0.000
27.500	0.000	0.000	0.000	0.000	0.000
27.750	0.000	0.000	0.000	0.000	0.000
28.000	0.000	0.000	0.000	0.000	0.000
28.250	0.000	0.000	0.000	0.000	0.000
28.500	0.000	0.000	0.000	0.000	0.000
28.750	0.000	0.000	0.000	0.000	0.000
29.000	0.000	0.000	0.000	0.000	0.000
29.250	0.000	0.000	0.000	0.000	0.000
29.500	0.000	0.000	0.000	0.000	0.000
29.750	0.000	0.000	0.000	0.000	0.000
30.000	0.000	0.000	0.000	0.000	0.000
30.250	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #7
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
30.500	0.000	0.000	0.000	0.000	0.000
30.750	0.000	0.000	0.000	0.000	0.000
31.000	0.000	0.000	0.000	0.000	0.000
31.250	0.000	0.000	0.000	0.000	0.000
31.500	0.000	0.000	0.000	0.000	0.000
31.750	0.000	0.000	0.000	0.000	0.000
32.000	0.000	0.000	0.000	0.000	0.000
32.250	0.000	0.000	0.000	0.000	0.000
32.500	0.000	0.000	0.000	0.000	0.000
32.750	0.000	0.000	0.000	0.000	0.000
33.000	0.000	0.000	0.000	0.000	0.000
33.250	0.000	0.000	0.000	0.000	0.000
33.500	0.000	0.000	0.000	0.000	0.000
33.750	0.000	0.000	0.000	0.000	0.000
34.000	0.000	0.000	0.000	0.000	0.000
34.250	0.000	0.000	0.000	0.000	0.000
34.500	0.000	0.000	0.000	0.000	0.000
34.750	0.000	0.000	0.000	0.000	0.000
35.000	0.000	0.000	0.000	0.000	0.000
35.250	0.000	0.000	0.000	0.000	0.000
35.500	0.000	0.000	0.000	0.000	0.000
35.750	0.000	0.000	0.000	0.000	0.000
36.000	0.000	0.000	0.000	0.000	0.000
36.250	0.000	0.000	0.000	0.000	0.000
36.500	0.000	0.000	0.000	0.000	0.000
36.750	0.000	0.000	0.000	0.000	0.000
37.000	0.000	0.000	0.000	0.000	0.000
37.250	0.000	0.000	0.000	0.000	0.000
37.500	0.000	0.000	0.000	0.000	0.000
37.750	0.000	0.000	0.000	0.000	0.000
38.000	0.000	0.000	0.000	0.000	0.000
38.250	0.000	0.000	0.000	0.000	0.000
38.500	0.000	0.000	0.000	0.000	0.000
38.750	0.000	0.000	0.000	0.000	0.000
39.000	0.000	0.000	0.000	0.000	0.000
39.250	0.000	0.000	0.000	0.000	0.000
39.500	0.000	0.000	0.000	0.000	0.000
39.750	0.000	0.000	0.000	0.000	0.000
40.000	0.000	0.000	0.000	0.000	0.000
40.250	0.000	0.000	0.000	0.000	0.000
40.500	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #7
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
40.750	0.000	0.000	0.000	0.000	0.000
41.000	0.000	0.000	0.000	0.000	0.000
41.250	0.000	0.000	0.000	0.000	0.000
41.500	0.000	0.000	0.000	0.000	0.000
41.750	0.000	0.000	0.000	0.000	0.000
42.000	0.000	0.000	0.000	0.000	0.000
42.250	0.000	0.000	0.000	0.000	0.000
42.500	0.000	0.000	0.000	0.000	0.000
42.750	0.000	0.000	0.000	0.000	0.000
43.000	0.000	0.000	0.000	0.000	0.000
43.250	0.000	0.000	0.000	0.000	0.000
43.500	0.000	0.000	0.000	0.000	0.000
43.750	0.000	0.000	0.000	0.000	0.000
44.000	0.000	0.000	0.000	0.000	0.000
44.250	0.000	0.000	0.000	0.000	0.000
44.500	0.000	0.000	0.000	0.000	0.000
44.750	0.000	0.000	0.000	0.000	0.000
45.000	0.000	0.000	0.000	0.000	0.000
45.250	0.000	0.000	0.000	0.000	0.000
45.500	0.000	0.000	0.000	0.000	0.000
45.750	0.000	0.000	0.000	0.000	0.000
46.000	0.000	0.000	0.000	0.000	0.000
46.250	0.000	0.000	0.000	0.000	0.000
46.500	0.000	0.000	0.000	0.000	0.000
46.750	0.000	0.000	0.000	0.000	0.000
47.000	0.000	0.000	0.000	0.000	0.000
47.250	0.000	0.000	0.000	0.000	0.000
47.500	0.000	0.000	0.000	0.000	0.000
47.750	0.000	0.000	0.000	0.000	0.000
48.000	0.000	0.000	0.000	0.000	0.000
48.250	0.000	0.000	0.000	0.000	0.000
48.500	0.000	0.000	0.000	0.000	0.000
48.750	0.000	0.000	0.000	0.000	0.000
49.000	0.000	0.000	0.000	0.000	0.000
49.250	0.000	0.000	0.000	0.000	0.000
49.500	0.000	0.000	0.000	0.000	0.000
49.750	0.000	0.000	0.000	0.000	0.000
50.000	0.000	0.000	0.000	0.000	0.000
50.250	0.000	0.000	0.000	0.000	0.000
50.500	0.000	0.000	0.000	0.000	0.000
50.750	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #7
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
51.000	0.000	0.000	0.000	0.000	0.000
51.250	0.000	0.000	0.000	0.000	0.000
51.500	0.000	0.000	0.000	0.000	0.000
51.750	0.000	0.000	0.000	0.000	0.000
52.000	0.000	0.000	0.000	0.000	0.000
52.250	0.000	0.000	0.000	0.000	0.000
52.500	0.000	0.000	0.000	0.000	0.000
52.750	0.000	0.000	0.000	0.000	0.000
53.000	0.000	0.000	0.000	0.000	0.000
53.250	0.000	0.000	0.000	0.000	0.000
53.500	0.000	0.000	0.000	0.000	0.000
53.750	0.000	0.000	0.000	0.000	0.000
54.000	0.000	0.000	0.000	0.000	0.000
54.250	0.000	0.000	0.000	0.000	0.000
54.500	0.000	0.000	0.000	0.000	0.000
54.750	0.000	0.000	0.000	0.000	0.000
55.000	0.000	0.000	0.000	0.000	0.000
55.250	0.000	0.000	0.000	0.000	0.000
55.500	0.000	0.000	0.000	0.000	0.000
55.750	0.000	0.000	0.000	0.000	0.000
56.000	0.000	0.000	0.000	0.000	0.000
56.250	0.000	0.000	0.000	0.000	0.000
56.500	0.000	0.000	0.000	0.000	0.000
56.750	0.000	0.000	0.000	0.000	0.000
57.000	0.000	0.000	0.000	0.000	0.000
57.250	0.000	0.000	0.000	0.000	0.000
57.500	0.000	0.000	0.000	0.000	0.000
57.750	0.000	0.000	0.000	0.000	0.000
58.000	0.000	0.000	0.000	0.000	0.000
58.250	0.000	0.000	0.000	0.000	0.000
58.500	0.000	0.000	0.000	0.000	0.000
58.750	0.000	0.000	0.000	0.000	0.000
59.000	0.000	0.000	0.000	0.000	0.000
59.250	0.000	0.000	0.000	0.000	0.000
59.500	0.000	0.000	0.000	0.000	0.000
59.750	0.000	0.000	0.000	0.000	0.000
60.000	0.000	0.000	0.000	0.000	0.000
60.250	0.000	0.000	0.000	0.000	0.000
60.500	0.000	0.000	0.000	0.000	0.000
60.750	0.000	0.000	0.000	0.000	0.000
61.000	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #7
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
61.250	0.000	0.000	0.000	0.000	0.000
61.500	0.000	0.000	0.000	0.000	0.000
61.750	0.000	0.000	0.000	0.000	0.000
62.000	0.000	0.000	0.000	0.000	0.000
62.250	0.000	0.000	0.000	0.000	0.000
62.500	0.000	0.000	0.000	0.000	0.000
62.750	0.000	0.000	0.000	0.000	0.000
63.000	0.000	0.000	0.000	0.000	0.000
63.250	0.000	0.000	0.000	0.000	0.000
63.500	0.000	0.000	0.000	0.000	0.000
63.750	0.000	0.000	0.000	0.000	0.000
64.000	0.000	0.000	0.000	0.000	0.000
64.250	0.000	0.000	0.000	0.000	0.000
64.500	0.000	0.000	0.000	0.000	0.000
64.750	0.000	0.000	0.000	0.000	0.000
65.000	0.000	0.000	0.000	0.000	0.000
65.250	0.000	0.000	0.000	0.000	0.000
65.500	0.000	0.000	0.000	0.000	0.000
65.750	0.000	0.000	0.000	0.000	0.000
66.000	0.000	0.000	0.000	0.000	0.000
66.250	0.000	0.000	0.000	0.000	0.000
66.500	0.000	0.000	0.000	0.000	0.000
66.750	0.000	0.000	0.000	0.000	0.000
67.000	0.000	0.000	0.000	0.000	0.000
67.250	0.000	0.000	0.000	0.000	0.000
67.500	0.000	0.000	0.000	0.000	0.000
67.750	0.000	0.000	0.000	0.000	0.000
68.000	0.000	0.000	0.000	0.000	0.000
68.250	0.000	0.000	0.000	0.000	0.000
68.500	0.000	0.000	0.000	0.000	0.000
68.750	0.000	0.000	0.000	0.000	0.000
69.000	0.000	0.000	0.000	0.000	0.000
69.250	0.000	0.000	0.000	0.000	0.000
69.500	0.000	0.000	0.000	0.000	0.000
69.750	0.000	0.000	0.000	0.000	0.000
70.000	0.000	0.000	0.000	0.000	0.000
70.250	0.000	0.000	0.000	0.000	0.000
70.500	0.000	0.000	0.000	0.000	0.000
70.750	0.000	0.000	0.000	0.000	0.000
71.000	0.000	0.000	0.000	0.000	0.000
71.250	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #7
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
71.500	0.000	0.000	0.000	0.000	0.000
71.750	0.000	0.000	0.000	0.000	0.000
72.000	0.000	0.000	0.000	0.000	0.000
72.250	0.000	0.000	0.000	0.000	0.000
72.500	0.000	0.000	0.000	0.000	0.000
72.750	0.000	0.000	0.000	0.000	0.000
73.000	0.000	0.000	0.000	0.000	0.000
73.250	0.000	0.000	0.000	0.000	0.000
73.500	0.000	0.000	0.000	0.000	0.000
73.750	0.000	0.000	0.000	0.000	0.000
74.000	0.000	0.000	0.000	0.000	0.000
74.250	0.000	0.000	0.000	0.000	0.000
74.500	0.000	0.000	0.000	0.000	0.000
74.750	0.000	0.000	0.000	0.000	0.000
75.000	0.000	0.000	0.000	0.000	0.000
75.250	0.000	0.000	0.000	0.000	0.000
75.500	0.000	0.000	0.000	0.000	0.000
75.750	0.000	0.000	0.000	0.000	0.000
76.000	0.000	0.000	0.000	0.000	0.000
76.250	0.000	0.000	0.000	0.000	0.000
76.500	0.000	0.000	0.000	0.000	0.000
76.750	0.000	0.000	0.000	0.000	0.000
77.000	0.000	0.000	0.000	0.000	0.000
77.250	0.000	0.000	0.000	0.000	0.000
77.500	0.000	0.000	0.000	0.000	0.000
77.750	0.000	0.000	0.000	0.000	0.000
78.000	0.000	0.000	0.000	0.000	0.000
78.250	0.000	0.000	0.000	0.000	0.000
78.500	0.000	0.000	0.000	0.000	0.000
78.750	0.000	0.000	0.000	0.000	0.000
79.000	0.000	0.000	0.000	0.000	0.000
79.250	0.000	0.000	0.000	0.000	0.000
79.500	0.000	0.000	0.000	0.000	0.000
79.750	0.000	0.000	0.000	0.000	0.000
80.000	0.000	0.000	0.000	0.000	0.000
80.250	0.000	0.000	0.000	0.000	0.000
80.500	0.000	0.000	0.000	0.000	0.000
80.750	0.000	0.000	0.000	0.000	0.000
81.000	0.000	0.000	0.000	0.000	0.000
81.250	0.000	0.000	0.000	0.000	0.000
81.500	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #7
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
81.750	0.000	0.000	0.000	0.000	0.000
82.000	0.000	0.000	0.000	0.000	0.000
82.250	0.000	0.000	0.000	0.000	0.000
82.500	0.000	0.000	0.000	0.000	0.000
82.750	0.000	0.000	0.000	0.000	0.000
83.000	0.000	0.000	0.000	0.000	0.000
83.250	0.000	0.000	0.000	0.000	0.000
83.500	0.000	0.000	0.000	0.000	0.000
83.750	0.000	0.000	0.000	0.000	0.000
84.000	0.000	0.000	0.000	0.000	0.000
84.250	0.000	0.000	0.000	0.000	0.000
84.500	0.000	0.000	0.000	0.000	0.000
84.750	0.000	0.000	0.000	0.000	0.000
85.000	0.000	0.000	0.000	0.000	0.000
85.250	0.000	0.000	0.000	0.000	0.000
85.500	0.000	0.000	0.000	0.000	0.000
85.750	0.000	0.000	0.000	0.000	0.000
86.000	0.000	0.000	0.000	0.000	0.000
86.250	0.000	0.000	0.000	0.000	0.000
86.500	0.000	0.000	0.000	0.000	0.000
86.750	0.000	0.000	0.000	0.000	0.000
87.000	0.000	0.000	0.000	0.000	0.000
87.250	0.000	0.000	0.000	0.000	0.000
87.500	0.000	0.000	0.000	0.000	0.000
87.750	0.000	0.000	0.000	0.000	0.000
88.000	0.000	0.000	0.000	0.000	0.000
88.250	0.000	0.000	0.000	0.000	0.000
88.500	0.000	0.000	0.000	0.000	0.000
88.750	0.000	0.000	0.000	0.000	0.000
89.000	0.000	0.000	0.000	0.000	0.000
89.250	0.000	0.000	0.000	0.000	0.000
89.500	0.000	0.000	0.000	0.000	0.000
89.750	0.000	0.000	0.000	0.000	0.000
90.000	0.000	0.000	0.000	0.000	0.000
90.250	0.000	0.000	0.000	0.000	0.000
90.500	0.000	0.000	0.000	0.000	0.000
90.750	0.000	0.000	0.000	0.000	0.000
91.000	0.000	0.000	0.000	0.000	0.000
91.250	0.000	0.000	0.000	0.000	0.000
91.500	0.000	0.000	0.000	0.000	0.000
91.750	0.000	0.000	0.000	0.000	0.000

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: Basin #7
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
92.000	0.000	0.000	0.000	0.000	0.000
92.250	0.000	0.000	0.000	0.000	0.000
92.500	0.000	0.000	0.000	0.000	0.000
92.750	0.000	0.000	0.000	0.000	0.000
93.000	0.000	0.000	0.000	0.000	0.000
93.250	0.000	0.000	0.000	0.000	0.000
93.500	0.000	0.000	0.000	0.000	0.000
93.750	0.000	0.000	0.000	0.000	0.000
94.000	0.000	0.000	0.000	0.000	0.000
94.250	0.000	0.000	0.000	0.000	0.000
94.500	0.000	0.000	0.000	0.000	0.000
94.750	0.000	0.000	0.000	0.000	0.000
95.000	0.000	0.000	0.000	0.000	0.000
95.250	0.000	0.000	0.000	0.000	0.000
95.500	0.000	0.000	0.000	0.000	0.000
95.750	0.000	0.000	0.000	0.000	0.000
96.000	0.000	0.000	0.000	0.000	0.000
96.250	0.000	0.000	0.000	0.000	0.000
96.500	0.000	0.000	0.000	0.000	0.000
96.750	0.000	0.000	0.000	0.000	0.000
97.000	0.000	0.000	0.000	0.000	0.000
97.250	0.000	0.000	0.000	0.000	0.000
97.500	0.000	0.000	0.000	0.000	0.000
97.750	0.000	0.000	0.000	0.000	0.000
98.000	0.000	0.000	0.000	0.000	0.000
98.250	0.000	0.000	0.000	0.000	0.000
98.500	0.000	0.000	0.000	0.000	0.000
98.750	0.000	0.000	0.000	0.000	0.000
99.000	0.000	0.000	0.000	0.000	0.000
99.250	0.000	0.000	0.000	0.000	0.000
99.500	0.000	0.000	0.000	0.000	0.000
99.750	0.000	0.000	0.000	0.000	0.000
100.000	0.000	(N/A)	(N/A)	(N/A)	(N/A)

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: UG Basin #8
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
0.000	0.000	0.000	0.000	0.000	0.000
0.250	0.000	0.000	0.000	0.000	0.000
0.500	0.000	0.001	0.001	0.001	0.001
0.750	0.002	0.002	0.002	0.003	0.003
1.000	0.004	0.004	0.005	0.005	0.006
1.250	0.007	0.007	0.008	0.009	0.009
1.500	0.010	0.011	0.011	0.012	0.013
1.750	0.014	0.015	0.016	0.017	0.017
2.000	0.018	0.019	0.020	0.021	0.022
2.250	0.023	0.024	0.026	0.027	0.028
2.500	0.029	0.030	0.031	0.032	0.033
2.750	0.034	0.035	0.036	0.036	0.037
3.000	0.038	0.039	0.040	0.041	0.042
3.250	0.043	0.044	0.045	0.046	0.047
3.500	0.048	0.049	0.050	0.051	0.052
3.750	0.053	0.055	0.056	0.057	0.058
4.000	0.059	0.061	0.062	0.063	0.064
4.250	0.066	0.067	0.068	0.070	0.071
4.500	0.072	0.074	0.075	0.077	0.078
4.750	0.079	0.081	0.082	0.083	0.084
5.000	0.086	0.087	0.088	0.089	0.091
5.250	0.092	0.093	0.095	0.096	0.097
5.500	0.099	0.100	0.101	0.103	0.104
5.750	0.105	0.107	0.108	0.109	0.111
6.000	0.112	0.114	0.115	0.117	0.118
6.250	0.120	0.121	0.123	0.124	0.126
6.500	0.127	0.129	0.131	0.132	0.134
6.750	0.136	0.137	0.139	0.141	0.143
7.000	0.145	0.146	0.148	0.150	0.152
7.250	0.154	0.156	0.158	0.160	0.162
7.500	0.164	0.166	0.168	0.170	0.172
7.750	0.174	0.177	0.179	0.181	0.183
8.000	0.185	0.188	0.190	0.192	0.195
8.250	0.197	0.199	0.202	0.204	0.207
8.500	0.209	0.212	0.214	0.217	0.219
8.750	0.222	0.224	0.227	0.230	0.232
9.000	0.235	0.238	0.241	0.244	0.246
9.250	0.250	0.253	0.256	0.259	0.263
9.500	0.266	0.269	0.273	0.277	0.280
9.750	0.284	0.288	0.292	0.296	0.300

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: UG Basin #8
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
10.000	0.304	0.309	0.313	0.317	0.322
10.250	0.326	0.331	0.336	0.341	0.346
10.500	0.350	0.356	0.361	0.367	0.373
10.750	0.379	0.386	0.393	0.400	0.407
11.000	0.415	0.423	0.432	0.441	0.450
11.250	0.460	0.470	0.481	0.492	0.503
11.500	0.515	0.528	0.544	0.559	0.574
11.750	0.590	0.609	0.631	0.655	0.689
12.000	0.730	0.785	0.851	0.886	0.885
12.250	0.875	0.863	0.849	0.834	0.820
12.500	0.808	0.795	0.782	0.770	0.759
12.750	0.749	0.739	0.730	0.722	0.714
13.000	0.707	0.700	0.693	0.687	0.681
13.250	0.675	0.670	0.665	0.660	0.655
13.500	0.651	0.646	0.642	0.638	0.635
13.750	0.631	0.628	0.625	0.622	0.619
14.000	0.617	0.614	0.612	0.610	0.608
14.250	0.606	0.604	0.602	0.601	0.599
14.500	0.597	0.596	0.594	0.593	0.591
14.750	0.590	0.589	0.587	0.586	0.585
15.000	0.583	0.582	0.581	0.579	0.578
15.250	0.577	0.576	0.575	0.574	0.573
15.500	0.572	0.571	0.570	0.569	0.568
15.750	0.567	0.567	0.566	0.565	0.564
16.000	0.564	0.563	0.562	0.562	0.561
16.250	0.560	0.560	0.559	0.559	0.558
16.500	0.558	0.557	0.557	0.556	0.556
16.750	0.555	0.555	0.554	0.554	0.553
17.000	0.553	0.552	0.552	0.551	0.551
17.250	0.550	0.550	0.550	0.549	0.549
17.500	0.548	0.548	0.548	0.547	0.547
17.750	0.546	0.546	0.546	0.545	0.545
18.000	0.544	0.544	0.544	0.543	0.543
18.250	0.543	0.542	0.542	0.542	0.541
18.500	0.541	0.541	0.541	0.540	0.540
18.750	0.540	0.540	0.539	0.539	0.539
19.000	0.539	0.539	0.538	0.538	0.538
19.250	0.538	0.538	0.538	0.538	0.537
19.500	0.537	0.537	0.537	0.537	0.537
19.750	0.537	0.536	0.536	0.536	0.536
20.000	0.536	0.536	0.536	0.536	0.535

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: UG Basin #8
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
20.250	0.535	0.535	0.535	0.535	0.535
20.500	0.535	0.535	0.535	0.534	0.534
20.750	0.534	0.534	0.534	0.534	0.534
21.000	0.534	0.533	0.533	0.533	0.533
21.250	0.533	0.533	0.533	0.532	0.532
21.500	0.532	0.532	0.532	0.532	0.532
21.750	0.531	0.531	0.531	0.531	0.531
22.000	0.531	0.530	0.530	0.530	0.530
22.250	0.530	0.530	0.530	0.529	0.529
22.500	0.529	0.529	0.529	0.529	0.528
22.750	0.528	0.528	0.528	0.528	0.528
23.000	0.527	0.527	0.527	0.527	0.527
23.250	0.527	0.526	0.526	0.526	0.526
23.500	0.526	0.526	0.525	0.525	0.525
23.750	0.525	0.525	0.524	0.524	0.524
24.000	0.524	0.523	0.522	0.521	0.520
24.250	0.519	0.518	0.517	0.516	0.515
24.500	0.514	0.513	0.512	0.511	0.510
24.750	0.510	0.509	0.508	0.507	0.506
25.000	0.505	0.504	0.504	0.503	0.502
25.250	0.501	0.500	0.499	0.499	0.498
25.500	0.497	0.496	0.495	0.495	0.494
25.750	0.493	0.492	0.491	0.491	0.490
26.000	0.489	0.488	0.488	0.487	0.486
26.250	0.485	0.485	0.484	0.483	0.482
26.500	0.482	0.481	0.480	0.479	0.479
26.750	0.478	0.477	0.477	0.476	0.475
27.000	0.474	0.474	0.473	0.472	0.472
27.250	0.471	0.470	0.470	0.469	0.468
27.500	0.468	0.467	0.467	0.466	0.465
27.750	0.465	0.464	0.464	0.463	0.462
28.000	0.462	0.461	0.461	0.460	0.459
28.250	0.459	0.458	0.458	0.457	0.457
28.500	0.456	0.456	0.455	0.455	0.454
28.750	0.454	0.453	0.453	0.452	0.452
29.000	0.451	0.451	0.450	0.450	0.449
29.250	0.449	0.448	0.448	0.447	0.447
29.500	0.446	0.446	0.445	0.445	0.445
29.750	0.444	0.444	0.443	0.443	0.442
30.000	0.442	0.442	0.441	0.441	0.440
30.250	0.440	0.440	0.439	0.439	0.438

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: UG Basin #8
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
30.500	0.438	0.438	0.437	0.437	0.437
30.750	0.436	0.436	0.435	0.435	0.435
31.000	0.434	0.434	0.434	0.433	0.433
31.250	0.433	0.432	0.432	0.432	0.431
31.500	0.431	0.431	0.430	0.430	0.430
31.750	0.430	0.429	0.429	0.429	0.428
32.000	0.428	0.428	0.427	0.427	0.427
32.250	0.427	0.426	0.426	0.426	0.425
32.500	0.425	0.425	0.425	0.424	0.424
32.750	0.424	0.424	0.423	0.423	0.423
33.000	0.423	0.422	0.422	0.422	0.422
33.250	0.421	0.421	0.421	0.421	0.420
33.500	0.420	0.420	0.420	0.419	0.419
33.750	0.419	0.419	0.419	0.418	0.418
34.000	0.418	0.418	0.417	0.417	0.417
34.250	0.417	0.416	0.416	0.416	0.416
34.500	0.415	0.415	0.415	0.415	0.414
34.750	0.414	0.414	0.414	0.414	0.413
35.000	0.413	0.413	0.413	0.412	0.412
35.250	0.412	0.412	0.411	0.411	0.411
35.500	0.411	0.410	0.410	0.410	0.410
35.750	0.409	0.409	0.409	0.409	0.409
36.000	0.408	0.408	0.408	0.408	0.407
36.250	0.407	0.407	0.407	0.406	0.406
36.500	0.406	0.406	0.405	0.405	0.405
36.750	0.405	0.404	0.404	0.404	0.404
37.000	0.404	0.403	0.403	0.403	0.403
37.250	0.402	0.402	0.402	0.402	0.401
37.500	0.401	0.401	0.401	0.400	0.400
37.750	0.400	0.400	0.400	0.399	0.399
38.000	0.399	0.399	0.398	0.398	0.398
38.250	0.398	0.397	0.397	0.397	0.397
38.500	0.396	0.396	0.396	0.396	0.395
38.750	0.395	0.395	0.395	0.395	0.394
39.000	0.394	0.394	0.394	0.393	0.393
39.250	0.393	0.393	0.392	0.392	0.392
39.500	0.392	0.391	0.391	0.391	0.391
39.750	0.390	0.390	0.390	0.390	0.390
40.000	0.389	0.389	0.389	0.389	0.388
40.250	0.388	0.388	0.388	0.387	0.387
40.500	0.387	0.387	0.386	0.386	0.386

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: UG Basin #8
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
40.750	0.386	0.386	0.385	0.385	0.385
41.000	0.385	0.384	0.384	0.384	0.384
41.250	0.383	0.383	0.383	0.383	0.382
41.500	0.382	0.382	0.382	0.381	0.381
41.750	0.381	0.381	0.381	0.380	0.380
42.000	0.380	0.380	0.379	0.379	0.379
42.250	0.379	0.378	0.378	0.378	0.378
42.500	0.377	0.377	0.377	0.377	0.376
42.750	0.376	0.376	0.376	0.376	0.375
43.000	0.375	0.375	0.375	0.374	0.374
43.250	0.374	0.374	0.373	0.373	0.373
43.500	0.373	0.372	0.372	0.372	0.372
43.750	0.371	0.371	0.371	0.371	0.371
44.000	0.370	0.370	0.370	0.370	0.369
44.250	0.369	0.369	0.369	0.368	0.368
44.500	0.368	0.368	0.367	0.367	0.367
44.750	0.367	0.367	0.366	0.366	0.366
45.000	0.366	0.365	0.365	0.365	0.365
45.250	0.364	0.364	0.364	0.364	0.363
45.500	0.363	0.363	0.363	0.362	0.362
45.750	0.362	0.362	0.362	0.361	0.361
46.000	0.361	0.361	0.360	0.360	0.360
46.250	0.360	0.359	0.359	0.359	0.359
46.500	0.358	0.358	0.358	0.358	0.357
46.750	0.357	0.357	0.357	0.357	0.356
47.000	0.356	0.356	0.356	0.355	0.355
47.250	0.355	0.355	0.354	0.354	0.354
47.500	0.354	0.353	0.353	0.353	0.353
47.750	0.353	0.352	0.352	0.352	0.352
48.000	0.351	0.351	0.351	0.351	0.350
48.250	0.350	0.350	0.350	0.349	0.349
48.500	0.349	0.349	0.348	0.348	0.348
48.750	0.348	0.347	0.347	0.347	0.347
49.000	0.347	0.346	0.346	0.346	0.346
49.250	0.345	0.345	0.345	0.345	0.344
49.500	0.344	0.344	0.344	0.343	0.343
49.750	0.343	0.343	0.343	0.342	0.342
50.000	0.342	0.342	0.341	0.341	0.341
50.250	0.341	0.340	0.340	0.340	0.340
50.500	0.339	0.339	0.339	0.339	0.338
50.750	0.338	0.338	0.338	0.338	0.337

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: UG Basin #8
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
51.000	0.337	0.337	0.337	0.336	0.336
51.250	0.336	0.336	0.335	0.335	0.335
51.500	0.335	0.334	0.334	0.334	0.334
51.750	0.333	0.333	0.333	0.333	0.333
52.000	0.332	0.332	0.332	0.332	0.331
52.250	0.331	0.331	0.331	0.330	0.330
52.500	0.330	0.330	0.329	0.329	0.329
52.750	0.329	0.329	0.328	0.328	0.328
53.000	0.328	0.327	0.327	0.327	0.327
53.250	0.326	0.326	0.326	0.326	0.325
53.500	0.325	0.325	0.325	0.324	0.324
53.750	0.324	0.324	0.324	0.323	0.323
54.000	0.323	0.323	0.322	0.322	0.322
54.250	0.322	0.321	0.321	0.321	0.321
54.500	0.320	0.320	0.320	0.320	0.319
54.750	0.319	0.319	0.319	0.319	0.318
55.000	0.318	0.318	0.318	0.317	0.317
55.250	0.317	0.317	0.316	0.316	0.316
55.500	0.316	0.315	0.315	0.315	0.315
55.750	0.314	0.314	0.314	0.314	0.314
56.000	0.313	0.313	0.313	0.313	0.312
56.250	0.312	0.312	0.312	0.311	0.311
56.500	0.311	0.311	0.310	0.310	0.310
56.750	0.310	0.310	0.309	0.309	0.309
57.000	0.309	0.308	0.308	0.308	0.308
57.250	0.307	0.307	0.307	0.307	0.306
57.500	0.306	0.306	0.306	0.305	0.305
57.750	0.305	0.305	0.305	0.304	0.304
58.000	0.304	0.304	0.303	0.303	0.303
58.250	0.303	0.302	0.302	0.302	0.302
58.500	0.301	0.301	0.301	0.301	0.300
58.750	0.300	0.300	0.300	0.300	0.299
59.000	0.299	0.299	0.299	0.298	0.298
59.250	0.298	0.298	0.297	0.297	0.297
59.500	0.297	0.296	0.296	0.296	0.296
59.750	0.296	0.295	0.295	0.295	0.295
60.000	0.294	0.294	0.294	0.294	0.293
60.250	0.293	0.293	0.293	0.292	0.292
60.500	0.292	0.292	0.291	0.291	0.291
60.750	0.291	0.290	0.290	0.290	0.290
61.000	0.290	0.289	0.289	0.289	0.289

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: UG Basin #8
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
61.250	0.288	0.288	0.288	0.288	0.287
61.500	0.287	0.287	0.287	0.286	0.286
61.750	0.286	0.286	0.286	0.285	0.285
62.000	0.285	0.285	0.284	0.284	0.284
62.250	0.284	0.283	0.283	0.283	0.283
62.500	0.282	0.282	0.282	0.282	0.281
62.750	0.281	0.281	0.281	0.281	0.280
63.000	0.280	0.280	0.280	0.279	0.279
63.250	0.279	0.279	0.278	0.278	0.278
63.500	0.278	0.277	0.277	0.277	0.277
63.750	0.276	0.276	0.276	0.276	0.276
64.000	0.275	0.275	0.275	0.275	0.274
64.250	0.274	0.274	0.274	0.273	0.273
64.500	0.273	0.273	0.272	0.272	0.272
64.750	0.272	0.272	0.271	0.271	0.271
65.000	0.271	0.270	0.270	0.270	0.270
65.250	0.269	0.269	0.269	0.269	0.268
65.500	0.268	0.268	0.268	0.267	0.267
65.750	0.267	0.267	0.267	0.266	0.266
66.000	0.266	0.266	0.265	0.265	0.265
66.250	0.265	0.264	0.264	0.264	0.264
66.500	0.263	0.263	0.263	0.263	0.262
66.750	0.262	0.262	0.262	0.262	0.261
67.000	0.261	0.261	0.261	0.260	0.260
67.250	0.260	0.260	0.259	0.259	0.259
67.500	0.259	0.258	0.258	0.258	0.258
67.750	0.257	0.257	0.257	0.257	0.257
68.000	0.256	0.256	0.256	0.256	0.255
68.250	0.255	0.255	0.255	0.254	0.254
68.500	0.254	0.254	0.253	0.253	0.253
68.750	0.253	0.253	0.252	0.252	0.252
69.000	0.252	0.251	0.251	0.251	0.251
69.250	0.250	0.250	0.250	0.250	0.249
69.500	0.249	0.249	0.249	0.248	0.248
69.750	0.248	0.248	0.248	0.247	0.247
70.000	0.247	0.247	0.246	0.246	0.246
70.250	0.246	0.245	0.245	0.245	0.245
70.500	0.244	0.244	0.244	0.244	0.243
70.750	0.243	0.243	0.243	0.243	0.242
71.000	0.242	0.242	0.242	0.241	0.241
71.250	0.241	0.241	0.240	0.240	0.240

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: UG Basin #8
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
71.500	0.240	0.239	0.239	0.239	0.239
71.750	0.238	0.238	0.238	0.238	0.238
72.000	0.237	0.237	0.237	0.237	0.236
72.250	0.236	0.236	0.236	0.235	0.235
72.500	0.235	0.235	0.234	0.234	0.234
72.750	0.234	0.233	0.233	0.233	0.233
73.000	0.233	0.232	0.232	0.232	0.232
73.250	0.231	0.231	0.231	0.231	0.230
73.500	0.230	0.230	0.230	0.229	0.229
73.750	0.229	0.229	0.229	0.228	0.228
74.000	0.228	0.228	0.227	0.227	0.227
74.250	0.227	0.226	0.226	0.226	0.226
74.500	0.225	0.225	0.225	0.225	0.224
74.750	0.224	0.224	0.224	0.224	0.223
75.000	0.223	0.223	0.223	0.222	0.222
75.250	0.222	0.222	0.221	0.221	0.221
75.500	0.221	0.220	0.220	0.220	0.220
75.750	0.219	0.219	0.219	0.219	0.219
76.000	0.218	0.218	0.218	0.218	0.217
76.250	0.217	0.217	0.217	0.216	0.216
76.500	0.216	0.216	0.215	0.215	0.215
76.750	0.215	0.215	0.214	0.214	0.214
77.000	0.214	0.213	0.213	0.213	0.213
77.250	0.212	0.212	0.212	0.212	0.211
77.500	0.211	0.211	0.211	0.210	0.210
77.750	0.210	0.210	0.210	0.209	0.209
78.000	0.209	0.209	0.208	0.208	0.208
78.250	0.208	0.207	0.207	0.207	0.207
78.500	0.206	0.206	0.206	0.206	0.205
78.750	0.205	0.205	0.205	0.205	0.204
79.000	0.204	0.204	0.204	0.203	0.203
79.250	0.203	0.203	0.202	0.202	0.202
79.500	0.202	0.201	0.201	0.201	0.201
79.750	0.200	0.200	0.200	0.200	0.200
80.000	0.199	0.199	0.199	0.199	0.198
80.250	0.198	0.198	0.198	0.197	0.197
80.500	0.197	0.197	0.196	0.196	0.196
80.750	0.196	0.196	0.195	0.195	0.195
81.000	0.195	0.194	0.194	0.194	0.194
81.250	0.193	0.193	0.193	0.193	0.192
81.500	0.192	0.192	0.192	0.191	0.191

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: UG Basin #8
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
81.750	0.191	0.191	0.191	0.190	0.190
82.000	0.190	0.190	0.189	0.189	0.189
82.250	0.189	0.188	0.188	0.188	0.188
82.500	0.187	0.187	0.187	0.187	0.186
82.750	0.186	0.186	0.186	0.186	0.185
83.000	0.185	0.185	0.185	0.184	0.184
83.250	0.184	0.184	0.183	0.183	0.183
83.500	0.183	0.182	0.182	0.182	0.182
83.750	0.181	0.181	0.181	0.181	0.181
84.000	0.180	0.180	0.180	0.180	0.179
84.250	0.179	0.179	0.179	0.178	0.178
84.500	0.178	0.178	0.177	0.177	0.177
84.750	0.177	0.176	0.176	0.176	0.176
85.000	0.176	0.175	0.175	0.175	0.175
85.250	0.174	0.174	0.174	0.174	0.173
85.500	0.173	0.173	0.173	0.172	0.172
85.750	0.172	0.172	0.172	0.171	0.171
86.000	0.171	0.171	0.170	0.170	0.170
86.250	0.170	0.169	0.169	0.169	0.169
86.500	0.168	0.168	0.168	0.168	0.167
86.750	0.167	0.167	0.167	0.167	0.166
87.000	0.166	0.166	0.166	0.165	0.165
87.250	0.165	0.165	0.164	0.164	0.164
87.500	0.164	0.163	0.163	0.163	0.163
87.750	0.162	0.162	0.162	0.162	0.162
88.000	0.161	0.161	0.161	0.161	0.160
88.250	0.160	0.160	0.160	0.159	0.159
88.500	0.159	0.159	0.158	0.158	0.158
88.750	0.158	0.158	0.157	0.157	0.157
89.000	0.157	0.156	0.156	0.156	0.156
89.250	0.155	0.155	0.155	0.155	0.154
89.500	0.154	0.154	0.154	0.153	0.153
89.750	0.153	0.153	0.153	0.152	0.152
90.000	0.152	0.152	0.151	0.151	0.151
90.250	0.151	0.150	0.150	0.150	0.150
90.500	0.149	0.149	0.149	0.149	0.148
90.750	0.148	0.148	0.148	0.148	0.147
91.000	0.147	0.147	0.147	0.146	0.146
91.250	0.146	0.146	0.145	0.145	0.145
91.500	0.145	0.144	0.144	0.144	0.144
91.750	0.143	0.143	0.143	0.143	0.143

1047-01 - 100 Year Storm Pond Drain Times

Subsection: Time vs. Volume
Label: UG Basin #8
Scenario: Post-Development 100

Return Event: 100 years
Storm Event: NOAA 100 YR - D DIST.

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
92.000	0.142	0.142	0.142	0.142	0.141
92.250	0.141	0.141	0.141	0.140	0.140
92.500	0.140	0.140	0.139	0.139	0.139
92.750	0.139	0.138	0.138	0.138	0.138
93.000	0.138	0.137	0.137	0.137	0.137
93.250	0.136	0.136	0.136	0.136	0.135
93.500	0.135	0.135	0.135	0.134	0.134
93.750	0.134	0.134	0.134	0.133	0.133
94.000	0.133	0.133	0.132	0.132	0.132
94.250	0.132	0.131	0.131	0.131	0.131
94.500	0.130	0.130	0.130	0.130	0.129
94.750	0.129	0.129	0.129	0.129	0.128
95.000	0.128	0.128	0.128	0.127	0.127
95.250	0.127	0.127	0.126	0.126	0.126
95.500	0.126	0.125	0.125	0.125	0.125
95.750	0.124	0.124	0.124	0.124	0.124
96.000	0.123	0.123	0.123	0.123	0.122
96.250	0.122	0.122	0.122	0.121	0.121
96.500	0.121	0.121	0.120	0.120	0.120
96.750	0.120	0.120	0.119	0.119	0.119
97.000	0.119	0.118	0.118	0.118	0.118
97.250	0.117	0.117	0.117	0.117	0.116
97.500	0.116	0.116	0.116	0.115	0.115
97.750	0.115	0.115	0.115	0.114	0.114
98.000	0.114	0.114	0.113	0.113	0.113
98.250	0.113	0.112	0.112	0.112	0.112
98.500	0.111	0.111	0.111	0.111	0.110
98.750	0.110	0.110	0.110	0.110	0.109
99.000	0.109	0.109	0.109	0.108	0.108
99.250	0.108	0.108	0.107	0.107	0.107
99.500	0.107	0.106	0.106	0.106	0.106
99.750	0.105	0.105	0.105	0.105	0.105
100.000	0.104	(N/A)	(N/A)	(N/A)	(N/A)

1047-01 - 100 Year Storm Pond Drain Times

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WATER QUALITY CALCULATIONS – APPENDIX C-3
GROUNDWATER RECHARGE

New Jersey Groundwater Recharge Spreadsheet Version 2.0 November 2003

Annual Groundwater Recharge Analysis (based on GSR-32)

Select Township ↓	Average Annual P (in)	Climatic Factor
MORRIS CO., HARDING TWP	49.9	1.72

Project Name:	1047-01
Description:	
Analysis Date:	05/03/23

Pre-Developed Conditions

Land Segment	Area (acres)	TR-55 Land Cover	Soil	Annual Recharge (in)	Annual Recharge (cu.ft)
1	1.39	Impervious areas	Parsippany	0.0	-
2	0.03	Open space	Califon	15.6	1,694
3	0.07	Woods	Califon	16.3	4,153
4	0.11	Open space	Cokesbury	0.0	-
5	0.09	Woods	Cokesbury	0.0	-
6	7.58	Open space	Parker	18.8	517,411
7	14.34	Woods	Parker	19.4	1,009,393
8	2.34	Brush	Parker	20.1	171,015
9	0.01	Gravel, dirt	Califon	7.6	274
10	0.02	Gravel, dirt	Cokesbury	0.0	-
11	0.4	Gravel, dirt	Parker	11.8	17,197
12	0				
13	0				
14	0				
15	0				
Total =	26.4			Total Annual Recharge (in)	Total Annual Recharge (cu-ft)
				18.0	1,721,137

Post-Developed Conditions

Land Segment	Area (acres)	TR-55 Land Cover	Soil	Annual Recharge (in)	Annual Recharge (cu.ft)
1	8.04	Impervious areas	Parsippany	0.0	-
2	0.05	Open space	Califon	15.6	2,823
3	0.07	Woods	Califon	16.3	4,153
4	0.18	Open space	Cokesbury	0.0	-
5	0.04	Woods	Cokesbury	0.0	-
6	8.2	Open space	Parker	18.8	559,732
7	8.62	Woods	Parker	19.4	606,762
8	1.18	Brush	Parker	20.1	86,239
9	0				
10	0				
11	0				
12	0				
13	0				
14	0				
15	0				
Total =	26.4			Total Annual Recharge (in)	Total Annual Recharge (cu.ft)
				13.2	1,259,709

Annual Recharge Requirements Calculation ↓

% of Pre-Developed Annual Recharge to Preserve =	100%	Total Impervious Area (sq.ft) 350,222
Post-Development Annual Recharge Deficit=	*461,429*	(cubic feet)

Recharge Efficiency Parameters Calculations (area averages)

RWC=	2.85	(in)	DRWC=	1.47	(in)
ERWC =	0.40	(in)	EDRWC=	0.21	(in)

Procedure to fill the Pre-Development and Post-Development Conditions Tables

For each land segment, first enter the area, then select TR-55 Land Cover, then select Soil. Start from the top of the table and proceed downward. Don't leave blank rows (with A=0) in between your segment entries. Rows with A=0 will not be displayed or used in calculations. For impervious areas outside of standard lots select "Impervious Areas" as the Land Cover. Soil type for impervious areas are only required if an infiltration facility will be built within these areas.

Project Name	Description	Analysis Date	BMP or LID Type
1047-01	0	05/03/23	Basin #6

Recharge BMP Input Parameters

Parameter	Symbol	Value	Unit
BMP Area	ABMP	1354.6	sq.ft
BMP Effective Depth, this is the design variable	dBMP	27.0	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-32.8	in
Depth of lower surface of BMP, must be>=dBMPu	dEXC	42.0	in
Post-development Land Segment Location of BMP , Input Zero if Location is distributed or undetermined	SegBMP	6	unitless

Root Zone Water capacity Calculated Parameters

Parameter	Symbol	Value	Unit
Empty Portion of RWC under Post-D Natural Recharge	ERWC	0.55	in
ERWC Modified to consider dEXC	EDRWC	0.26	in
Empty Portion of RWC under Infilt. BMP	RERWC	0.20	in

Recharge Design Parameters

Parameter	Symbol	Value	Unit
Inches of Runoff to capture	Qdesign	1.88	in
Inches of Rainfall to capture	Pdesign	2.11	in
Recharge Provided Avg. over Imp. Area		36.1	in
Runoff Captured Avg. over imp. Area		37.2	in

BMP Calculated Size Parameters

ABMP/Aimp	Aratio	0.06	unitless
BMP Volume	VBMP	3,048	cu.ft

Parameters from Annual Recharge Worksheet

Post-D Deficit Recharge (or desired recharge volume)	Vdef	461,429	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	21,344	sq.ft
Root Zone Water Capacity	RWC	3.92	in
RWC Modified to consider dEXC	DRWC	1.86	in
Climatic Factor	C-factor	1.72	no units
Average Annual P	Pavg	49.9	in
Recharge Requirement over Imp. Area	dr	15.8	in

System Performance Calculated Parameters

Annual BMP Recharge Volume		64,295	cu.ft
Avg BMP Recharge Efficiency		97.2%	Represents % Infiltration Recharged
%Rainfall became Runoff		78.7%	%
%Runoff Infiltrated		94.7%	%
%Runoff Recharged		5.6%	%
%Rainfall Recharged		4.4%	%

CALCULATION CHECK MESSAGES

Volume Balance-> **Solve Problem to satisfy Annual Recharge**
dBMP Check---> **OK**
dEXC Check---> **OK**
BMP Location---> **OK**

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensetive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP.
To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration clik the "Default Vdef & Aimp" button.

Project Name	Description	Analysis Date	BMP or LID Type
1047-01	0	05/03/23	Basin #8

Recharge BMP Input Parameters

Parameter	Symbol	Value	Unit
BMP Area	ABMP	5000.0	sq.ft
BMP Effective Depth, this is the design variable	dBMP	36.0	in
Upper level of the BMP surface (negative if above ground)	dBMPu	2.2	in
Depth of lower surface of BMP, must be>=dBMPu	dEXC	72.0	in
Post-development Land Segment Location of BMP , Input Zero if Location is distributed or undetermined	SegBMP	1	unitless

Root Zone Water capacity Calculated Parameters

Parameter	Symbol	Value	Unit
Empty Portion of RWC under Post-D Natural Recharge	ERWC	0.00	in
ERWC Modified to consider dEXC	EDRWC	0.00	in
Empty Portion of RWC under Infilt. BMP	RERWC	0.00	in

Recharge Design Parameters

Parameter	Symbol	Value	Unit
Inches of Runoff to capture	Qdesign	2.24	in
Inches of Rainfall to capture	Pdesign	2.46	in
Recharge Provided Avg. over Imp. Area		38.4	in
Runoff Captured Avg. over imp. Area		38.4	in

BMP Calculated Size Parameters

ABMP/Aimp	Aratio	0.06	unitless
BMP Volume	VBMP	15,000	cu.ft

CALCULATION CHECK MESSAGES

Volume Balance-> Solve Problem to satisfy Annual Recharge
dBMP Check---> OK
dEXC Check---> OK
BMP Location---> OK

Parameters from Annual Recharge Worksheet

Post-D Deficit Recharge (or desired recharge volume)	Vdef	461,429	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	80,586	sq.ft
Root Zone Water Capacity	RWC	0.00	in
RWC Modified to consider dEXC	DRWC	0.00	in
Climatic Factor	C-factor	1.72	no units
Average Annual P	Pavg	49.9	in
Recharge Requirement over Imp. Area	dr	15.8	in

System Performance Calculated Parameters

Annual BMP Recharge Volume		257,738	cu.ft
Avg BMP Recharge Efficiency		100.0%	Represents % Infiltration Recharged
%Rainfall became Runoff		78.7%	%
%Runoff Infiltrated		97.8%	%
%Runoff Recharged		22.5%	%
%Rainfall Recharged		17.7%	%

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensetive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP.
To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration clik the "Default Vdef & Aimp" button.

Project Name	Description	Analysis Date	BMP or LID Type
1047-01	0	05/03/23	Basin #10

Recharge BMP Input Parameters

Parameter	Symbol	Value	Unit
BMP Area	ABMP	2091.4	sq.ft
BMP Effective Depth, this is the design variable	dBMP	36.0	in
Upper level of the BMP surface (negative if above ground)	dBMPu	-46.3	in
Depth of lower surface of BMP, must be>=dBMPu	dEXC	42.0	in
Post-development Land Segment Location of BMP , Input Zero if Location is distributed or undetermined	SegBMP	4	unitless

Root Zone Water capacity Calculated Parameters

Parameter	Symbol	Value	Unit
Empty Portion of RWC under Post-D Natural Recharge	ERWC	0.00	in
ERWC Modified to consider dEXC	EDRWC	0.00	in
Empty Portion of RWC under Infilt. BMP	RERWC	0.00	in

Recharge Design Parameters

Parameter	Symbol	Value	Unit
Inches of Runoff to capture	Qdesign	1.35	in
Inches of Rainfall to capture	Pdesign	1.57	in
Recharge Provided Avg. over Imp. Area		35.5	in
Runoff Captured Avg. over imp. Area		35.5	in

BMP Calculated Size Parameters

ABMP/Aimp	Aratio	0.04	unitless
BMP Volume	VBMP	6,274	cu.ft

Parameters from Annual Recharge Worksheet

Post-D Deficit Recharge (or desired recharge volume)	Vdef	461,429	cu.ft
Post-D Impervious Area (or target Impervious Area)	Aimp	56,628	sq.ft
Root Zone Water Capacity	RWC	0.00	in
RWC Modified to consider dEXC	DRWC	0.00	in
Climatic Factor	C-factor	1.72	no units
Average Annual P	Pavg	49.9	in
Recharge Requirement over Imp. Area	dr	15.8	in

System Performance Calculated Parameters

Annual BMP Recharge Volume		167,740	cu.ft
Avg BMP Recharge Efficiency		100.0%	Represents % Infiltration Recharged
%Rainfall became Runoff		78.7%	%
%Runoff Infiltrated		90.6%	%
%Runoff Recharged		14.6%	%
%Rainfall Recharged		11.5%	%

CALCULATION CHECK MESSAGES

Volume Balance-> **Solve Problem to satisfy Annual Recharge**
dBMP Check---> **OK**
dEXC Check---> **OK**
BMP Location---> **OK**

OTHER NOTES

Pdesign is accurate only after BMP dimensions are updated to make rech volume= deficit volume. The portion of BMP infiltration prior to filling and the area occupied by BMP are ignored in these calculations. Results are sensetive to dBMP, make sure dBMP selected is small enough for BMP to empty in less than 3 days. For land Segment Location of BMP if you select "impervious areas" RWC will be minimal but not zero as determined by the soil type and a shallow root zone for this Land Cover allowing consideration of lateral flow and other losses.

How to solve for different recharge volumes: By default the spreadsheet assigns the values of total deficit recharge volume "Vdef" and total proposed impervious area "Aimp" from the "Annual Recharge" sheet to "Vdef" and "Aimp" on this page. This allows solution for a single BMP to handle the entire recharge requirement assuming the runoff from entire impervious area is available to the BMP.
To solve for a smaller BMP or a LID-IMP to recharge only part of the recharge requirement, set Vdef to your target value and Aimp to impervious area directly connected to your infiltration facility and then solve for ABMP or dBMP. To go back to the default configuration clik the "Default Vdef & Aimp" button.

STORMWATER PIPING CALCULATIONS – APPENDIX D

PROJECT: The Estates at Hurstmont
LOCATION: Harding Township
COMPUTED BY: AGS
CHECKED BY: RCM2

DRAINAGE COMPUTATION SHEET

STORM FREQUENCY: 25 yr.
N FACTOR: 0.013

JOB NO.: 1047-01
DATE: May 26, 2023
SHEET: 1 OF

LOCATION		ACRES					TIME OF CONC. (MIN)				Q(C.F.S.)			V (FT/S)			
FROM	TO	SUB	TOTAL	C	CxA(SUB)	SUM CxA	INLET	PIPE	TOT.	I	DESIGN	CAP.	SIZE	SLOPE	DESIGN	LENGTH	REMARKS
#1-8	#1-7	0.29	0.29	0.25	0.07	0.07	10	-	10	6.4	0.46	64.47	24	0.0813	2.89	123	
#1-7	#1-3	0.60	0.89	0.25	0.15	0.22	10	0.709	11	6.4	1.42	79.94	24	0.125	4.00	96	
#1-6	#1-5	0.46	1.35	0.25	0.12	0.34	10	0.4	11	6.4	2.16	74.31	24	0.108	4.57	88	
#1-5	#1-4	0.46	1.81	0.25	0.12	0.45	10	0.321	11	6.4	2.89	113.05	24	0.25	4.94	50	
#1-4	MH #1-3	0.09	1.90	0.25	0.02	0.48	10	0.169	12	6.4	3.04	70.17	24	0.0963	4.98	41	
MH #1-3	MH #1-2	0.00	1.90	0.00	0.00	0.48	10	0.137	12	6.4	3.04	108.08	24	0.2285	5.09	111	
MH #1-2	FES #1-1	0.00	1.90	0.00	0.00	0.48	10	0.363	12	6.4	3.04	30.92	24	0.0187	5.14	14	
#4-8	#4-7	1.36	1.36	0.25	0.34	0.34	10	-	10	6.4	2.17	71.50	24	0.1	4.55	40	
#4-7	MH #4-6	0.67	2.03	0.25	0.17	0.51	10	0.147	10	6.4	3.24	68.17	24	0.0909	5.16	121	
MH #4-6	MH #4-5	0.00	2.03	0.00	0.00	0.51	10	0.391	11	6.4	3.24	68.10	24	0.0907	5.09	151	
MH #4-5	#4-4	0.00	2.03	0.00	0.00	0.51	10	0.494	11	6.4	3.24	71.50	24	0.1	5.15	83	
#4-4	MH #4-3	1.47	3.50	0.25	0.37	0.88	10	0.269	11	6.4	5.59	71.50	24	0.1	6.03	92	
MH #4-3	MH #4-2	0.00	3.50	0.00	0.00	0.88	10	0.254	12	6.4	5.59	71.50	24	0.1	5.94	166	
MH #4-2	FES #4-1	0.00	3.50	0.00	0.00	0.88	10	0.466	12	6.4	5.59	48.86	24	0.0467	5.97	30	
#5-15	#5-14	0.03	0.03	0.25	0.01	0.01	10	-	10	6.4	0.05	5.21	12	0.0214	1.71	21	
#5-14	#5-13	0.03	0.06	0.25	0.01	0.02	10	0.205	10	6.4	0.10	21.13	15	0.1071	1.98	14	
#5-13	MH #5-12	0.04	0.10	0.25	0.01	0.03	10	0.118	10	6.4	0.16	8.66	15	0.018	2.22	100	
#5-12A	MH #5-12	0.31	0.31	0.68	0.21	0.21	10	-	10	6.4	1.35	3.72	12	0.0109	4.36	46	
MH#5-12	#5-11	0.00	0.41	0.00	0.00	0.24	10	0.176	10	6.4	1.51	5.59	15	0.0075	4.31	174	
#5-11A	#5-11	0.21	0.21	0.77	0.16	0.16	10	-	10	6.4	1.03	3.80	12	0.0114	4.12	22	
#5-11	MH #5-10	0.03	0.65	0.98	0.03	0.43	10	0.089	10	6.4	2.73	17.06	18	0.0264	5.04	55	
MH #5-10	#5-9	0.00	0.65	0.00	0.00	0.43	10	0.182	10	6.4	2.73	28.75	18	0.075	5.08	98	
#5-9A	#5-9	0.32	0.32	0.57	0.18	0.18	10	-	10	6.4	1.17	10.43	15	0.0261	3.99	115	
#5-9	#5-8	0.01	0.98	0.98	0.01	0.62	10	0.48	10	6.4	3.96	61.67	24	0.0744	5.59	78	
#5-8	#5-7	0.02	1.00	0.98	0.02	0.64	10	0.233	11	6.4	4.08	71.82	24	0.1009	5.61	64	
#5-7	#5-6	0.02	1.02	0.98	0.02	0.66	10	0.19	11	6.4	4.21	22.61	24	0.01	5.67	34	
#5-6A	#5-6	0.27	1.29	0.61	0.17	0.17	10	-	10	6.4	1.06	3.56	12	0.01	3.96	45	
#5-6	#5-5	0.13	1.42	0.76	0.10	0.92	10	0.189	10	6.4	5.90	68.51	24	0.0918	5.99	158	
#5-5	#5-4	0.15	1.57	0.58	0.09	1.01	10	0.44	11	6.4	6.46	22.61	24	0.01	6.28	40	
#5-4	MH #5-3	0.18	1.75	0.76	0.14	1.15	10	0.106	11	6.4	7.34	62.62	24	0.0767	6.42	180	

PROJECT: The Estates at Hurstmont
LOCATION: Harding Township
COMPUTED BY: AGS
CHECKED BY: RCM2

DRAINAGE COMPUTATION SHEET

STORM FREQUENCY: 25 yr.
N FACTOR: 0.013

JOB NO.: 1047-01
DATE: May 26, 2023
SHEET: 1 OF

LOCATION		ACRES					TIME OF CONC. (MIN)				Q(C.F.S.)			V (FT/S)			
FROM	TO	SUB	TOTAL	C	CxA(SUB)	SUM CxA	INLET	PIPE	TOT.	I	DESIGN	CAP.	SIZE	SLOPE	DESIGN	LENGTH	REMARKS
MH #5-3	MH #5-2	0.00	1.75	0.00	0.00	1.15	10	0.467	11	6.4	7.34	59.01	24	0.0681	6.53	72	
#5-2J	#5-2H	0.05	0.05	0.25	0.01	0.01	10	-	10	6.4	0.08	10.50	18	0.01	1.86	100	
#5-2I	#5-2H	0.09	0.09	0.98	0.09	0.09	10	-	10	6.4	0.56	11.73	15	0.033	3.23	53	
#5-2H	#5-2G	0.13	0.27	0.51	0.07	0.17	10	0.273	10	6.4	1.06	10.50	18	0.01	3.91	122	
#5-2G	#5-2F	0.09	0.36	0.33	0.03	0.20	10	0.52	11	6.4	1.25	10.50	18	0.01	4.13	111	
#5-2F	#5-2D	0.07	0.43	0.25	0.02	0.21	10	0.448	11	6.4	1.36	10.50	18	0.01	4.21	97	
#5-2E	#5-2D	0.10	0.10	0.98	0.10	0.10	10	-	10	6.4	0.63	7.71	16	0.0101	3.35	109	
#5-2D	MH #5-2C	0.06	0.59	0.25	0.02	0.33	10	0.542	11	6.4	2.09	39.17	18	0.1392	4.83	37	
MH #5-2C	MH #5-2B	0.00	0.59	0.00	0.00	0.33	11	0.128	11	6.4	2.09	33.20	18	0.1	5.44	10	
MH #5-2B	MH #5-2A	0.00	0.59	0.00	0.00	0.33	12	0.031	11	6.4	2.09	29.70	18	0.08	4.70	210	
MH #5-2A	MH #5-2	0.00	0.59	0.00	0.00	0.33	13	0.745	11	6.4	2.09	10.60	18	0.0102	4.73	132	
MH #5-2	HW #5-1	0.00	2.34	0.00	0.00	1.47	14	0.465	12	6.4	9.42	24.56	24	0.0118	7.21	17	
#6-11	#6-10	0.02	0.02	0.25	0.01	0.01	10	-	10	6.4	0.03	3.98	12	0.0125	1.49	8	
#6-10	#6-9	0.04	0.06	0.25	0.01	0.02	10	0.089	10	6.4	0.10	7.22	15	0.0125	2.08	8	
#6-9	#6-8	0.04	0.10	0.25	0.01	0.03	10	0.064	10	6.4	0.16	7.72	15	0.0143	2.52	7	
#6-8	#6-7	0.04	0.14	0.25	0.01	0.04	10	0.046	10	6.4	0.22	6.16	15	0.0091	2.37	11	
#6-7	MH #6-6	0.14	0.28	0.25	0.04	0.07	10	0.077	10	6.4	0.45	7.67	15	0.0141	3.06	34	
MH #6-6	MH #6-5	0.00	0.28	0.00	0.00	0.07	10	0.185	10	6.4	0.45	7.33	15	0.0129	3.03	85	
MH #6-5	#6-4	0.00	0.28	0.00	0.00	0.07	10	0.468	11	6.4	0.45	9.92	15	0.0236	2.99	36	
#6-4	#6-3	0.28	0.56	0.56	0.16	0.23	10	0.201	11	6.4	1.44	2.66	15	0.0017	4.25	89	
#6-3	#6-2	0.14	0.70	0.71	0.10	0.32	10	0.349	11	6.4	2.07	6.46	15	0.01	4.63	24	
#6-2	HW #6-1	0.12	0.82	0.70	0.08	0.41	10	0.086	12	6.4	2.61	6.62	15	0.0105	5.07	19	
#7-11	FES #7-10	0.15	0.15	0.53	0.08	0.08	10	-	10	6.4	0.50	3.85	12	0.0117	3.38	5	
#7-3	#7-2	0.09	0.09	0.82	0.07	0.07	10	-	10	6.4	0.47	3.56	12	0.01	3.14	42	
#7-2	FES #7-1	0.11	0.20	0.80	0.09	0.16	10	0.223	10	6.4	1.04	6.46	15	0.01	3.86	5	
#10-5	#10-4	0.43	0.43	0.41	0.18	0.18	10	-	10	6.4	1.13	9.98	12	0.0786	4.02	70	
#10-4	#10-3	0.53	0.96	0.77	0.41	0.58	10	0.29	10	6.4	3.73	11.92	15	0.0341	5.41	41	
#10-3	#10-2	0.18	1.14	1.13	0.20	0.79	10	0.126	10	6.4	5.04	21.77	15	0.1137	6.11	84	

PROJECT: The Estates at Hurstmont
LOCATION: Harding Township
COMPUTED BY: AGS
CHECKED BY: RCM2

DRAINAGE COMPUTATION SHEET

STORM FREQUENCY: 25 yr.
N FACTOR: 0.013

JOB NO.: 1047-01
DATE: May 26, 2023
SHEET: 1 OF

LOCATION		ACRES					TIME OF CONC. (MIN)				Q(C.F.S.)			V (FT/S)			
FROM	TO	SUB	TOTAL	C	CxA(SUB)	SUM CxA	INLET	PIPE	TOT.	I	DESIGN	CAP.	SIZE	SLOPE	DESIGN	LENGTH	REMARKS
#10-2A	#10-2	0.06	0.06	0.85	0.05	0.05	10	-	10	6.4	0.32	3.56	12	0.01	2.81	40	
#10-2	FES #10-1	0.37	1.57	0.82	0.31	1.14	10	0.237	10	6.4	7.31	12.79	24	0.0032	4.21	31	
#10-14	#10-13	0.34	0.34	0.67	0.23	0.23	10	-	10	6.4	1.45	3.80	12	0.0114	4.52	22	
#10-13	#10-12	0.08	0.42	0.71	0.06	0.28	10	0.081	10	6.4	1.82	20.47	15	0.1005	4.47	108	
#10-12	#10-11	0.06	0.48	0.73	0.04	0.33	10	0.403	10	6.4	2.10	15.03	15	0.0542	4.77	72	
#10-11	FES #10-10	0.04	0.52	0.70	0.03	0.36	10	0.252	11	6.4	2.28	7.72	15	0.0143	5.48	14	
#11-16	#11-15	0.36	0.36	0.25	0.09	0.09	10	-	10	6.4	0.58	69.25	24	0.0938	3.07	80	
#11-15	#11-14	0.72	1.08	0.25	0.18	0.27	10	0.434	11	6.4	1.73	50.96	24	0.0508	4.28	197	
#11-14	#11-13	1.30	2.38	0.25	0.33	0.60	10	0.767	11	6.4	3.80	54.03	24	0.0571	5.35	70	
#11-13	MH #11-12	0.79	3.17	0.25	0.20	0.79	10	0.218	12	6.4	5.06	66.69	24	0.087	5.98	23	
MH #11-12	MH #11-11	0.00	3.17	0.00	0.00	0.79	10	0.064	12	6.4	5.06	19.58	24	0.0075	5.78	347	
MH #11-11	MH #11-10	0.00	3.17	0.00	0.00	0.79	10	1.001	13	6.4	5.06	44.65	24	0.039	5.91	86	
MH #11-10	MH #11-9	0.00	3.17	0.00	0.00	0.79	10	0.243	13	6.4	5.06	36.46	24	0.026	5.88	77	
MH #11-9	MH #11-8	0.00	3.17	0.00	0.00	0.79	10	0.218	13	6.4	5.06	72.18	24	0.1019	5.84	108	
O.S. #7	HW #6-20	-	-	-	-	-	-	-	-	-	1.01	6.65	15	0.0106	3.91	71	100 YR
O.S. #6	MH #11-8	-	-	-	-	-	-	-	-	-	7.24	10.91	18	0.0108	6.60	37	100 YR
MH #11-8	MH #11-7	0.00	3.17	0.00	0.00	0.79	10	0.093	10	6.4	12.30	66.15	24	0.0856	7.32	111	
MH #11-7	MH #11-6	0.00	3.17	0.00	0.00	0.79	10	0.253	10	6.4	17.37	47.97	24	0.045	7.91	111	
MH #11-6	MH #11-5	0.00	3.17	0.00	0.00	0.79	10	0.234	11	6.4	22.43	56.16	24	0.0617	8.25	243	
#11-5D	#11-5C	0.09	0.09	0.98	0.09	0.09	10	-	10	6.4	0.56	19.37	15	0.09	3.15	106	
#11-5C	#11-5A	0.09	0.18	0.98	0.09	0.18	10	0.561	11	6.4	1.13	6.16	15	0.0091	3.83	66	
O.S. #8	#11-5A	-	-	-	-	-	-	-	-	-	10.32	29.22	24	0.0167	6.19	9	100 YR
#11-5A	MH #11-5	0.10	0.28	0.98	0.10	0.274	10	0.024	10	6.4	12.07	35.96	24	0.0253	7.84	73	
MH #11-5	MH #11-4	0.00	3.45	0.00	0.00	1.067	10	0.155	10	6.4	18.89	34.88	24	0.0238	7.96	42	
MH #11-4	MH #11-3	0.00	3.45	0.00	0.00	1.07	10	0.088	10	6.4	25.71	25.18	24	0.0124	8.91	85	
O.S. #5	MH #11-3	-	-	-	-	-	-	-	-	-	20.15	26.56	24	0.0138	9.30	40	100 YR
MH #11-3	MH #11-2	0.00	0.00	0.00	0.00	0.00	10	0.072	10	6.4	20.15	167.72	36	0.0633	7.48	79	
O.S. #10	MH #11-2	-	-	-	-	-	-	-	-	-	25.67	67.33	36	0.0102	8.88	44	100 YR

PROJECT: The Estates at Hurstmont
LOCATION: Harding Township
COMPUTED BY: AGS
CHECKED BY: RCM2

DRAINAGE COMPUTATION SHEET

STORM FREQUENCY: 25 yr.
N FACTOR: 0.013

JOB NO.: 1047-01
DATE: May 26, 2023
SHEET: 1 OF

LOCATION		ACRES					TIME OF CONC. (MIN)				Q(C.F.S.)			V (FT/S)			
FROM	TO	SUB	TOTAL	C	CxA(SUB)	SUM CxA	INLET	PIPE	TOT.	I	DESIGN	CAP.	SIZE	SLOPE	DESIGN	LENGTH	REMARKS
MH #11-2	HW #11-1	0.00	0.00	0.00	0.00	0.00	10	0.083	10	6.4	45.82	67.00	36	0.0101	10.21	10	
O.S. #11	HW #11-30	-	-	-	-	-	-	-	-	-	35.13	99.10	36	0.0221	2.31	34	100 YR
#11A-10	#11A-9	0.55	0.55	0.64	0.35	0.35	10	-	10	6.4	2.23	3.80	12	0.0114	5.04	22	
#11A-9	#11A-8	0.09	0.64	0.76	0.07	0.42	10	0.073	10	6.4	2.67	4.57	15	0.005	5.01	90	
#11A-8	#11A-7	0.02	0.66	0.98	0.02	0.44	10	0.299	10	6.4	2.80	20.52	18	0.0382	5.10	114	
#11A-7	#11A-6	0.41	1.07	0.64	0.26	0.70	10	0.373	11	6.4	4.46	10.50	18	0.01	5.74	156	
#11A-5	MH #11A-5	0.04	1.11	0.28	0.01	0.71	10	0.453	11	6.4	4.54	10.50	18	0.01	6.10	21	
MH #11A-5	#11A-4	0.00	1.11	0.00	0.00	0.71	10	0.057	11	6.4	4.54	15.78	18	0.0226	5.77	102	
#11A-4	#11A-3	0.30	1.41	0.67	0.20	0.91	10	0.295	12	6.4	5.82	10.50	18	0.01	6.30	22	
#11A-3	MH #11A-2	0.10	1.51	0.66	0.07	0.98	11	0.058	12	6.4	6.24	33.20	18	0.1	6.11	24	
MH #11A-2	HW #11A-1	0.00	1.41	0.00	0.00	0.98	10	0.065	12	6.4	6.24	11.74	18	0.0125	6.62	18	
#12-4	#12-3	0.03	0.03	0.25	0.01	0.01	10	-	10	6.4	0.05	3.98	12	0.0125	1.74	8	
#12-3	#12-2	0.05	0.08	0.25	0.01	0.02	10	0.077	10	6.4	0.13	7.72	15	0.0143	1.76	7	
#12-2	FES #12-1	0.05	0.13	0.25	0.01	0.03	10	0.066	10	6.4	0.21	6.62	15	0.0105	2.46	19	
O.S. #12	MH #12-22	-	-	-	-	-	-	-	-	-	12.66	24.04	24	0.0113	7.75	31	100 YR
MH #12-22	MH #12-21	0.00	0.00	0.00	0.00	0.00	10	0.067	10	6.4	12.66	23.28	24	0.0106	7.57	33	
MH #12-21	FES #12-20	0.00	0.00	0.00	0.00	0.00	10	0.073	10	6.4	12.66	24.77	24	0.012	7.93	25	
#12A-19	#12A-18	0.02	0.02	0.25	0.01	0.01	10	-	10	6.4	0.03	4.15	12	0.0136	1.53	11	
#12A-18	#12A-17	0.04	0.06	0.25	0.01	0.02	10	0.12	10	6.4	0.10	12.13	15	0.0353	1.93	95	
#12A-17	#12A-16	0.27	0.33	0.67	0.18	0.20	10	0.82	11	6.4	1.26	6.92	15	0.0115	4.29	26	
#12A-16	#12A-15	0.22	0.55	0.95	0.21	0.41	10	0.101	11	6.4	2.59	19.73	15	0.0934	5.06	38	
#12A-15	MH #12A-14	0.10	0.65	0.78	0.08	0.48	10	0.125	11	6.4	3.09	10.50	18	0.01	5.21	15	
MH #12A-14	#12A-13	0.00	0.65	0.00	0.00	0.48	10	0.048	11	6.4	3.09	27.24	18	0.0673	5.21	75	
#12A-13C	#12A-13B	0.08	0.08	0.25	0.02	0.02	10	-	10	6.4	0.13	3.30	12	0.0086	2.15	81	
#12A-13B	#12A-13A	0.10	0.18	0.80	0.08	0.10	10	0.628	11	6.4	0.64	10.25	15	0.0252	3.39	107	
#12A-13A	#12A-13	0.01	0.19	0.55	0.01	0.11	10	0.526	11	6.4	0.68	6.92	15	0.0115	3.59	13	
#12A-13	#12A-12	0.04	0.88	0.25	0.01	0.60	10	0.06	11	6.4	3.83	11.26	18	0.0115	5.79	13	
#12A-12	MH #12A-11	0.56	1.44	0.43	0.24	0.84	10	0.037	11	6.4	5.37	21.67	18	0.0426	5.96	34	
#12A-11B	#12A-11A	0.01	0.01	0.25	0.00	0.00	10	-	10	6.4	0.02	9.07	12	0.0649	1.21	94	

PROJECT: The Estates at Hurstmont
LOCATION: Harding Township
COMPUTED BY: AGS
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DRAINAGE COMPUTATION SHEET

STORM FREQUENCY: 25 yr.
N FACTOR: 0.013

JOB NO.: 1047-01
DATE: May 26, 2023
SHEET: 1 OF

LOCATION		ACRES					TIME OF CONC. (MIN)				Q(C.F.S.)			V (FT/S)			
FROM	TO	SUB	TOTAL	C	CxA(SUB)	SUM CxA	INLET	PIPE	TOT.	I	DESIGN	CAP.	SIZE	SLOPE	DESIGN	LENGTH	REMARKS
#12-11A	MH #12A-11	0.04	0.05	0.28	0.01	0.01	10	1.295	11	6.4	0.09	7.77	15	0.0145	1.86	100	
MH #12A-11	#12A-10	0.00	1.49	0.00	0.00	0.85	10	0.896	12	6.4	5.45	23.31	18	0.0493	5.97	102	
#12A-10	#12A-9	0.56	2.05	0.73	0.41	1.26	10	0.285	12	6.4	8.08	15.99	24	0.005	6.91	22	
#12A-9	MH #12A-8	0.20	2.25	0.69	0.14	1.40	10	0.053	13	6.4	8.96	15.99	24	0.005	6.76	145	
MH #12A-8	MH #12A-7	0.00	2.25	0.00	0.00	1.40	10	0.357	13	6.4	8.96	15.83	24	0.0049	6.70	89	
MH #12A-7	#12A-6	0.00	2.25	0.00	0.00	1.40	10	0.221	13	6.4	8.96	22.61	24	0.01	7.15	17	
#12A-6	#12A-5	0.03	2.28	0.28	0.01	1.41	10	0.04	13	6.4	9.01	22.61	24	0.01	6.60	36	
#12A-5	#12A-4	0.20	2.48	0.81	0.16	1.57	10	0.091	13	6.4	10.05	23.82	24	0.0111	7.09	9	
#12A-4	#12A-3	0.01	2.49	0.25	0.00	1.57	10	0.021	13	6.4	10.06	25.28	24	0.0125	7.47	8	
#12A-3	#12A-2	0.01	2.50	0.25	0.00	1.58	10	0.018	13	6.4	10.08	25.28	24	0.0125	7.47	8	
#12A-2	FES #12A-1	0.01	2.51	0.25	0.00	1.58	10	0.018	13	6.4	10.10	23.28	24	0.0106	6.98	14	
#13-4	#13-3	0.05	0.05	0.25	0.01	0.01	10	-	10	6.4	0.08	3.82	12	0.0115	1.95	13	
#13-3	#13-2	0.13	0.18	0.49	0.06	0.08	10	0.111	10	6.4	0.49	6.46	15	0.01	3.11	15	
#13-2	FES #13-1	0.20	0.38	0.82	0.16	0.24	10	0.08	10	6.4	1.54	6.26	15	0.0094	4.22	16	
O.S. #13	FES #13-10	-	-	-	-	-	-	-	-	6.4	4.31	7.28	15	0.0127	6.18	79	100 YR

SOIL EROSION AND SEDIMENT CONTROL CALCULATIONS – APPENDIX E

Conduit Outlet Protection Calculation Sheet*

Job No. 1047-01 | Performed By: CR
Date: 5/26/2023 | Chck By: RCM2
Rev Date: -

Comment: Rip Rap Apron #1-1

For areas where tailwater cannot be computed use TW=0.2Do

A. APRON DIMENSIONS

Q(cfs)=	3.04
Do(feet)=	2
Wo(feet)	2

q= 1.52

La(feet)= 16

Q=flow from culvert in cfs.(100 yr. Storm)
Do=maximum inside culvert height in feet
Wo=maximum inside culvert width in feet
q=unit discharge

Where there is no well defined channel immediately downstream use formula below.

For tailwater elevation less than elevation of the center of the pipe:

Width= 22

B. RIPRAP

The median stone diameter, D_{50}, shall be determined from the formula:

D_{50}(feet)= 0.09 TW= 0.4

***Min. stone diameter shall be no less than 6"**

*Refer to Standards for Soil Erosion and Sediment Control in New Jersey, Section 12-2 for text pertaining to this worksheet (July 1999.)

Conduit Outlet Protection Calculation Sheet*

Job No. 1047-01 | Performed By: CR
Date: 5/26/2023 | Chck By: RCM2
Rev Date: -

Comment: Rip Rap Apron #4-1

For areas where tailwater cannot be computed use TW=0.2Do

A. APRON DIMENSIONS

Q(cfs)=	5.59
Do(feet)=	2
Wo(feet)	2

q= 2.795

La(feet)= 18

Q=flow from culvert in cfs.(100 yr. Storm)
Do=maximum inside culvert height in feet
Wo=maximum inside culvert width in feet
q=unit discharge

Where there is no well defined channel immediately downstream use formula below.

For tailwater elevation less than elevation of the center of the pipe:

Width= 24

B. RIPRAP

The median stone diameter, D_{50}, shall be determined from the formula:

D_{50}(feet)= 0.20 TW= 0.4

***Min. stone diameter shall be no less than 6"**

*Refer to Standards for Soil Erosion and Sediment Control in New Jersey, Section 12-2 for text pertaining to this worksheet (July 1999.)

Conduit Outlet Protection Calculation Sheet*

Job No. 1047-01
Date: 5/26/2023
Rev Date: -

Performed By: CR
Chck By: RCM2

Comment: Rip Rap Apron #11-30

For areas where tailwater cannot be computed use TW=0.2Do

A. APRON DIMENSIONS

Q(cfs)=	35.13
Do(feet)=	3
Wo(feet)	3

q= 11.71

La(feet)= 33

Q=flow from culvert in cfs.(100 yr. Storm)
Do=maximum inside culvert height in feet
Wo=maximum inside culvert width in feet
q=unit discharge

Where there is no well defined channel immediately downstream use formula below.

For tailwater elevation less than elevation of the center of the pipe:

Width= 42

B. RIPRAP

The median stone diameter, D_{50}, shall be determined from the formula:

D_{50}(feet)= 0.88 TW= 0.6

***Min. stone diameter shall be no less than 6"**

*Refer to Standards for Soil Erosion and Sediment Control in New Jersey, Section 12-2 for text pertaining to this worksheet (July 1999.)

Conduit Outlet Protection Calculation Sheet*

Job No. 1047-01 | Performed By: CR
Date: 5/26/2023 | Chck By: RCM2
Rev Date: -

Comment: Rip Rap Apron #12-20

For areas where tailwater cannot be computed use TW=0.2Do

A. APRON DIMENSIONS

Q(cfs)=	12.66
Do(feet)=	2
Wo(feet)	2

q= 6.33

La(feet)= 22

Q=flow from culvert in cfs.(100 yr. Storm)
Do=maximum inside culvert height in feet
Wo=maximum inside culvert width in feet
q=unit discharge

Where there is no well defined channel immediately downstream use formula below.

For tailwater elevation less than elevation of the center of the pipe:

Width= 28

B. RIPRAP

The median stone diameter, D_{50}, shall be determined from the formula:

D_{50}(feet)= 0.58 TW= 0.4

***Min. stone diameter shall be no less than 6"**

*Refer to Standards for Soil Erosion and Sediment Control in New Jersey, Section 12-2 for text pertaining to this worksheet (July 1999.)

Conduit Outlet Protection Calculation Sheet*

Job No. 1047-01
Date: 5/26/2023
Rev Date: -

Performed By: CR
Chck By: RCM2

Comment: Rip Rap Apron #13-10

For areas where tailwater cannot be computed use TW=0.2Do

A. APRON DIMENSIONS

Q(cfs)=	4.31
Do(feet)=	1.25
Wo(feet)	1.25

q= 3.448

La(feet)= 14

Q=flow from culvert in cfs.(100 yr. Storm)
Do=maximum inside culvert height in feet
Wo=maximum inside culvert width in feet
q=unit discharge

Where there is no well defined channel immediately downstream use formula below.

For tailwater elevation less than elevation of the center of the pipe:

Width= 18

B. RIPRAP

The median stone diameter, D_{50}, shall be determined from the formula:

D_{50}(feet)= 0.42 TW= 0.25

***Min. stone diameter shall be no less than 6"**

*Refer to Standards for Soil Erosion and Sediment Control in New Jersey, Section 12-2 for text pertaining to this worksheet (July 1999.)

Conduit Outlet Protection Calculation Sheet*

Job No. 1047-01
Date: 5/26/2023
Rev. Date: -

Performed By: CR
Chck By: RCM2

Comment: Rip Rap Apron #5-1

For discharge into detention basins and TW≥0.5D0

2-yr WSE(feet)= 413.46

A. APRON DIMENSIONS

Q(cfs)= 9.42
Do(feet)= 1.50
Wo(feet) 1.50

q= 6.28

La(feet)= 15

Q=flow from culvert in cfs.(25 yr. Storm)
Do=maximum inside culvert height in feet
Wo=maximum inside culvert width in feet
q=unit discharge

Where there is no well defined channel immediately downstream use formula below.

For tailwater elevation greater than elevation of the center of the pipe:

Width= 11

B. RIPRAP

The median stone diameter, D_{50}, shall be determined from the formula:

D_{50}(feet)= 0.25

TW= 0.75

***Min. stone diameter shall be no less than 6"**

*Refer to Standards for Soil Erosion and Sediment Control in New Jersey, Section 12-2 for text pertaining to this worksheet (July 1999.)

Conduit Outlet Protection Calculation Sheet*

Job No. 1047-01
Date: 5/26/2023
Rev. Date: -

Performed By: CR
Chck By: RCM2

Comment: Rip Rap Apron #6-1

For discharge into detention basins and TW≥0.5D0

2-yr WSE(feet)= 474.09

A. APRON DIMENSIONS

Q(cfs)= 2.61
Do(feet)= 1.25
Wo(feet) 1.25

q= 2.088

La(feet)= 6

Q=flow from culvert in cfs.(25 yr. Storm)
Do=maximum inside culvert height in feet
Wo=maximum inside culvert width in feet
q=unit discharge

Where there is no well defined channel immediately downstream use formula below.

For tailwater elevation greater than elevation of the center of the pipe:

Width= 6

B. RIPRAP

The median stone diameter, D_{50}, shall be determined from the formula:

D_{50}(feet)= 0.07

TW= 0.625

***Min. stone diameter shall be no less than 6"**

*Refer to Standards for Soil Erosion and Sediment Control in New Jersey, Section 12-2 for text pertaining to this worksheet (July 1999.)

Conduit Outlet Protection Calculation Sheet*

Job No. 1047-01
Date: 5/26/2023
Rev. Date: -

Performed By: CR
Chck By: RCM2

Comment: Rip Rap Apron #10-1

For discharge into detention basins and TW≥0.5D0

2-yr WSE(feet)= 408.29

A. APRON DIMENSIONS

Q(cfs)= 7.31
Do(feet)= 2.00
Wo(feet) 2.00

q= 3.655

La(feet)= 8

Q=flow from culvert in cfs.(25 yr. Storm)
Do=maximum inside culvert height in feet
Wo=maximum inside culvert width in feet
q=unit discharge

Where there is no well defined channel immediately downstream use formula below.

For tailwater elevation greater than elevation of the center of the pipe:

Width= 9

B. RIPRAP

The median stone diameter, D_{50}, shall be determined from the formula:

D_{50}(feet)= 0.09

TW= 1

***Min. stone diameter shall be no less than 6"**

*Refer to Standards for Soil Erosion and Sediment Control in New Jersey, Section 12-2 for text pertaining to this worksheet (July 1999.)

Conduit Outlet Protection Calculation Sheet*

Job No. 1047-01
Date: 5/26/2023
Rev. Date: -

Performed By: CR
Chck By: RCM2

Comment: Rip Rap Apron #10-10

For discharge into detention basins and TW≥0.5D0

2-yr WSE(feet)= 408.29

A. APRON DIMENSIONS

Q(cfs)= 2.28
Do(feet)= 1.25
Wo(feet) 1.25

q= 1.824

La(feet)= 5

Q=flow from culvert in cfs.(25 yr. Storm)
Do=maximum inside culvert height in feet
Wo=maximum inside culvert width in feet
q=unit discharge

Where there is no well defined channel immediately downstream use formula below.

For tailwater elevation greater than elevation of the center of the pipe:

Width= 6

B. RIPRAP

The median stone diameter, D_{50}, shall be determined from the formula:

D_{50}(feet)= 0.06

TW= 0.625

***Min. stone diameter shall be no less than 6"**

*Refer to Standards for Soil Erosion and Sediment Control in New Jersey, Section 12-2 for text pertaining to this worksheet (July 1999.)

Conduit Outlet Protection Calculation Sheet*

Job No. 1047-01
Date: 5/26/2023
Rev. Date: -

Performed By: CR
Chck By: RCM2

Comment: Rip Rap Apron #6-20

For discharge into detention basins and TW≥0.5D0

2-yr WSE(feet)= 474.09

A. APRON DIMENSIONS

Q(cfs)= 1.01
Do(feet)= 1.25
Wo(feet) 1.25

q= 0.808

La(feet)= 2

Q=flow from culvert in cfs.(25 yr. Storm)
Do=maximum inside culvert height in feet
Wo=maximum inside culvert width in feet
q=unit discharge

Where there is no well defined channel immediately downstream use formula below.

For tailwater elevation greater than elevation of the center of the pipe:

Width= 5

B. RIPRAP

The median stone diameter, D_{50}, shall be determined from the formula:

D_{50}(feet)= 0.02

TW= 0.625

***Min. stone diameter shall be no less than 6"**

*Refer to Standards for Soil Erosion and Sediment Control in New Jersey, Section 12-2 for text pertaining to this worksheet (July 1999.)

Conduit Outlet Protection Calculation Sheet*

Job No. 1047-01 | Performed By: CR
Date: 5/26/2023 | Chck By: RCM2
Rev. Date: -

Comment: Rip Rap Apron #11-1

For discharge into detention basins and TW≥0.5D0

2-yr WSE(feet)= 404.13

A. APRON DIMENSIONS

Q(cfs)= 45.82 q= 15.27
Do(feet)= 3.00
Wo(feet) 3.00

La(feet)= 26

Q=flow from culvert in cfs.(25 yr. Storm)
Do=maximum inside culvert height in feet
Wo=maximum inside culvert width in feet
q=unit discharge

Where there is no well defined channel immediately downstream use formula below.

For tailwater elevation greater than elevation of the center of the pipe:

Width= 20

B. RIPRAP

The median stone diameter, D_{50}, shall be determined from the formula:

D_{50}(feet)= 0.40 TW= 1.5

***Min. stone diameter shall be no less than 6"**

*Refer to Standards for Soil Erosion and Sediment Control in New Jersey, Section 12-2 for text pertaining to this worksheet (July 1999.)

Conduit Outlet Protection Calculation Sheet*

Job No. 1047-01 | Performed By: CR
Date: 5/26/2023 | Chck By: RCM2
Rev. Date: -

Comment: Rip Rap Apron #12-1

For discharge into detention basins and TW≥0.5D0

2-yr WSE(feet)= 404.15

A. APRON DIMENSIONS

Q(cfs)= 0.21 | q= 0.168
Do(feet)= 1.25
Wo(feet) 1.25

La(feet)= 0

Q=flow from culvert in cfs.(25 yr. Storm)
Do=maximum inside culvert height in feet
Wo=maximum inside culvert width in feet
q=unit discharge

Where there is no well defined channel immediately downstream use formula below.

For tailwater elevation greater than elevation of the center of the pipe:

Width= 4

B. RIPRAP

The median stone diameter, D_{50}, shall be determined from the formula:

D_{50}(feet)= 0.00 | TW= 0.625

***Min. stone diameter shall be no less than 6"**

*Refer to Standards for Soil Erosion and Sediment Control in New Jersey, Section 12-2 for text pertaining to this worksheet (July 1999.)

Conduit Outlet Protection Calculation Sheet*

Job No. 1047-01 | Performed By: CR
Date: 5/26/2023 | Chck By: RCM2
Rev. Date: -

Comment: Rip Rap Apron #13-1

For discharge into detention basins and TW≥0.5D0

2-yr WSE(feet)= 382.78

A. APRON DIMENSIONS

Q(cfs)= 6.26 q= 5.008
Do(feet)= 1.25
Wo(feet) 1.25

La(feet)= 13

Q=flow from culvert in cfs.(25 yr. Storm)
Do=maximum inside culvert height in feet
Wo=maximum inside culvert width in feet
q=unit discharge

Where there is no well defined channel immediately downstream use formula below.

For tailwater elevation greater than elevation of the center of the pipe:

Width= 9

B. RIPRAP

The median stone diameter, D_{50}, shall be determined from the formula:

D_{50}(feet)= 0.22 TW= 0.625

***Min. stone diameter shall be no less than 6"**

*Refer to Standards for Soil Erosion and Sediment Control in New Jersey, Section 12-2 for text pertaining to this worksheet (July 1999.)

Conduit Outlet Protection Calculation Sheet*

Job No. 1047-01
Date: 5/26/2023
Rev. Date: -

Performed By: CR
Chck By: RCM2

Comment: Rip Rap Apron #7-10

For discharge into detention basins and TW<0.5D0

2-yr WSE(feet)= 483.82

A. APRON DIMENSIONS

Q(cfs)= 0.5
Do(feet)= 1
Wo(feet) 1

q= 0.5

La(feet)= 8

Q=flow from culvert in cfs.(25 yr. Storm)
Do=maximum inside culvert height in feet
Wo=maximum inside culvert width in feet
q=unit discharge

Where there is no well defined channel immediately downstream use formula below.

For tailwater elevation greater than elevation of the center of the pipe:

Width= 11

B. RIPRAP

The median stone diameter, D_{50}, shall be determined from the formula:

D_{50}(feet)= 0.02

TW= 0.5

***Min. stone diameter shall be no less than 6"**

*Refer to Standards for Soil Erosion and Sediment Control in New Jersey, Section 12-2 for text pertaining to this worksheet (July 1999.)

Conduit Outlet Protection Calculation Sheet*

Job No. 1047-01
Date: 5/26/2023
Rev. Date: -

Performed By: CR
Chck By: RCM2

Comment: Rip Rap Apron #7-1

For discharge into detention basins and TW<0.5D0

2-yr WSE(feet)= 483.82

A. APRON DIMENSIONS

Q(cfs)= 1.04
Do(feet)= 1.25
Wo(feet) 1.25

q= 0.832

La(feet)= 10

Q=flow from culvert in cfs.(25 yr. Storm)
Do=maximum inside culvert height in feet
Wo=maximum inside culvert width in feet
q=unit discharge

Where there is no well defined channel immediately downstream use formula below.

For tailwater elevation greater than elevation of the center of the pipe:

Width= 14

B. RIPRAP

The median stone diameter, D_{50}, shall be determined from the formula:

D_{50}(feet)= 0.03

TW= 0.625

***Min. stone diameter shall be no less than 6"**

*Refer to Standards for Soil Erosion and Sediment Control in New Jersey, Section 12-2 for text pertaining to this worksheet (July 1999.)

Conduit Outlet Protection Calculation Sheet*

Job No. 1047-01
Date: 5/26/2023
Rev. Date: -

Performed By: CR
Chck By: RCM2

Comment: Rip Rap Apron #11A-1

For discharge into detention basins and TW<0.5D0

2-yr WSE(feet)= 404.13

A. APRON DIMENSIONS

Q(cfs)= 6.24
Do(feet)= 1.25
Wo(feet) 1.25

q= 4.992

La(feet)= 17

Q=flow from culvert in cfs.(25 yr. Storm)
Do=maximum inside culvert height in feet
Wo=maximum inside culvert width in feet
q=unit discharge

Where there is no well defined channel immediately downstream use formula below.

For tailwater elevation greater than elevation of the center of the pipe:

Width= 21

B. RIPRAP

The median stone diameter, D_{50}, shall be determined from the formula:

D_{50}(feet)= 0.27

TW= 0.625

***Min. stone diameter shall be no less than 6"**

*Refer to Standards for Soil Erosion and Sediment Control in New Jersey, Section 12-2 for text pertaining to this worksheet (July 1999.)

Conduit Outlet Protection Calculation Sheet*

Job No. 1047-01
Date: 5/26/2023
Rev. Date: -

Performed By: CR
Chck By: RCM2

Comment: Rip Rap Apron #12A-1

For discharge into detention basins and TW<0.5D0

2-yr WSE(feet)= 404.15

A. APRON DIMENSIONS

Q(cfs)= 10.86
Do(feet)= 1.5
Wo(feet) 1.5

q= 7.24

La(feet)= 21

Q=flow from culvert in cfs.(25 yr. Storm)
Do=maximum inside culvert height in feet
Wo=maximum inside culvert width in feet
q=unit discharge

Where there is no well defined channel immediately downstream use formula below.

For tailwater elevation greater than elevation of the center of the pipe:

Width= 26

B. RIPRAP

The median stone diameter, D_{50}, shall be determined from the formula:

D_{50}(feet)= 0.37

TW= 0.75

***Min. stone diameter shall be no less than 6"**

*Refer to Standards for Soil Erosion and Sediment Control in New Jersey, Section 12-2 for text pertaining to this worksheet (July 1999.)

EMERGENCY SPILLWAY CALCULATIONS – APPENDIX F

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1047-01 - Emergency Spillway Design Routings

Subsection: Master Network Summary

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)
PR DA #1	Post-100+50 Spillway	150	2.006	12.200	23.28
PR DA #1 IMP	Post-100+50 Spillway	150	0.015	12.050	0.22
PR DA #10	Post-100+50 Spillway	150	1.118	12.100	18.54
PR DA #10 IMP	Post-100+50 Spillway	150	1.989	12.050	28.38
PR DA #11	Post-100+50 Spillway	150	0.369	12.150	5.18
PR DA #11 IMP	Post-100+50 Spillway	150	0.566	12.050	8.08
PR DA #11A IMP	Post-100+50 Spillway	150	1.316	12.050	18.78
PR DA #12	Post-100+50 Spillway	150	0.369	12.150	5.13
PR DA #12A	Post-100+50 Spillway	150	1.181	12.100	17.08
PR DA #12A IMP	Post-100+50 Spillway	150	2.019	12.100	28.88
PR DA #13	Post-100+50 Spillway	150	0.274	12.150	3.85
PR DA #13 IMP	Post-100+50 Spillway	150	0.291	12.100	4.16
PR DA #2	Post-100+50 Spillway	150	1.338	12.150	18.04
PR DA #2Z	Post-100+50 Spillway	150	0.282	12.200	3.35
PR DA #3	Post-100+50 Spillway	150	1.221	12.150	16.11
PR DA #3 IMP	Post-100+50 Spillway	150	0.627	12.100	8.63
PR DA #3Z	Post-100+50 Spillway	150	3.023	12.200	34.96
PR DA #4	Post-100+50 Spillway	150	4.137	12.250	42.74
PR DA #4 IMP	Post-100+50 Spillway	150	0.031	12.050	0.44
PR DA #5	Post-100+50 Spillway	150	1.328	12.150	17.11
PR DA #5 IMP	Post-100+50 Spillway	150	1.851	12.050	26.47
PR DA #6	Post-100+50 Spillway	150	0.696	12.150	8.96
PR DA #6 IMP	Post-100+50 Spillway	150	0.428	12.050	6.11
PR DA #7	Post-100+50 Spillway	150	0.242	12.150	3.25
PR DA #7 IMP	Post-100+50 Spillway	150	0.321	12.050	4.59
PR DA #8 IMP	Post-100+50 Spillway	150	1.377	12.100	19.62
PR DA #9 IMP	Post-100+50 Spillway	150	1.453	12.100	20.71
PR DR #11A	Post-100+50 Spillway	150	0.907	12.150	12.74

Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)
POA "A"	Post-100+50 Spillway	150	2.303	12.200	26.71
POA "B"	Post-100+50 Spillway	150	4.260	12.100	64.97
POA "C"	Post-100+50 Spillway	150	14.661	12.100	214.65
POA "D"	Post-100+50 Spillway	150	4.167	12.250	42.85

Pond Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft^3/s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
Basin #10 (IN)	Post-100+50 Spillway	150	3.107	12.100	46.91	(N/A)	(N/A)
Basin #10 (OUT)	Post-100+50 Spillway	150	2.739	12.100	48.41	409.26	0.409
Basin #11 (IN)	Post-100+50 Spillway	150	15.227	12.100	188.50	(N/A)	(N/A)
Basin #11 (OUT)	Post-100+50 Spillway	150	12.265	12.100	184.19	411.63	3.202
Basin #11A (IN)	Post-100+50 Spillway	150	2.223	12.100	30.86	(N/A)	(N/A)
Basin #11A (OUT)	Post-100+50 Spillway	150	2.223	12.100	30.86	0.00	0.000
Basin #12 (IN)	Post-100+50 Spillway	150	3.569	12.100	50.68	(N/A)	(N/A)
Basin #12 (OUT)	Post-100+50 Spillway	150	2.921	12.100	49.07	407.66	0.749
Basin #12A (IN)	Post-100+50 Spillway	150	3.200	12.100	45.96	(N/A)	(N/A)
Basin #12A (OUT)	Post-100+50 Spillway	150	3.200	12.100	45.96	0.00	0.000
Basin #13 (IN)	Post-100+50 Spillway	150	0.565	12.100	7.81	(N/A)	(N/A)
Basin #13 (OUT)	Post-100+50 Spillway	150	0.548	12.100	7.90	383.42	0.020
Basin #5 (IN)	Post-100+50 Spillway	150	3.180	12.100	41.10	(N/A)	(N/A)
Basin #5 (OUT)	Post-100+50 Spillway	150	2.902	12.100	42.03	415.26	0.312
Basin #6 (IN)	Post-100+50 Spillway	150	1.604	12.100	21.09	(N/A)	(N/A)
Basin #6 (OUT)	Post-100+50 Spillway	150	1.424	12.100	19.99	475.36	0.215
Basin #7 (IN)	Post-100+50 Spillway	150	0.564	12.100	7.46	(N/A)	(N/A)
Basin #7 (OUT)	Post-100+50 Spillway	150	0.480	12.100	7.32	486.27	0.094
UG Basin #8 (IN)	Post-100+50 Spillway	150	2.830	12.100	40.32	(N/A)	(N/A)
UG Basin #8 (OUT)	Post-100+50 Spillway	150	1.981	11.850	8.18	467.60	0.956

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #1
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.240 hours
Area (User Defined)	2.030 acres

Computational Time Increment	0.032 hours
Time to Peak (Computed)	12.192 hours
Flow (Peak, Computed)	23.47 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.200 hours
Flow (Peak Interpolated Output)	23.28 ft³/s

Drainage Area	
SCS CN (Composite)	57.000
Area (User Defined)	2.030 acres
Maximum Retention (Pervious)	7.5 in
Maximum Retention (Pervious, 20 percent)	1.5 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	11.9 in
Runoff Volume (Pervious)	2.006 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	2.006 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.240 hours
Computational Time Increment	0.032 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #1
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	9.58 ft³/s
Unit peak time, Tp	0.160 hours
Unit receding limb, Tr	0.640 hours
Total unit time, Tb	0.800 hours

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #1 IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	0.010 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	0.22 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.22 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.010 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	18.4 in
Runoff Volume (Pervious)	0.015 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.015 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Subsection: Unit Hydrograph Summary
Label: PR DA #1 IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.13 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #10
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.060 hours
Area (User Defined)	1.030 acres

Computational Time Increment	0.008 hours
Time to Peak (Computed)	12.104 hours
Flow (Peak, Computed)	18.59 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	18.54 ft³/s

Drainage Area	
SCS CN (Composite)	63.000
Area (User Defined)	1.030 acres
Maximum Retention (Pervious)	5.9 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	13.0 in
Runoff Volume (Pervious)	1.119 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.118 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.060 hours
Computational Time Increment	0.008 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #10
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	19.45 ft^3/s
Unit peak time, Tp	0.040 hours
Unit receding limb, Tr	0.160 hours
Total unit time, Tb	0.200 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #10 IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	1.300 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	28.45 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	28.38 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1.300 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	18.4 in
Runoff Volume (Pervious)	1.989 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.989 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Subsection: Unit Hydrograph Summary
Label: PR DA #10 IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	73.65 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #11
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.130 hours
Area (User Defined)	0.350 acres

Computational Time Increment	0.017 hours
Time to Peak (Computed)	12.133 hours
Flow (Peak, Computed)	5.35 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	5.18 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.350 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.7 in
Runoff Volume (Pervious)	0.369 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.369 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.130 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #11
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	3.05 ft³/s
Unit peak time, Tp	0.087 hours
Unit receding limb, Tr	0.347 hours
Total unit time, Tb	0.433 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #11 IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.370 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	8.10 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	8.08 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.370 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	18.4 in
Runoff Volume (Pervious)	0.566 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.566 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Subsection: Unit Hydrograph Summary
Label: PR DA #11 IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	20.96 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #11A IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.860 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	18.82 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	18.78 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.860 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	18.4 in
Runoff Volume (Pervious)	1.316 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.316 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Subsection: Unit Hydrograph Summary
Label: PR DA #11A IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	48.72 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #12
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.140 hours
Area (User Defined)	0.350 acres

Computational Time Increment	0.019 hours
Time to Peak (Computed)	12.133 hours
Flow (Peak, Computed)	5.22 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	5.13 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.350 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.7 in
Runoff Volume (Pervious)	0.369 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.369 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.140 hours
Computational Time Increment	0.019 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #12
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	2.83 ft³/s
Unit peak time, Tp	0.093 hours
Unit receding limb, Tr	0.373 hours
Total unit time, Tb	0.467 hours

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #12A
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.110 hours
Area (User Defined)	1.120 acres

Computational Time Increment	0.015 hours
Time to Peak (Computed)	12.129 hours
Flow (Peak, Computed)	17.84 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	17.08 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	1.120 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.7 in
Runoff Volume (Pervious)	1.181 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.181 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.110 hours
Computational Time Increment	0.015 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Subsection: Unit Hydrograph Summary
Label: PR DA #12A
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	11.54 ft³/s
Unit peak time, Tp	0.073 hours
Unit receding limb, Tr	0.293 hours
Total unit time, Tb	0.367 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #12A IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.030 hours
Area (User Defined)	1.320 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	28.88 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	28.88 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1.320 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	18.4 in
Runoff Volume (Pervious)	2.019 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	2.019 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.030 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Subsection: Unit Hydrograph Summary
Label: PR DA #12A IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	49.85 ft³/s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.080 hours
Total unit time, Tb	0.100 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #13
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.130 hours
Area (User Defined)	0.260 acres

Computational Time Increment	0.017 hours
Time to Peak (Computed)	12.133 hours
Flow (Peak, Computed)	3.97 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	3.85 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.260 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.7 in
Runoff Volume (Pervious)	0.274 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.274 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.130 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #13
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	2.27 ft³/s
Unit peak time, Tp	0.087 hours
Unit receding limb, Tr	0.347 hours
Total unit time, Tb	0.433 hours

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #13 IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.030 hours
Area (User Defined)	0.190 acres

Computational Time Increment	0.004 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	4.16 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	4.16 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.190 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	18.4 in
Runoff Volume (Pervious)	0.291 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.291 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.030 hours
Computational Time Increment	0.004 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Subsection: Unit Hydrograph Summary
Label: PR DA #13 IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.18 ft³/s
Unit peak time, Tp	0.020 hours
Unit receding limb, Tr	0.080 hours
Total unit time, Tb	0.100 hours

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #2
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.160 hours
Area (User Defined)	1.310 acres

Computational Time Increment	0.021 hours
Time to Peak (Computed)	12.139 hours
Flow (Peak, Computed)	18.10 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	18.04 ft³/s

Drainage Area	
SCS CN (Composite)	59.000
Area (User Defined)	1.310 acres
Maximum Retention (Pervious)	6.9 in
Maximum Retention (Pervious, 20 percent)	1.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.3 in
Runoff Volume (Pervious)	1.338 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.338 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.160 hours
Computational Time Increment	0.021 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #2
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	9.28 ft³/s
Unit peak time, Tp	0.107 hours
Unit receding limb, Tr	0.427 hours
Total unit time, Tb	0.533 hours

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #2Z
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.220 hours
Area (User Defined)	0.290 acres

Computational Time Increment	0.029 hours
Time to Peak (Computed)	12.173 hours
Flow (Peak, Computed)	3.40 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.200 hours
Flow (Peak Interpolated Output)	3.35 ft³/s

Drainage Area	
SCS CN (Composite)	56.000
Area (User Defined)	0.290 acres
Maximum Retention (Pervious)	7.9 in
Maximum Retention (Pervious, 20 percent)	1.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	11.7 in
Runoff Volume (Pervious)	0.282 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.282 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.220 hours
Computational Time Increment	0.029 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #2Z
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.49 ft³/s
Unit peak time, Tp	0.147 hours
Unit receding limb, Tr	0.587 hours
Total unit time, Tb	0.733 hours

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #3
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.170 hours
Area (User Defined)	1.140 acres

Computational Time Increment	0.023 hours
Time to Peak (Computed)	12.149 hours
Flow (Peak, Computed)	16.12 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	16.11 ft³/s

Drainage Area	
SCS CN (Composite)	62.000
Area (User Defined)	1.140 acres
Maximum Retention (Pervious)	6.1 in
Maximum Retention (Pervious, 20 percent)	1.2 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.8 in
Runoff Volume (Pervious)	1.220 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.221 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.170 hours
Computational Time Increment	0.023 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #3
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.60 ft³/s
Unit peak time, Tp	0.113 hours
Unit receding limb, Tr	0.453 hours
Total unit time, Tb	0.567 hours

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #3 IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.070 hours
Area (User Defined)	0.410 acres

Computational Time Increment	0.009 hours
Time to Peak (Computed)	12.105 hours
Flow (Peak, Computed)	8.66 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	8.63 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.410 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	18.4 in
Runoff Volume (Pervious)	0.627 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.627 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.070 hours
Computational Time Increment	0.009 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #3 IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	6.64 ft³/s
Unit peak time, Tp	0.047 hours
Unit receding limb, Tr	0.187 hours
Total unit time, Tb	0.233 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #3Z
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.250 hours
Area (User Defined)	3.170 acres

Computational Time Increment	0.033 hours
Time to Peak (Computed)	12.200 hours
Flow (Peak, Computed)	34.96 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.200 hours
Flow (Peak Interpolated Output)	34.96 ft³/s

Drainage Area	
SCS CN (Composite)	55.000
Area (User Defined)	3.170 acres
Maximum Retention (Pervious)	8.2 in
Maximum Retention (Pervious, 20 percent)	1.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	11.4 in
Runoff Volume (Pervious)	3.023 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	3.023 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.250 hours
Computational Time Increment	0.033 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #3Z
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	14.37 ft³/s
Unit peak time, Tp	0.167 hours
Unit receding limb, Tr	0.667 hours
Total unit time, Tb	0.833 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #4
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.310 hours
Area (User Defined)	4.260 acres

Computational Time Increment	0.041 hours
Time to Peak (Computed)	12.235 hours
Flow (Peak, Computed)	43.28 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.250 hours
Flow (Peak Interpolated Output)	42.74 ft³/s

Drainage Area	
SCS CN (Composite)	56.000
Area (User Defined)	4.260 acres
Maximum Retention (Pervious)	7.9 in
Maximum Retention (Pervious, 20 percent)	1.6 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	11.7 in
Runoff Volume (Pervious)	4.137 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	4.137 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.310 hours
Computational Time Increment	0.041 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #4
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	15.57 ft³/s
Unit peak time, Tp	0.207 hours
Unit receding limb, Tr	0.827 hours
Total unit time, Tb	1.033 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #4 IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.020 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	0.44 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	0.44 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.020 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	18.4 in
Runoff Volume (Pervious)	0.031 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.031 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Subsection: Unit Hydrograph Summary
Label: PR DA #4 IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.13 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #5
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.180 hours
Area (User Defined)	1.260 acres

Computational Time Increment	0.024 hours
Time to Peak (Computed)	12.168 hours
Flow (Peak, Computed)	17.16 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	17.11 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	1.260 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.7 in
Runoff Volume (Pervious)	1.328 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.328 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.180 hours
Computational Time Increment	0.024 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #5
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.93 ft³/s
Unit peak time, Tp	0.120 hours
Unit receding limb, Tr	0.480 hours
Total unit time, Tb	0.600 hours

Subsection: Unit Hydrograph Summary
Label: PR DA #5 IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.010 hours
Area (User Defined)	1.210 acres

Computational Time Increment	0.001 hours
Time to Peak (Computed)	12.100 hours
Flow (Peak, Computed)	26.48 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	26.47 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	1.210 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	18.4 in
Runoff Volume (Pervious)	1.851 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.851 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.010 hours
Computational Time Increment	0.001 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Subsection: Unit Hydrograph Summary
Label: PR DA #5 IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	137.10 ft³/s
Unit peak time, Tp	0.007 hours
Unit receding limb, Tr	0.027 hours
Total unit time, Tb	0.033 hours

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #6
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.180 hours
Area (User Defined)	0.660 acres

Computational Time Increment	0.024 hours
Time to Peak (Computed)	12.168 hours
Flow (Peak, Computed)	8.99 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	8.96 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.660 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.7 in
Runoff Volume (Pervious)	0.696 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.696 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.180 hours
Computational Time Increment	0.024 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Subsection: Unit Hydrograph Summary
Label: PR DA #6
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	4.15 ft³/s
Unit peak time, Tp	0.120 hours
Unit receding limb, Tr	0.480 hours
Total unit time, Tb	0.600 hours

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #6 IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.280 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	6.13 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	6.11 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.280 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	18.4 in
Runoff Volume (Pervious)	0.428 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.428 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Subsection: Unit Hydrograph Summary
Label: PR DA #6 IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	15.86 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #7
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.160 hours
Area (User Defined)	0.230 acres

Computational Time Increment	0.021 hours
Time to Peak (Computed)	12.139 hours
Flow (Peak, Computed)	3.27 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	3.25 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.230 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.7 in
Runoff Volume (Pervious)	0.242 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.242 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.160 hours
Computational Time Increment	0.021 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #7
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	1.63 ft³/s
Unit peak time, Tp	0.107 hours
Unit receding limb, Tr	0.427 hours
Total unit time, Tb	0.533 hours

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #7 IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.020 hours
Area (User Defined)	0.210 acres

Computational Time Increment	0.003 hours
Time to Peak (Computed)	12.099 hours
Flow (Peak, Computed)	4.60 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.050 hours
Flow (Peak Interpolated Output)	4.59 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.210 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	18.4 in
Runoff Volume (Pervious)	0.321 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.321 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.020 hours
Computational Time Increment	0.003 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Subsection: Unit Hydrograph Summary
Label: PR DA #7 IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	11.90 ft³/s
Unit peak time, Tp	0.013 hours
Unit receding limb, Tr	0.053 hours
Total unit time, Tb	0.067 hours

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #8 IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.040 hours
Area (User Defined)	0.900 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.096 hours
Flow (Peak, Computed)	19.64 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	19.62 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.900 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	18.4 in
Runoff Volume (Pervious)	1.377 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.377 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.040 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Subsection: Unit Hydrograph Summary
Label: PR DA #8 IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	25.49 ft^3/s
Unit peak time, Tp	0.027 hours
Unit receding limb, Tr	0.107 hours
Total unit time, Tb	0.133 hours

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DA #9 IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.040 hours
Area (User Defined)	0.950 acres

Computational Time Increment	0.005 hours
Time to Peak (Computed)	12.096 hours
Flow (Peak, Computed)	20.73 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	20.71 ft³/s

Drainage Area	
SCS CN (Composite)	98.000
Area (User Defined)	0.950 acres
Maximum Retention (Pervious)	0.2 in
Maximum Retention (Pervious, 20 percent)	0.0 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	18.4 in
Runoff Volume (Pervious)	1.453 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.453 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.040 hours
Computational Time Increment	0.005 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Subsection: Unit Hydrograph Summary
Label: PR DA #9 IMP
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	26.91 ft³/s
Unit peak time, Tp	0.027 hours
Unit receding limb, Tr	0.107 hours
Total unit time, Tb	0.133 hours

1047-01 - Emergency Spillway Design Routings

Subsection: Unit Hydrograph Summary
Label: PR DR #11A
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Storm Event	NOAA 100+50
Return Event	150 years
Duration	100.000 hours
Depth	18.6 in
Time of Concentration (Composite)	0.130 hours
Area (User Defined)	0.860 acres

Computational Time Increment	0.017 hours
Time to Peak (Computed)	12.133 hours
Flow (Peak, Computed)	13.14 ft³/s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	12.74 ft³/s

Drainage Area	
SCS CN (Composite)	61.000
Area (User Defined)	0.860 acres
Maximum Retention (Pervious)	6.4 in
Maximum Retention (Pervious, 20 percent)	1.3 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	12.7 in
Runoff Volume (Pervious)	0.907 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	0.907 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.130 hours
Computational Time Increment	0.017 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

Subsection: Unit Hydrograph Summary
Label: PR DR #11A
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

SCS Unit Hydrograph Parameters	
Unit peak, qp	7.50 ft³/s
Unit peak time, Tp	0.087 hours
Unit receding limb, Tr	0.347 hours
Total unit time, Tb	0.433 hours

1047-01 - Emergency Spillway Design Routings

Subsection: Outlet Input Data
Label: Emergency Spillway #10
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Requested Pond Water Surface Elevations	
Minimum (Headwater)	403.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	410.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	408.90	410.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

1047-01 - Emergency Spillway Design Routings

Subsection: Outlet Input Data
Label: Emergency Spillway #10
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	408.90 ft
Weir Length	60.00 ft
Weir Coefficient	3.15 (ft^0.5)/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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Emergency Spillway Design Routings

Subsection: Composite Rating Curve
Label: Emergency Spillway #10
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
403.00	0.00	(N/A)	0.00	None Contributing
403.50	0.00	(N/A)	0.00	None Contributing
404.00	0.00	(N/A)	0.00	None Contributing
404.50	0.00	(N/A)	0.00	None Contributing
405.00	0.00	(N/A)	0.00	None Contributing
405.50	0.00	(N/A)	0.00	None Contributing
406.00	0.00	(N/A)	0.00	None Contributing
406.50	0.00	(N/A)	0.00	None Contributing
407.00	0.00	(N/A)	0.00	None Contributing
407.50	0.00	(N/A)	0.00	None Contributing
408.00	0.00	(N/A)	0.00	None Contributing
408.50	0.00	(N/A)	0.00	None Contributing
408.90	0.00	(N/A)	0.00	Weir - 1
409.00	5.98	(N/A)	0.00	Weir - 1
409.50	87.84	(N/A)	0.00	Weir - 1
410.00	218.05	(N/A)	0.00	Weir - 1

1047-01 - Emergency Spillway Design Routings

Subsection: Outlet Input Data
Label: Emergency Spillway #11
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Requested Pond Water Surface Elevations	
Minimum (Headwater)	399.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	412.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	411.05	412.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

1047-01 - Emergency Spillway Design Routings

Subsection: Outlet Input Data
Label: Emergency Spillway #11
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	411.05 ft
Weir Length	125.00 ft
Weir Coefficient	3.15 (ft^0.5)/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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Emergency Spillway Design Routings

Subsection: Composite Rating Curve
Label: Emergency Spillway #11
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
399.00	0.00	(N/A)	0.00	None Contributing
399.50	0.00	(N/A)	0.00	None Contributing
400.00	0.00	(N/A)	0.00	None Contributing
400.50	0.00	(N/A)	0.00	None Contributing
401.00	0.00	(N/A)	0.00	None Contributing
401.50	0.00	(N/A)	0.00	None Contributing
402.00	0.00	(N/A)	0.00	None Contributing
402.50	0.00	(N/A)	0.00	None Contributing
403.00	0.00	(N/A)	0.00	None Contributing
403.50	0.00	(N/A)	0.00	None Contributing
404.00	0.00	(N/A)	0.00	None Contributing
404.50	0.00	(N/A)	0.00	None Contributing
405.00	0.00	(N/A)	0.00	None Contributing
405.50	0.00	(N/A)	0.00	None Contributing
406.00	0.00	(N/A)	0.00	None Contributing
406.50	0.00	(N/A)	0.00	None Contributing
407.00	0.00	(N/A)	0.00	None Contributing
407.50	0.00	(N/A)	0.00	None Contributing
408.00	0.00	(N/A)	0.00	None Contributing
408.50	0.00	(N/A)	0.00	None Contributing
409.00	0.00	(N/A)	0.00	None Contributing
409.50	0.00	(N/A)	0.00	None Contributing
410.00	0.00	(N/A)	0.00	None Contributing
410.50	0.00	(N/A)	0.00	None Contributing
411.00	0.00	(N/A)	0.00	None Contributing
411.05	0.00	(N/A)	0.00	Weir - 1
411.50	118.86	(N/A)	0.00	Weir - 1
412.00	364.59	(N/A)	0.00	Weir - 1

1047-01 - Emergency Spillway Design Routings

Subsection: Outlet Input Data
Label: Emergency Spillway #12
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Requested Pond Water Surface Elevations	
Minimum (Headwater)	400.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	408.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	407.15	408.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

1047-01 - Emergency Spillway Design Routings

Subsection: Outlet Input Data
Label: Emergency Spillway #12
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	407.15 ft
Weir Length	40.00 ft
Weir Coefficient	3.15 (ft^0.5)/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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Emergency Spillway Design Routings

Subsection: Composite Rating Curve
Label: Emergency Spillway #12
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
400.00	0.00	(N/A)	0.00	None Contributing
400.50	0.00	(N/A)	0.00	None Contributing
401.00	0.00	(N/A)	0.00	None Contributing
401.50	0.00	(N/A)	0.00	None Contributing
402.00	0.00	(N/A)	0.00	None Contributing
402.50	0.00	(N/A)	0.00	None Contributing
403.00	0.00	(N/A)	0.00	None Contributing
403.50	0.00	(N/A)	0.00	None Contributing
404.00	0.00	(N/A)	0.00	None Contributing
404.50	0.00	(N/A)	0.00	None Contributing
405.00	0.00	(N/A)	0.00	None Contributing
405.50	0.00	(N/A)	0.00	None Contributing
406.00	0.00	(N/A)	0.00	None Contributing
406.50	0.00	(N/A)	0.00	None Contributing
407.00	0.00	(N/A)	0.00	None Contributing
407.15	0.00	(N/A)	0.00	Weir - 1
407.50	26.09	(N/A)	0.00	Weir - 1
408.00	98.74	(N/A)	0.00	Weir - 1

1047-01 - Emergency Spillway Design Routings

Subsection: Outlet Input Data
Label: Emergency Spillway #13
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Requested Pond Water Surface Elevations	
Minimum (Headwater)	380.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	384.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Inlet Box	Riser - 1	Forward	TW	383.15	384.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

1047-01 - Emergency Spillway Design Routings

Subsection: Outlet Input Data
Label: Emergency Spillway #13
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Structure ID: Riser - 1 Structure Type: Inlet Box	
Number of Openings	1
Elevation	383.15 ft
Orifice Area	16.0 ft²
Orifice Coefficient	0.680
Weir Length	16.00 ft
Weir Coefficient	3.15 (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	True

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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Emergency Spillway Design Routings

Subsection: Composite Rating Curve
Label: Emergency Spillway #13
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
380.00	0.00	(N/A)	0.00	None Contributing
380.50	0.00	(N/A)	0.00	None Contributing
381.00	0.00	(N/A)	0.00	None Contributing
381.50	0.00	(N/A)	0.00	None Contributing
382.00	0.00	(N/A)	0.00	None Contributing
382.50	0.00	(N/A)	0.00	None Contributing
383.00	0.00	(N/A)	0.00	None Contributing
383.15	0.00	(N/A)	0.00	Riser - 1
383.50	10.44	(N/A)	0.00	Riser - 1
384.00	39.50	(N/A)	0.00	Riser - 1

1047-01 - Emergency Spillway Design Routings

Subsection: Outlet Input Data
Label: Emergency Spillway #5
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Requested Pond Water Surface Elevations	
Minimum (Headwater)	409.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	416.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	414.85	416.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

1047-01 - Emergency Spillway Design Routings

Subsection: Outlet Input Data
Label: Emergency Spillway #5
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	414.85 ft
Weir Length	45.00 ft
Weir Coefficient	3.15 (ft^0.5)/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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Emergency Spillway Design Routings

Subsection: Composite Rating Curve
Label: Emergency Spillway #5
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
409.00	0.00	(N/A)	0.00	None Contributing
409.50	0.00	(N/A)	0.00	None Contributing
410.00	0.00	(N/A)	0.00	None Contributing
410.50	0.00	(N/A)	0.00	None Contributing
411.00	0.00	(N/A)	0.00	None Contributing
411.50	0.00	(N/A)	0.00	None Contributing
412.00	0.00	(N/A)	0.00	None Contributing
412.50	0.00	(N/A)	0.00	None Contributing
413.00	0.00	(N/A)	0.00	None Contributing
413.50	0.00	(N/A)	0.00	None Contributing
414.00	0.00	(N/A)	0.00	None Contributing
414.50	0.00	(N/A)	0.00	None Contributing
414.85	0.00	(N/A)	0.00	Weir - 1
415.00	8.23	(N/A)	0.00	Weir - 1
415.50	74.28	(N/A)	0.00	Weir - 1
416.00	174.81	(N/A)	0.00	Weir - 1

1047-01 - Emergency Spillway Design Routings

Subsection: Outlet Input Data
Label: Emergency Spillway #6
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Requested Pond Water Surface Elevations	
Minimum (Headwater)	470.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	476.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Inlet Box	Riser - 1	Forward	TW	474.85	476.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

1047-01 - Emergency Spillway Design Routings

Subsection: Outlet Input Data
Label: Emergency Spillway #6
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Structure ID: Riser - 1 Structure Type: Inlet Box	
Number of Openings	1
Elevation	474.85 ft
Orifice Area	16.0 ft²
Orifice Coefficient	0.680
Weir Length	16.00 ft
Weir Coefficient	3.15 (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	True

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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Emergency Spillway Design Routings

Subsection: Composite Rating Curve
Label: Emergency Spillway #6
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
470.00	0.00	(N/A)	0.00	None Contributing
470.50	0.00	(N/A)	0.00	None Contributing
471.00	0.00	(N/A)	0.00	None Contributing
471.50	0.00	(N/A)	0.00	None Contributing
472.00	0.00	(N/A)	0.00	None Contributing
472.50	0.00	(N/A)	0.00	None Contributing
473.00	0.00	(N/A)	0.00	None Contributing
473.50	0.00	(N/A)	0.00	None Contributing
474.00	0.00	(N/A)	0.00	None Contributing
474.50	0.00	(N/A)	0.00	None Contributing
474.85	0.00	(N/A)	0.00	Riser - 1
475.00	2.93	(N/A)	0.00	Riser - 1
475.50	26.41	(N/A)	0.00	Riser - 1
476.00	62.16	(N/A)	0.00	Riser - 1

1047-01 - Emergency Spillway Design Routings

Subsection: Outlet Input Data
Label: Emergency Spillway #7
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Requested Pond Water Surface Elevations	
Minimum (Headwater)	483.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	488.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Inlet Box	Riser - 1	Forward	TW	486.05	488.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

1047-01 - Emergency Spillway Design Routings

Subsection: Outlet Input Data
Label: Emergency Spillway #7
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Structure ID: Riser - 1 Structure Type: Inlet Box	
Number of Openings	1
Elevation	486.05 ft
Orifice Area	16.0 ft²
Orifice Coefficient	0.680
Weir Length	16.00 ft
Weir Coefficient	3.15 (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	True

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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Emergency Spillway Design Routings

Subsection: Composite Rating Curve
Label: Emergency Spillway #7
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
483.00	0.00	(N/A)	0.00	None Contributing
483.50	0.00	(N/A)	0.00	None Contributing
484.00	0.00	(N/A)	0.00	None Contributing
484.50	0.00	(N/A)	0.00	None Contributing
485.00	0.00	(N/A)	0.00	None Contributing
485.50	0.00	(N/A)	0.00	None Contributing
486.00	0.00	(N/A)	0.00	None Contributing
486.05	0.00	(N/A)	0.00	Riser - 1
486.50	15.21	(N/A)	0.00	Riser - 1
487.00	46.67	(N/A)	0.00	Riser - 1
487.50	88.00	(N/A)	0.00	Riser - 1
488.00	121.87	(N/A)	0.00	Riser - 1

1047-01 - Emergency Spillway Design Routings

Subsection: Outlet Input Data
Label: Emergency Spillway #8
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Requested Pond Water Surface Elevations	
Minimum (Headwater)	458.60 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	467.60 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Rectangular Weir	Weir - 1	Forward	TW	466.85	467.60
Tailwater Settings	Tailwater			(N/A)	(N/A)

1047-01 - Emergency Spillway Design Routings

Subsection: Outlet Input Data
Label: Emergency Spillway #8
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Structure ID: Weir - 1 Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	466.85 ft
Weir Length	4.00 ft
Weir Coefficient	3.15 (ft^0.5)/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 ft³/s
Flow Tolerance (Maximum)	10.000 ft³/s

1047-01 - Emergency Spillway Design Routings

Subsection: Composite Rating Curve
Label: Emergency Spillway #8
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Composite Outflow Summary

Water Surface Elevation (ft)	Flow (ft^3/s)	Tailwater Elevation (ft)	Convergence Error (ft)	Contributing Structures
458.60	0.00	(N/A)	0.00	None Contributing
459.10	0.00	(N/A)	0.00	None Contributing
459.60	0.00	(N/A)	0.00	None Contributing
460.10	0.00	(N/A)	0.00	None Contributing
460.60	0.00	(N/A)	0.00	None Contributing
461.10	0.00	(N/A)	0.00	None Contributing
461.60	0.00	(N/A)	0.00	None Contributing
462.10	0.00	(N/A)	0.00	None Contributing
462.60	0.00	(N/A)	0.00	None Contributing
463.10	0.00	(N/A)	0.00	None Contributing
463.60	0.00	(N/A)	0.00	None Contributing
464.10	0.00	(N/A)	0.00	None Contributing
464.60	0.00	(N/A)	0.00	None Contributing
465.10	0.00	(N/A)	0.00	None Contributing
465.60	0.00	(N/A)	0.00	None Contributing
466.10	0.00	(N/A)	0.00	None Contributing
466.60	0.00	(N/A)	0.00	None Contributing
466.85	0.00	(N/A)	0.00	Weir - 1
467.10	1.58	(N/A)	0.00	Weir - 1
467.60	8.18	(N/A)	0.00	Weir - 1

1047-01 - Emergency Spillway Design Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #10
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	403.00 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	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
403.00	0.00	0.000	0.000	0.00	0.00	0.00
403.50	0.00	0.006	0.017	0.00	0.00	2.84
404.00	0.00	0.016	0.026	0.00	0.00	7.93
404.50	0.00	0.032	0.036	0.00	0.00	15.39
405.00	0.00	0.053	0.049	0.00	0.00	25.69
405.50	0.00	0.079	0.056	0.00	0.00	38.41
406.00	0.00	0.109	0.064	0.00	0.00	52.95
406.50	0.00	0.143	0.072	0.00	0.00	69.43
407.00	0.00	0.182	0.081	0.00	0.00	87.96
407.50	0.00	0.225	0.090	0.00	0.00	108.67
408.00	0.00	0.272	0.100	0.00	0.00	131.68
408.50	0.00	0.324	0.107	0.00	0.00	156.74
408.90	0.00	0.368	0.113	0.00	0.00	178.05
409.00	5.98	0.379	0.115	0.00	5.98	189.53
409.50	87.84	0.438	0.122	0.00	87.84	300.02
410.00	218.05	0.501	0.130	0.00	218.05	460.73

1047-01 - Emergency Spillway Design Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #11
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	399.00 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	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
399.00	0.00	0.000	0.000	0.00	0.00	0.00
399.50	0.00	0.010	0.029	0.00	0.00	4.95
400.00	0.00	0.029	0.045	0.00	0.00	13.92
400.50	0.00	0.056	0.065	0.00	0.00	27.20
401.00	0.00	0.094	0.088	0.00	0.00	45.64
401.50	0.00	0.146	0.119	0.00	0.00	70.61
402.00	0.00	0.214	0.155	0.00	0.00	103.69
402.50	0.00	0.294	0.166	0.00	0.00	142.49
403.00	0.00	0.380	0.177	0.00	0.00	183.92
403.50	0.00	0.471	0.188	0.00	0.00	228.08
404.00	0.00	0.568	0.200	0.00	0.00	275.04
404.50	0.00	0.675	0.229	0.00	0.00	326.89
405.00	0.00	0.797	0.260	0.00	0.00	385.96
405.50	0.00	0.935	0.292	0.00	0.00	452.71
406.00	0.00	1.090	0.327	0.00	0.00	527.61
406.50	0.00	1.256	0.336	0.00	0.00	607.83
407.00	0.00	1.426	0.345	0.00	0.00	690.27
407.50	0.00	1.601	0.355	0.00	0.00	774.95
408.00	0.00	1.781	0.364	0.00	0.00	861.89
408.50	0.00	1.965	0.372	0.00	0.00	950.90
409.00	0.00	2.152	0.379	0.00	0.00	1,041.77
409.50	0.00	2.344	0.387	0.00	0.00	1,134.51
410.00	0.00	2.540	0.395	0.00	0.00	1,229.14
410.50	0.00	2.739	0.402	0.00	0.00	1,325.54
411.00	0.00	2.941	0.408	0.00	0.00	1,423.56
411.05	0.00	2.962	0.409	0.00	0.00	1,433.45
411.50	118.86	3.147	0.415	0.00	118.86	1,642.07
412.00	364.59	3.356	0.422	0.00	364.59	1,989.09

1047-01 - Emergency Spillway Design Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #12
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	400.00 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	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
400.00	0.00	0.000	0.000	0.00	0.00	0.00
400.50	0.00	0.004	0.012	0.00	0.00	2.09
401.00	0.00	0.012	0.019	0.00	0.00	5.92
401.50	0.00	0.024	0.028	0.00	0.00	11.63
402.00	0.00	0.040	0.038	0.00	0.00	19.57
402.50	0.00	0.063	0.053	0.00	0.00	30.54
403.00	0.00	0.094	0.071	0.00	0.00	45.43
403.50	0.00	0.134	0.091	0.00	0.00	64.87
404.00	0.00	0.185	0.113	0.00	0.00	89.44
404.50	0.00	0.244	0.123	0.00	0.00	118.00
405.00	0.00	0.308	0.134	0.00	0.00	149.06
405.50	0.00	0.378	0.145	0.00	0.00	182.71
406.00	0.00	0.453	0.156	0.00	0.00	219.08
406.50	0.00	0.534	0.168	0.00	0.00	258.25
407.00	0.00	0.620	0.180	0.00	0.00	300.32
407.15	0.00	0.648	0.187	0.00	0.00	313.63
407.50	26.09	0.716	0.203	0.00	26.09	372.71
408.00	98.74	0.824	0.227	0.00	98.74	497.34

1047-01 - Emergency Spillway Design Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #13
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	380.00 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	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
380.00	0.00	0.000	0.000	0.00	0.00	0.00
380.50	0.00	0.001	0.002	0.00	0.00	0.27
381.00	0.00	0.002	0.003	0.00	0.00	0.82
381.50	0.00	0.003	0.004	0.00	0.00	1.68
382.00	0.00	0.006	0.006	0.00	0.00	2.91
382.50	0.00	0.010	0.009	0.00	0.00	4.69
383.00	0.00	0.015	0.012	0.00	0.00	7.18
383.15	0.00	0.017	0.013	0.00	0.00	8.09
383.50	10.44	0.022	0.016	0.00	10.44	20.96
384.00	39.50	0.031	0.020	0.00	39.50	54.33

1047-01 - Emergency Spillway Design Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #5
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	409.00 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	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
409.00	0.00	0.000	0.000	0.00	0.00	0.00
409.50	0.00	0.005	0.014	0.00	0.00	2.33
410.00	0.00	0.013	0.021	0.00	0.00	6.48
410.50	0.00	0.026	0.030	0.00	0.00	12.58
411.00	0.00	0.043	0.040	0.00	0.00	20.98
411.50	0.00	0.065	0.045	0.00	0.00	31.30
412.00	0.00	0.089	0.051	0.00	0.00	42.95
412.50	0.00	0.116	0.056	0.00	0.00	55.91
413.00	0.00	0.145	0.062	0.00	0.00	70.14
413.50	0.00	0.177	0.067	0.00	0.00	85.70
414.00	0.00	0.212	0.073	0.00	0.00	102.65
414.50	0.00	0.250	0.078	0.00	0.00	120.92
414.85	0.00	0.278	0.082	0.00	0.00	134.43
415.00	8.23	0.290	0.083	0.00	8.23	148.65
415.50	74.28	0.333	0.089	0.00	74.28	235.47
416.00	174.81	0.379	0.094	0.00	174.81	358.07

1047-01 - Emergency Spillway Design Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #6
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	470.00 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	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
470.00	0.00	0.000	0.000	0.00	0.00	0.00
470.50	0.00	0.004	0.011	0.00	0.00	1.81
471.00	0.00	0.010	0.016	0.00	0.00	5.04
471.50	0.00	0.020	0.023	0.00	0.00	9.76
472.00	0.00	0.034	0.031	0.00	0.00	16.28
472.50	0.00	0.051	0.038	0.00	0.00	24.58
473.00	0.00	0.071	0.045	0.00	0.00	34.60
473.50	0.00	0.096	0.053	0.00	0.00	46.50
474.00	0.00	0.125	0.062	0.00	0.00	60.43
474.50	0.00	0.157	0.065	0.00	0.00	75.78
474.85	0.00	0.180	0.067	0.00	0.00	86.95
475.00	2.93	0.190	0.068	0.00	2.93	94.78
475.50	26.41	0.224	0.071	0.00	26.41	135.05
476.00	62.16	0.261	0.074	0.00	62.16	188.32

1047-01 - Emergency Spillway Design Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: Basin #7
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	483.00 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	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
483.00	0.00	0.000	0.000	0.00	0.00	0.00
483.50	0.00	0.004	0.012	0.00	0.00	2.08
484.00	0.00	0.012	0.019	0.00	0.00	5.86
484.50	0.00	0.024	0.027	0.00	0.00	11.44
485.00	0.00	0.040	0.037	0.00	0.00	19.20
485.50	0.00	0.059	0.042	0.00	0.00	28.73
486.00	0.00	0.082	0.047	0.00	0.00	39.48
486.05	0.00	0.084	0.048	0.00	0.00	40.62
486.50	15.21	0.107	0.053	0.00	15.21	66.78
487.00	46.67	0.135	0.059	0.00	46.67	111.81
487.50	88.00	0.166	0.066	0.00	88.00	168.29
488.00	121.87	0.201	0.073	0.00	121.87	218.97

1047-01 - Emergency Spillway Design Routings

Subsection: Elevation-Volume-Flow Table (Pond)
Label: UG Basin #8
Scenario: Post-100+50 Spillway

Return Event: 150 years
Storm Event: NOAA 100+50

Infiltration	
Infiltration Method (Computed)	No Infiltration

Initial Conditions	
Elevation (Water Surface, Initial)	458.60 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	0.050 hours

Elevation (ft)	Outflow (ft³/s)	Storage (ac-ft)	Area (acres)	Infiltration (ft³/s)	Flow (Total) (ft³/s)	2S/t + O (ft³/s)
458.60	0.00	0.000	0.049	0.00	0.00	0.00
459.10	0.00	0.031	0.078	0.00	0.00	15.25
459.60	0.00	0.079	0.114	0.00	0.00	38.36
460.10	0.00	0.136	0.114	0.00	0.00	65.94
460.60	0.00	0.193	0.114	0.00	0.00	93.53
461.10	0.00	0.250	0.114	0.00	0.00	121.12
461.60	0.00	0.307	0.114	0.00	0.00	148.71
462.10	0.00	0.364	0.114	0.00	0.00	176.30
462.60	0.00	0.421	0.114	0.00	0.00	203.88
463.10	0.00	0.478	0.114	0.00	0.00	231.47
463.60	0.00	0.535	0.114	0.00	0.00	259.06
464.10	0.00	0.592	0.114	0.00	0.00	286.65
464.60	0.00	0.649	0.114	0.00	0.00	314.24
465.10	0.00	0.706	0.114	0.00	0.00	341.82
465.60	0.00	0.763	0.114	0.00	0.00	369.41
466.10	0.00	0.820	0.114	0.00	0.00	397.00
466.60	0.00	0.877	0.114	0.00	0.00	424.59
466.85	0.00	0.903	0.095	0.00	0.00	437.23
467.10	1.58	0.925	0.078	0.00	1.58	449.27
467.60	8.18	0.956	0.049	0.00	8.18	471.13

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1047-01 - Emergency Spillway Design Routings

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Worksheet for Emergency Spillway #5

Project Description	
Friction Method	Manning Formula
Solve For	Normal Depth

Input Data		
Roughness Coefficient	0.035	
Channel Slope	5.000	ft/ft
Bottom Width	30.00	ft
Discharge	42.03	cfs

Results		
Normal Depth	1.0	in
Flow Area	2.4	ft²
Wetted Perimeter	30.2	ft
Hydraulic Radius	1.0	in
Top Width	30.00	ft
Critical Depth	4.7	in
Critical Slope	0.025	ft/ft
Velocity	17.59	ft/s
Velocity Head	4.81	ft
Specific Energy	4.89	ft
Froude Number	10.986	
Flow Type	Supercritical	

GVF Input Data		
Downstream Depth	0.0	in
Length	0.0	ft
Number Of Steps	0	

GVF Output Data		
Upstream Depth	0.0	in
Profile Description	N/A	
Profile Headloss	0.00	ft
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	1.0	in
Critical Depth	4.7	in
Channel Slope	5.000	ft/ft
Critical Slope	0.025	ft/ft

Worksheet for Emergency Spillway #10

Project Description	
Friction Method	Manning Formula
Solve For	Normal Depth

Input Data		
Roughness Coefficient	0.035	
Channel Slope	4.000	ft/ft
Bottom Width	60.00	ft
Discharge	48.41	cfs

Results		
Normal Depth	0.7	in
Flow Area	3.7	ft²
Wetted Perimeter	60.1	ft
Hydraulic Radius	0.7	in
Top Width	60.00	ft
Critical Depth	3.3	in
Critical Slope	0.028	ft/ft
Velocity	13.16	ft/s
Velocity Head	2.69	ft
Specific Energy	2.75	ft
Froude Number	9.374	
Flow Type	Supercritical	

GVF Input Data		
Downstream Depth	0.0	in
Length	0.0	ft
Number Of Steps	0	

GVF Output Data		
Upstream Depth	0.0	in
Profile Description	N/A	
Profile Headloss	0.00	ft
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	0.7	in
Critical Depth	3.3	in
Channel Slope	4.000	ft/ft
Critical Slope	0.028	ft/ft

Worksheet for Emergency Spillway #11

Project Description	
Friction Method	Manning Formula
Solve For	Normal Depth

Input Data		
Roughness Coefficient	0.035	
Channel Slope	3.000	ft/ft
Bottom Width	125.00	ft
Discharge	184.19	cfs

Results		
Normal Depth	1.1	in
Flow Area	12.0	ft^2
Wetted Perimeter	125.2	ft
Hydraulic Radius	1.1	in
Top Width	125.00	ft
Critical Depth	4.9	in
Critical Slope	0.024	ft/ft
Velocity	15.38	ft/s
Velocity Head	3.68	ft
Specific Energy	3.77	ft
Froude Number	8.762	
Flow Type	Supercritical	

GVF Input Data		
Downstream Depth	0.0	in
Length	0.0	ft
Number Of Steps	0	

GVF Output Data		
Upstream Depth	0.0	in
Profile Description	N/A	
Profile Headloss	0.00	ft
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	1.1	in
Critical Depth	4.9	in
Channel Slope	3.000	ft/ft
Critical Slope	0.024	ft/ft

Worksheet for Emergency Spillway #12

Project Description	
Friction Method	Manning Formula
Solve For	Normal Depth

Input Data		
Roughness Coefficient	0.035	
Channel Slope	3.000	ft/ft
Bottom Width	40.00	ft
Discharge	49.07	cfs

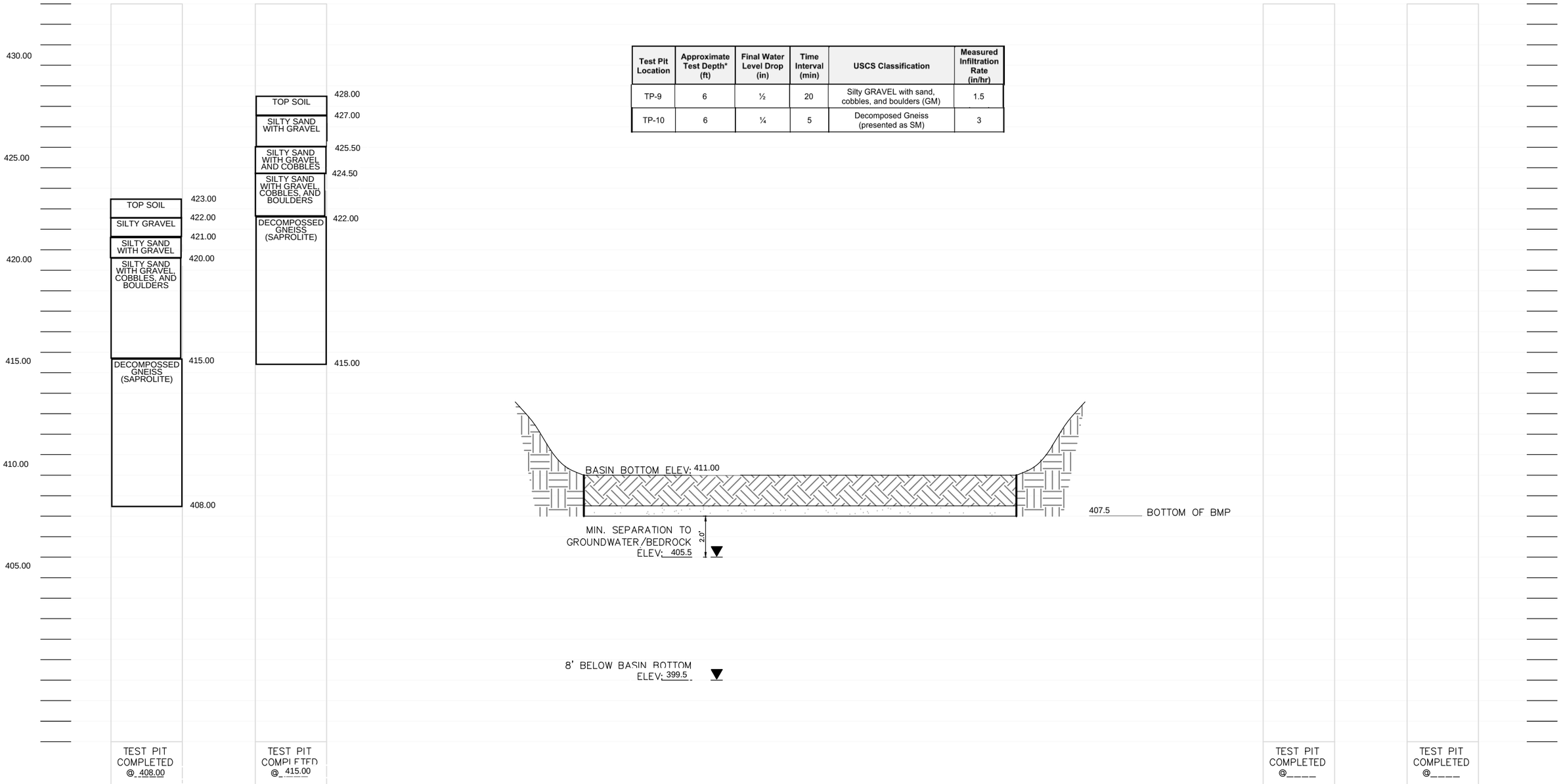
Results		
Normal Depth	1.0	in
Flow Area	3.4	ft²
Wetted Perimeter	40.2	ft
Hydraulic Radius	1.0	in
Top Width	40.00	ft
Critical Depth	4.3	in
Critical Slope	0.026	ft/ft
Velocity	14.30	ft/s
Velocity Head	3.18	ft
Specific Energy	3.26	ft
Froude Number	8.604	
Flow Type	Supercritical	

GVF Input Data		
Downstream Depth	0.0	in
Length	0.0	ft
Number Of Steps	0	

GVF Output Data		
Upstream Depth	0.0	in
Profile Description	N/A	
Profile Headloss	0.00	ft
Downstream Velocity	Infinity	ft/s
Upstream Velocity	Infinity	ft/s
Normal Depth	1.0	in
Critical Depth	4.3	in
Channel Slope	3.000	ft/ft
Critical Slope	0.026	ft/ft

Small-Scale Bioretention Basin w/ Underdrain

Test Pit Location	Approximate Test Depth* (ft)	Final Water Level Drop (in)	Time Interval (min)	USCS Classification	Measured Infiltration Rate (in/hr)
TP-9	6	½	20	Silty GRAVEL with sand, cobbles, and boulders (GM)	1.5
TP-10	6	¼	5	Decomposed Gneiss (presented as SM)	3



DESIGN INFORMATION

1. HIGHEST SHWT ELEVATION = N/A
2. MAXIMUM CALC. GROUNDWATER MOUND ELEV. N/A
3. LOWEST ELEVATION OF BMP BOTTOM 401.50
4. DISTANCE BETWEEN BOTTOM OF BMP AN:
   A. SHWT N/A
   B. MAX. GW MOUND N/A
5. SOIL REPLACEMENT IS / IS NOT PROPOSED
6. IF SOIL REPLACEMENT IS PROPOSED, REPLACEMENT EXTENDS TO N/A
7. ELEVATIONS AND RATES OF PERMEABILITY TESTS: 1.5 in/hr 417
   3 in/hr 422
8. SOIL LOGS EXTEND A MIN. OF 8' BELOW BMP BOTTOM OR 2x THE MAX. WATER DEPTH IN THE BMP.
   A. 8' BELOW BASIN BOTTOM 399.5
   B. 2x DEPTH OF WATER IN BMP 392.88
9. TEST PITS MUST EXTEND TO A MIN. ELEVATION OF: 392.88
10. WATER SURFACE ELEVATIONS:
    A. WQ STORM 411.58
    B. 2–YR STORM 413.46
    C. 10–YR STORM 414.13
    D. 100–YR STORM 414.81
11. TOP OF BMP BERM 415.30
12. SPILLWAY ELEVATION 414.85
13. OUTLET CONTROL ELEVATIONS:
    2.5" Orifice 411.60
    4' Weir 413.50

BIO-RETENTION BASIN: 5
SOIL PROFILE
CROSS-SECTION

GLADSTONE DESIGN, INC.
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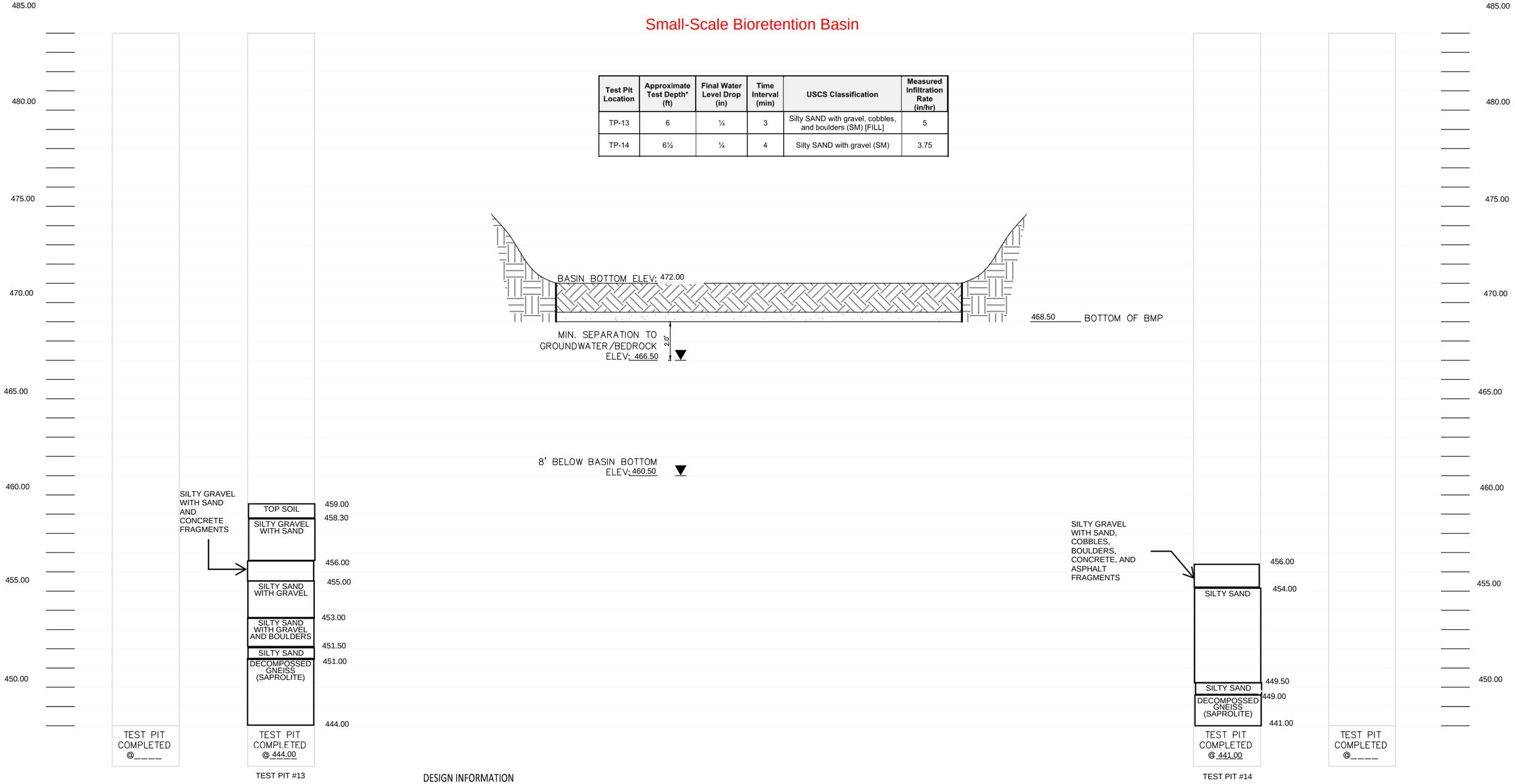
Small-Scale Bioretention Basin

Test Pit Location	Approximate Test Depth* (ft)	Final Water Level Drop (in)	Time Interval (min)	USCS Classification	Measured Infiltration Rate (in/hr)
TP-13	6	¼	3	Silty SAND with gravel, cobbles, and boulders (SM) [FILL]	5
TP-14	6½	¼	4	Silty SAND with gravel (SM)	3.75



DESIGN INFORMATION

1. HIGHEST SHWT ELEVATION = N/A
2. MAXIMUM CALC. GROUNDWATER MOUND ELEV. N/A
3. LOWEST ELEVATION OF BMP BOTTOM 468.50
4. DISTANCE BETWEEN BOTTOM OF BMP AN:
   A. SHWT N/A
   B. MAX. GW MOUND N/A
5. SOIL REPLACEMENT IS / IS NOT PROPOSED
6. IF SOIL REPLACEMENT IS PROPOSED, REPLACEMENT EXTENDS TO N/A
7. ELEVATIONS AND RATES OF PERMEABILITY TESTS: 5 in/hr 453; 3.75 in/hr 449.5
8. SOIL LOGS EXTEND A MIN. OF 8' BELOW BMP BOTTOM OR 2x THE MAX. WATER DEPTH IN THE BMP.
   A. 8' BELOW BASIN BOTTOM 460.50
   B. 2x DEPTH OF WATER IN BMP 455.9
9. TEST PITS MUST EXTEND TO A MIN. ELEVATION OF: 455.9
10. WATER SURFACE ELEVATIONS:
    A. WQ STORM 472.19
    B. 2–YR STORM 474.09
    C. 10–YR STORM 474.41
    D. 100–YR STORM 474.80
11. TOP OF BMP BERM 476.00
12. SPILLWAY ELEVATION 474.85
13. OUTLET CONTROL ELEVATIONS:
    2.5" Orifice 472.25
    4' Weir 474.15

BIO-RETENTION BASIN: 6
SOIL PROFILE
CROSS-SECTION

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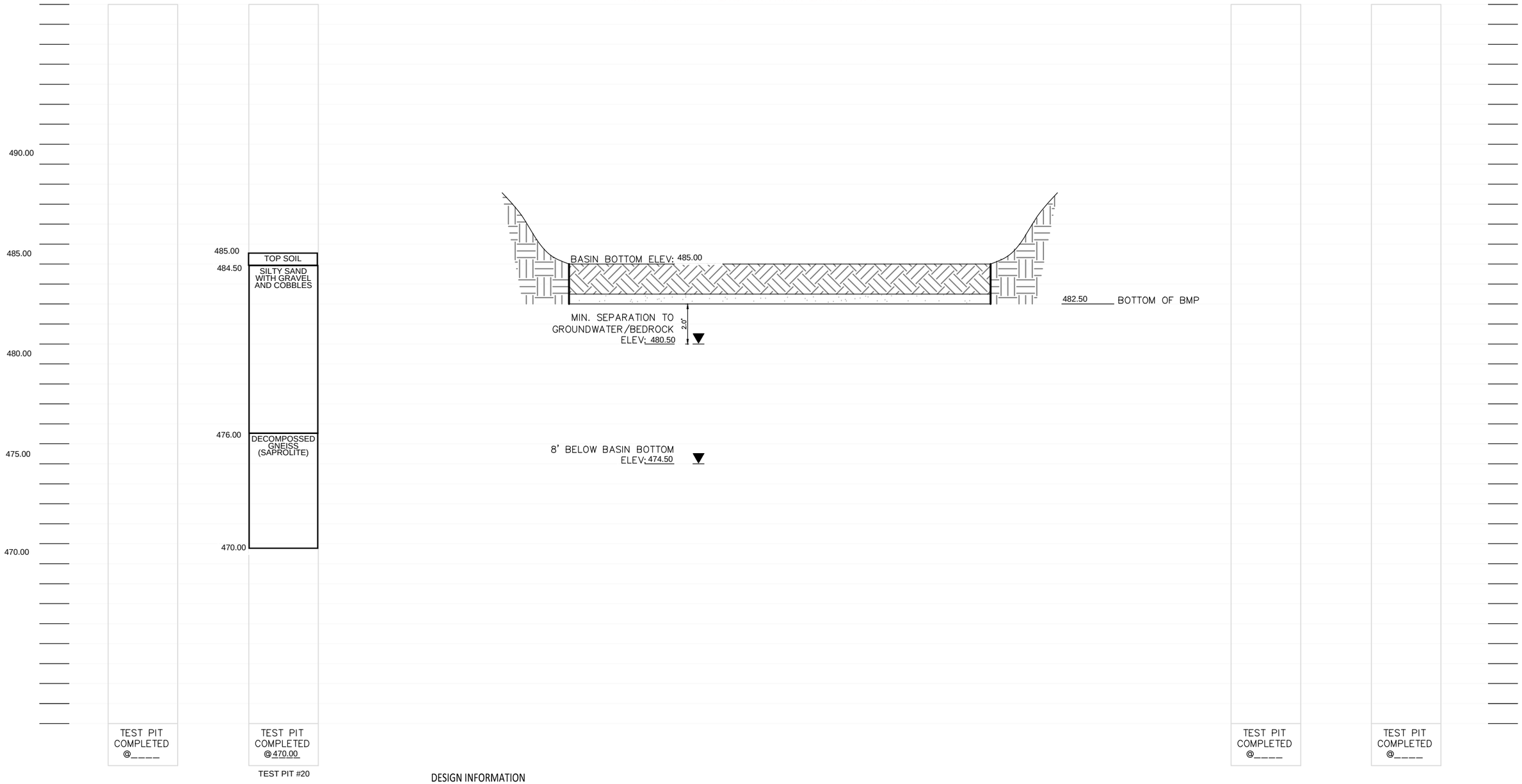
Small-Scale Bioretention Basin w/ Underdrain



DESIGN INFORMATION

1. HIGHEST SHWT ELEVATION = N/A
2. MAXIMUM CALC. GROUNDWATER MOUND ELEV. N/A
3. LOWEST ELEVATION OF BMP BOTTOM 482.50
4. DISTANCE BETWEEN BOTTOM OF BMP AN:
   A. SHWT N/A
   B. MAX. GW MOUND N/A
5. SOIL REPLACEMENT IS / IS NOT PROPOSED
6. IF SOIL REPLACEMENT IS PROPOSED, REPLACEMENT EXTENDS TO N/A
7. ELEVATIONS AND RATES OF PERMEABILITY TESTS: N/A
8. SOIL LOGS EXTEND A MIN. OF 8' BELOW BMP BOTTOM OR 2x THE MAX. WATER DEPTH IN THE BMP.
   A. 8' BELOW BASIN BOTTOM 474.50
   B. 2x DEPTH OF WATER IN BMP 475.48
9. TEST PITS MUST EXTEND TO A MIN. ELEVATION OF: 474.5
10. WATER SURFACE ELEVATIONS:
    A. WQ STORM 483.46
    B. 2-YR STORM 483.82
    C. 10-YR STORM 484.58
    D. 100-YR STORM 486.01
11. TOP OF BMP BERM 488.00
12. SPILLWAY ELEVATION 486.05
13. OUTLET CONTROL ELEVATIONS:
    2.5" Orifice 485.25

BIO-RETENTION BASIN: 7
SOIL PROFILE
CROSS-SECTION

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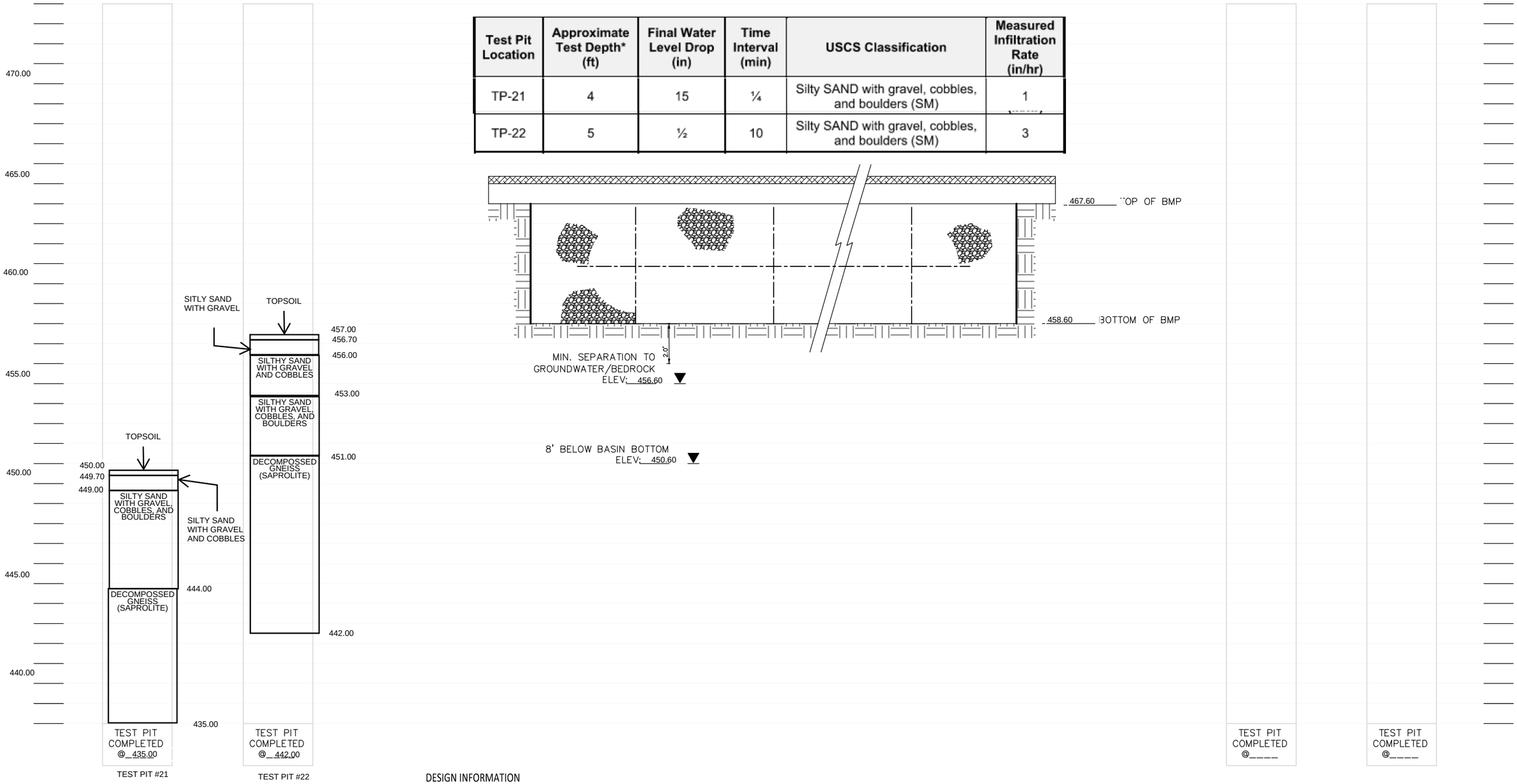
Underground Basin

Test Pit Location	Approximate Test Depth* (ft)	Final Water Level Drop (in)	Time Interval (min)	USCS Classification	Measured Infiltration Rate (in/hr)
TP-21	4	15	¼	Silty SAND with gravel, cobbles, and boulders (SM)	1
TP-22	5	½	10	Silty SAND with gravel, cobbles, and boulders (SM)	3



DESIGN INFORMATION

1. HIGHEST SHWT ELEVATION = N/A
2. MAXIMUM CALC. GROUNDWATER MOUND ELEV. N/A
3. LOWEST ELEVATION OF BMP BOTTOM 458.60
4. DISTANCE BETWEEN BOTTOM OF BMP AN:
   A. SHWT N/A
   B. MAX. GW MOUND N/A
5. SOIL REPLACEMENT IS / IS NOT PROPOSED
6. IF SOIL REPLACEMENT IS PROPOSED, REPLACEMENT EXTENDS TO N/A
7. ELEVATIONS AND RATES OF PERMEABILITY TESTS: 3 in/hr 452
8. SOIL LOGS EXTEND A MIN. OF 8' BELOW BMP BOTTOM OR 2x THE MAX. WATER DEPTH IN THE BMP.
   A. 8' BELOW BASIN BOTTOM 450.6
   B. 2x DEPTH OF WATER IN BMP 442.18
9. TEST PITS MUST EXTEND TO A MIN. ELEVATION OF: 442.18
10. WATER SURFACE ELEVATIONS:
    A. WQ STORM 460.27
    B. 2-YR STORM 463.39
    C. 10-YR STORM 464.34
    D. 100-YR STORM 466.81
11. TOP OF BMP BERM 467.00
12. SPILLWAY ELEVATION 466.85
13. OUTLET CONTROL ELEVATIONS:
    2.5" Orifice 462.60
    4" Weir 463.40

UNDERGROUND BASIN: 8
SOIL PROFILE
CROSS-SECTION

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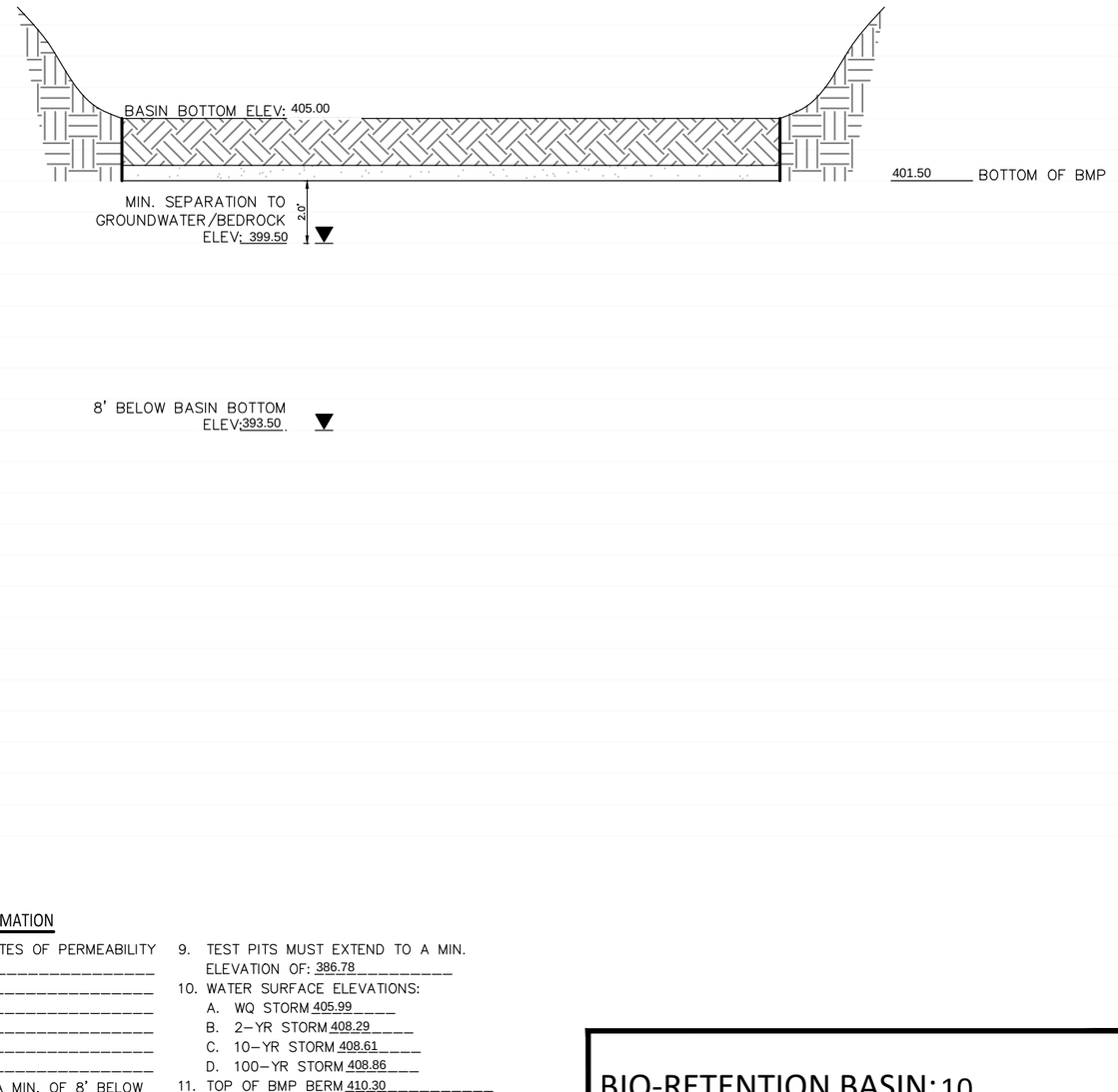
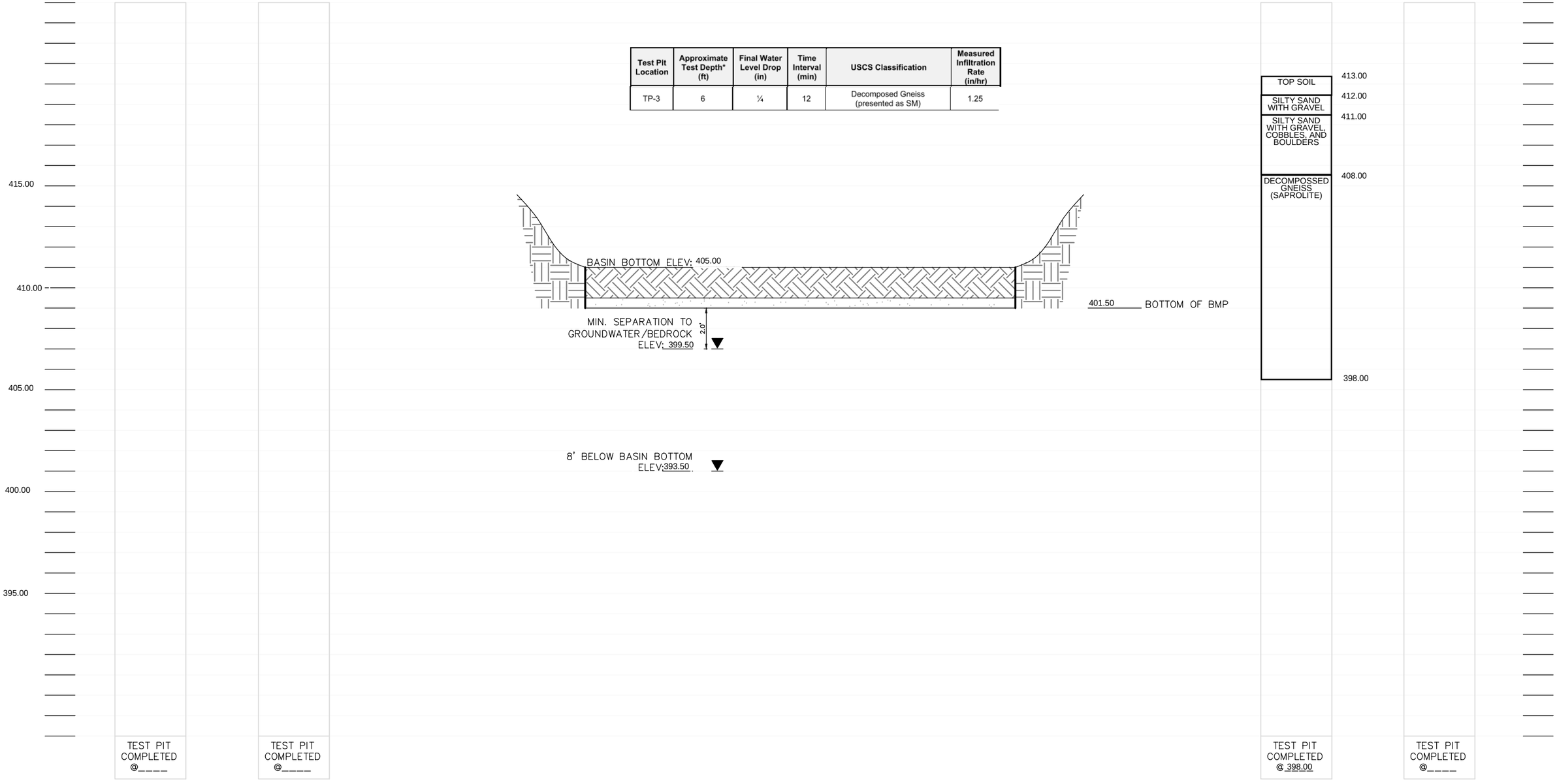
Small-Scale Bioretention Basin

Test Pit Location	Approximate Test Depth* (ft)	Final Water Level Drop (in)	Time Interval (min)	USCS Classification	Measured Infiltration Rate (in/hr)
TP-3	6	¼	12	Decomposed Gneiss (presented as SM)	1.25





TEST PIT #3

DESIGN INFORMATION

1. HIGHEST SHWT ELEVATION = N/A
2. MAXIMUM CALC. GROUNDWATER MOUND ELEV. N/A
3. LOWEST ELEVATION OF BMP BOTTOM 401.50
4. DISTANCE BETWEEN BOTTOM OF BMP AN:
   A. SHWT N/A
   B. MAX. GW MOUND N/A
5. SOIL REPLACEMENT IS / IS NOT PROPOSED
6. IF SOIL REPLACEMENT IS PROPOSED, REPLACEMENT EXTENDS TO N/A
7. ELEVATIONS AND RATES OF PERMEABILITY TESTS: 1.25 in/hr 407
8. SOIL LOGS EXTEND A MIN. OF 8' BELOW BMP BOTTOM OR 2x THE MAX. WATER DEPTH IN THE BMP.
   A. 8' BELOW BASIN BOTTOM 393.50
   B. 2x DEPTH OF WATER IN BMP 386.78
9. TEST PITS MUST EXTEND TO A MIN. ELEVATION OF: 386.78
10. WATER SURFACE ELEVATIONS:
    A. WQ STORM 405.99
    B. 2–YR STORM 408.29
    C. 10–YR STORM 408.61
    D. 100–YR STORM 408.86
11. TOP OF BMP BERM 410.30
12. SPILLWAY ELEVATION 408.90
13. OUTLET CONTROL ELEVATIONS:
    2.5" Orifice 406.00

BIO-RETENTION BASIN: 10
SOIL PROFILE
CROSS-SECTION

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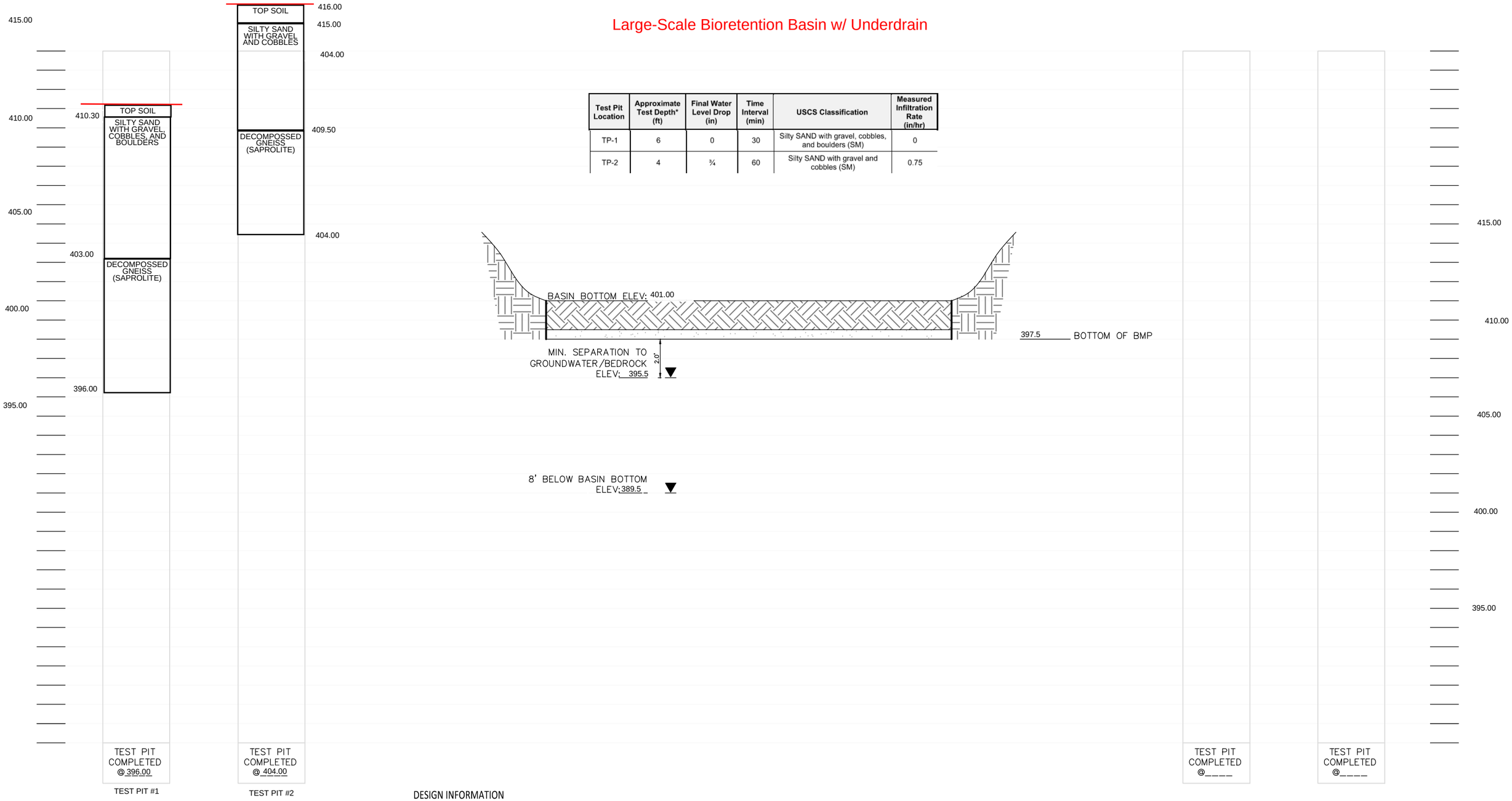
Large-Scale Bioretention Basin w/ Underdrain

Test Pit Location	Approximate Test Depth* (ft)	Final Water Level Drop (in)	Time Interval (min)	USCS Classification	Measured Infiltration Rate (in/hr)
TP-1	6	0	30	Silty SAND with gravel, cobbles, and boulders (SM)	0
TP-2	4	¾	60	Silty SAND with gravel and cobbles (SM)	0.75



DESIGN INFORMATION

1. HIGHEST SHWT ELEVATION = N/A
2. MAXIMUM CALC. GROUNDWATER MOUND ELEV. N/A
3. LOWEST ELEVATION OF BMP BOTTOM 397.50
4. DISTANCE BETWEEN BOTTOM OF BMP AN:
   A. SHWT N/A
   B. MAX. GW MOUND N/A
5. SOIL REPLACEMENT IS / IS NOT PROPOSED
6. IF SOIL REPLACEMENT IS PROPOSED, REPLACEMENT EXTENDS TO N/A
7. ELEVATIONS AND RATES OF PERMEABILITY TESTS: 0 in/hr 405; 0.75 in/hr 412
8. SOIL LOGS EXTEND A MIN. OF 8' BELOW BMP BOTTOM OR 2x THE MAX. WATER DEPTH IN THE BMP.
   A. 8' BELOW BASIN BOTTOM 389.50
   B. 2x DEPTH OF WATER IN BMP 370.48
9. TEST PITS MUST EXTEND TO A MIN. ELEVATION OF: 370.48
10. WATER SURFACE ELEVATIONS:
    A. WQ STORM 400.58
    B. 2–YR STORM 404.13
    C. 10–YR STORM 406.31
    D. 100–YR STORM 411.01
11. TOP OF BMP BERM 412.65
12. SPILLWAY ELEVATION 411.05
13. OUTLET CONTROL ELEVATIONS:
    2.5" Orifice 401.25
    0.5' Weir 404.10
    4' Weir 410.50

BIO-RETENTION BASIN: 11
SOIL PROFILE
CROSS-SECTION

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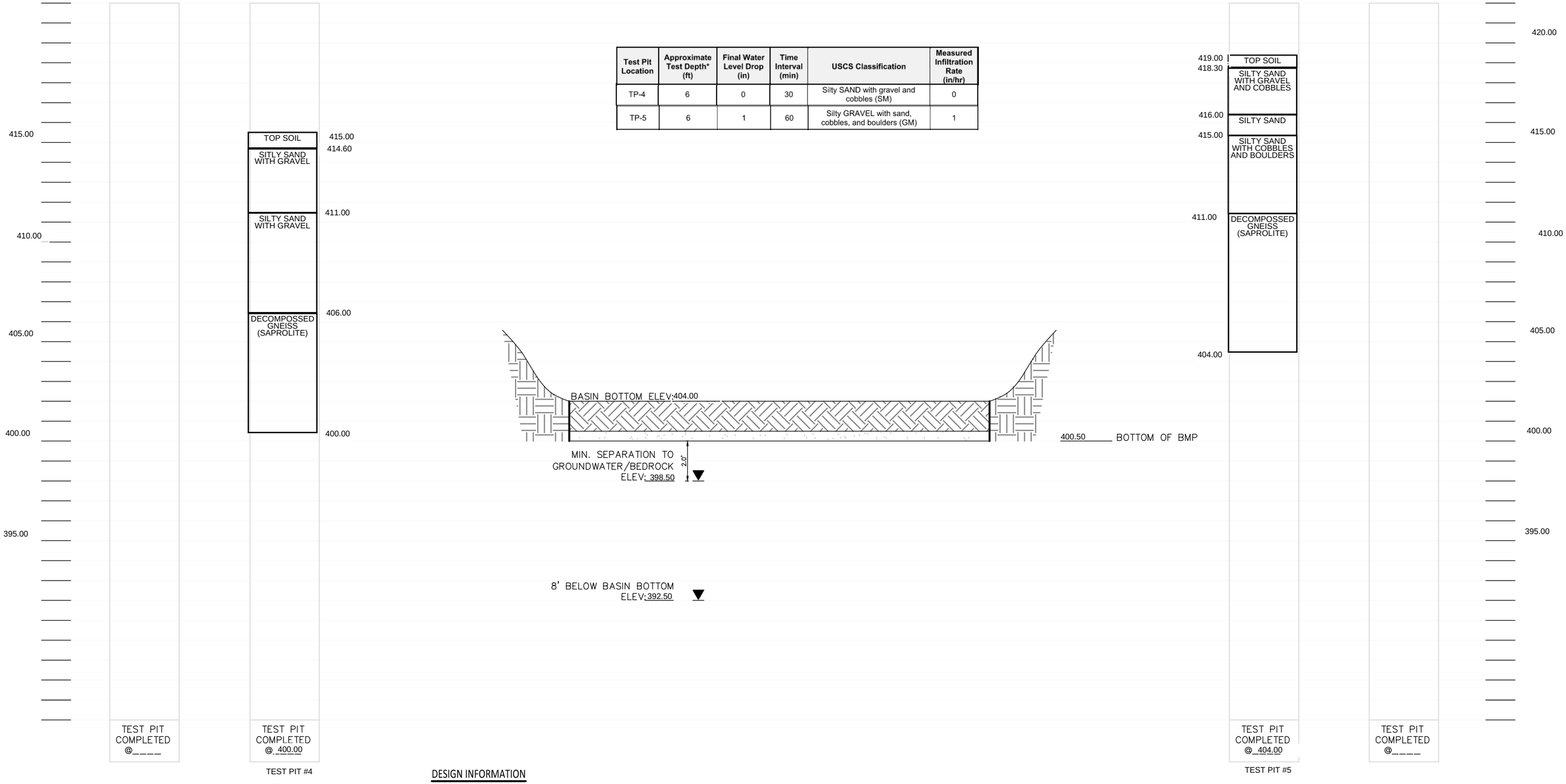
Small-Scale Bioretention Basin w/ Underdrain

Test Pit Location	Approximate Test Depth* (ft)	Final Water Level Drop (in)	Time Interval (min)	USCS Classification	Measured Infiltration Rate (in/hr)
TP-4	6	0	30	Silty SAND with gravel and cobbles (SM)	0
TP-5	6	1	60	Silty GRAVEL with sand, cobbles, and boulders (GM)	1



DESIGN INFORMATION

1. HIGHEST SHWT ELEVATION = N/A
2. MAXIMUM CALC. GROUNDWATER MOUND ELEV. N/A
3. LOWEST ELEVATION OF BMP BOTTOM 400.50
4. DISTANCE BETWEEN BOTTOM OF BMP AN:
   A. SHWT. N/A
   B. MAX. GW MOUND. N/A
5. SOIL REPLACEMENT IS / IS NOT PROPOSED
6. IF SOIL REPLACEMENT IS PROPOSED, REPLACEMENT EXTENDS TO. N/A
7. ELEVATIONS AND RATES OF PERMEABILITY TESTS: 1 in/hr 413
   0 in/hr 409
8. SOIL LOGS EXTEND A MIN. OF 8' BELOW BMP BOTTOM OR 2x THE MAX. WATER DEPTH IN THE BMP.
   A. 8' BELOW BASIN BOTTOM. 392.50
   B. 2x DEPTH OF WATER IN BMP. 394.96
9. TEST PITS MUST EXTEND TO A MIN. ELEVATION OF: 392.50
10. WATER SURFACE ELEVATIONS:
    A. WQ STORM. 403.27
    B. 2-YR STORM. 0.00
    C. 10-YR STORM. 0.00
    D. 100-YR STORM. 0.00
11. TOP OF BMP BERM. 406.00
12. SPILLWAY ELEVATION. -
13. OUTLET CONTROL ELEVATIONS:
    20' Weir 404.25

BIO-RETENTION BASIN: 11A
SOIL PROFILE
CROSS-SECTION

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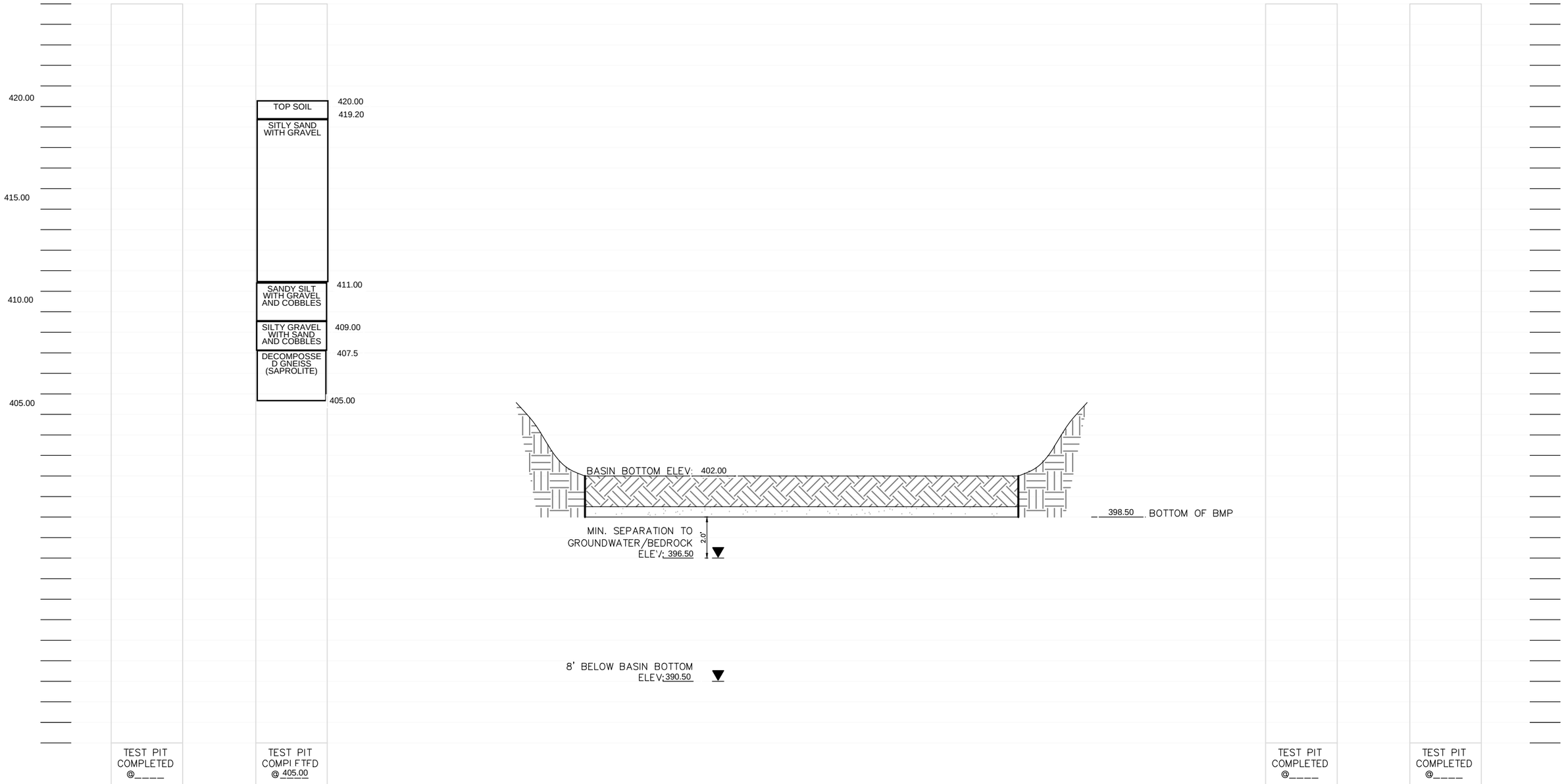
Small-Scale Bioretention Basin w/ Underdrain



TEST PIT #8

DESIGN INFORMATION

1. HIGHEST SHWT ELEVATION = N/A
2. MAXIMUM CALC. GROUNDWATER MOUND ELEV. N/A
3. LOWEST ELEVATION OF BMP BOTTOM 398.50
4. DISTANCE BETWEEN BOTTOM OF BMP AN:
   A. SHWT N/A
   B. MAX. GW MOUND N/A
5. SOIL REPLACEMENT IS / IS NOT PROPOSED
6. IF SOIL REPLACEMENT IS PROPOSED, REPLACEMENT EXTENDS TO N/A
7. ELEVATIONS AND RATES OF PERMEABILITY TESTS: N/A
8. SOIL LOGS EXTEND A MIN. OF 8' BELOW BMP BOTTOM OR 2x THE MAX. WATER DEPTH IN THE BMP.
   A. 8' BELOW BASIN BOTTOM 390.50
   B. 2x DEPTH OF WATER IN BMP 385.02
9. TEST PITS MUST EXTEND TO A MIN. ELEVATION OF: 385.02
10. WATER SURFACE ELEVATIONS:
    A. WQ STORM 402.15
    B. 2–YR STORM 404.15
    C. 10–YR STORM 405.24
    D. 100–YR STORM 407.11
11. TOP OF BMP BERM 408.70
12. SPILLWAY ELEVATION 407.15
13. OUTLET CONTROL ELEVATIONS:
    4" Orifice 402.25
    0.5' Weir 404.15
    ~~4' Weir 406.75~~

BIO-RETENTION BASIN: 12
SOIL PROFILE
CROSS-SECTION

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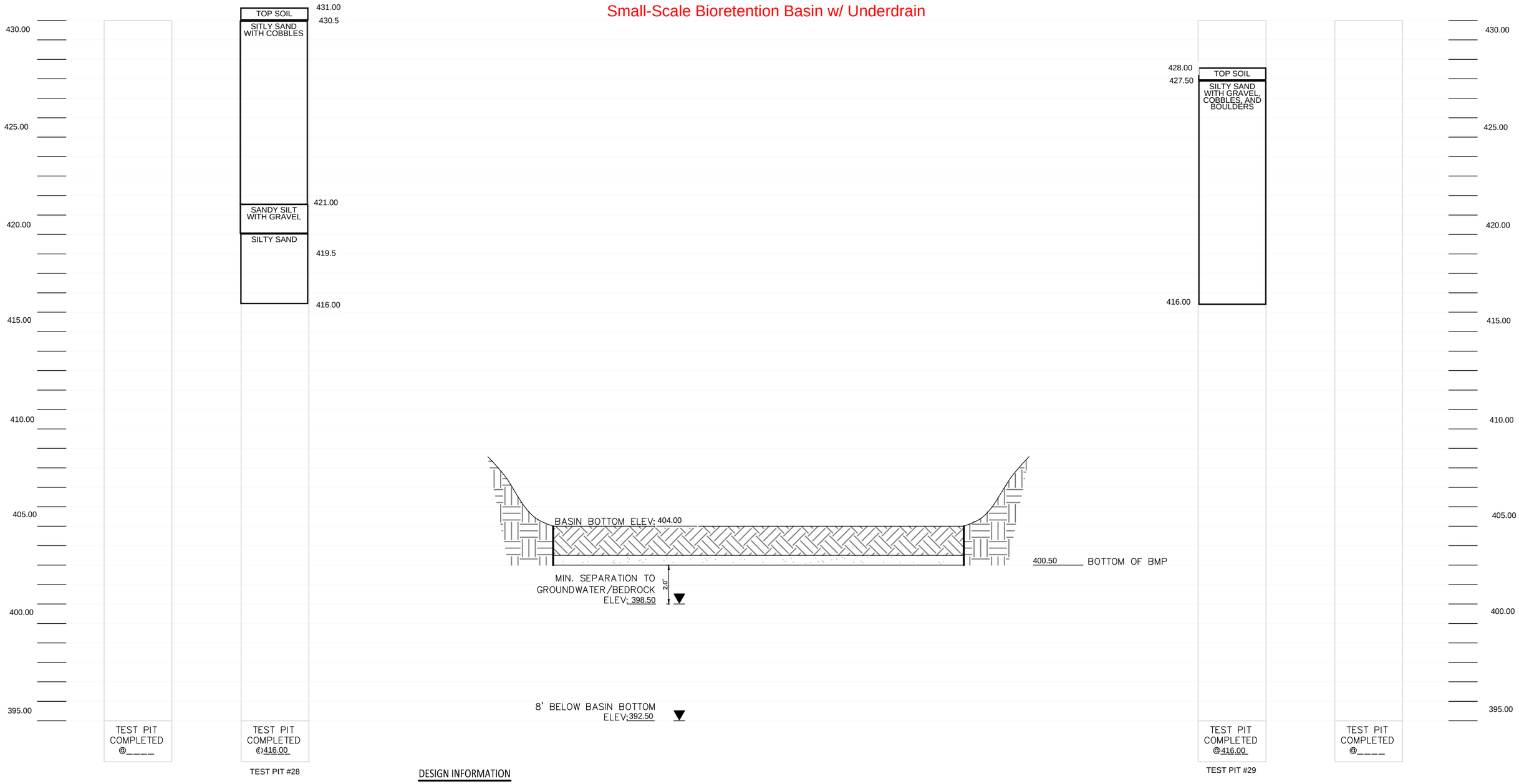
Small-Scale Bioretention Basin w/ Underdrain



DESIGN INFORMATION

1. HIGHEST SHWT ELEVATION = N/A_____
2. MAXIMUM CALC. GROUNDWATER MOUND ELEV N/A_____
3. LOWEST ELEVATION OF BMP BOTTOM 400.50___
4. DISTANCE BETWEEN BOTTOM OF BMP AN:
   A. SHWT N/A_____
   B. MAX. GW MOUND N/A_____
5. SOIL REPLACEMENT IS / IS NOT PROPOSED
6. IF SOIL REPLACEMENT IS PROPOSED, REPLACEMENT EXTENDS TO: N/A_____
7. ELEVATIONS AND RATES OF PERMEABILITY TESTS: 1.5 in/hr 426_____
   0.5 in/hr 422_____
8. SOIL LOGS EXTEND A MIN. OF 8' BELOW BMP BOTTOM OR 2x THE MAX. WATER DEPTH IN THE BMP.
   A. 8' BELOW BASIN BOTTOM 392.50_____
   B. 2x DEPTH OF WATER IN BMP 391.56_____
9. TEST PITS MUST EXTEND TO A MIN. ELEVATION OF: 391.56_____
10. WATER SURFACE ELEVATIONS:
    A. WQ STORM 404.97_____
    B. 2-YR STORM 0.00_____
    C. 10-YR STORM 0.00_____
    D. 100-YR STORM 0.00_____
11. TOP OF BMP BERM 407.00_____
12. SPILLWAY ELEVATION-_____
13. OUTLET CONTROL ELEVATIONS:
    25' Weir 405.00_____

BIO-RETENTION BASIN: 12A_____
SOIL PROFILE
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REFERENCES – APPENDIX H