BMP DESIGN CIVIL ENGINEERING LAND SURVEYING

Stormwater Report

DATE: May 28, 2017

FROM: Bogdan Popescu, P.E., P.L.S.

RE: Rose Bank Estates – 4 lots Residential Subdivision

LEGAL DESCRIPTION: 1.06 ACRES NW ¼ SW ¼ SEC 30, T1S, R2E, W.M.
ADDRESS: 4543 LOGUS ROAD, MILWAUKIE, CLACKAMAS COUNTY, OREGON

DESIGN CRITERIA:

- Design Storms: Design storms are based on total rainfall (inches) and rainfall distribution, per Clackamas County and State of Oregon Standards.
- Rainfall Intensity: The following are rainfall intensities for the respective storm events. The values were obtained from Milwaukie Stormwater Master Plan, which recorded the values from NOAA Atlas 2 Volume X. Storms are SCS 24HR TYPE IA.

Water quality event	1.0 inches
2-year event	2.4 inches
5-year event	3.0 inches
10-year event	3.5 inches
25-year event	4.0 inches
100-year event	4.7 inches

- Hydrological Soil Type: The soils report for the project area classifies the soil as hydrologic soil group "B".
- Curve Number (CN): The CN values were determined using Stormwater Management Manual.
- Drainage Basin Areas: total area 1.06 acres

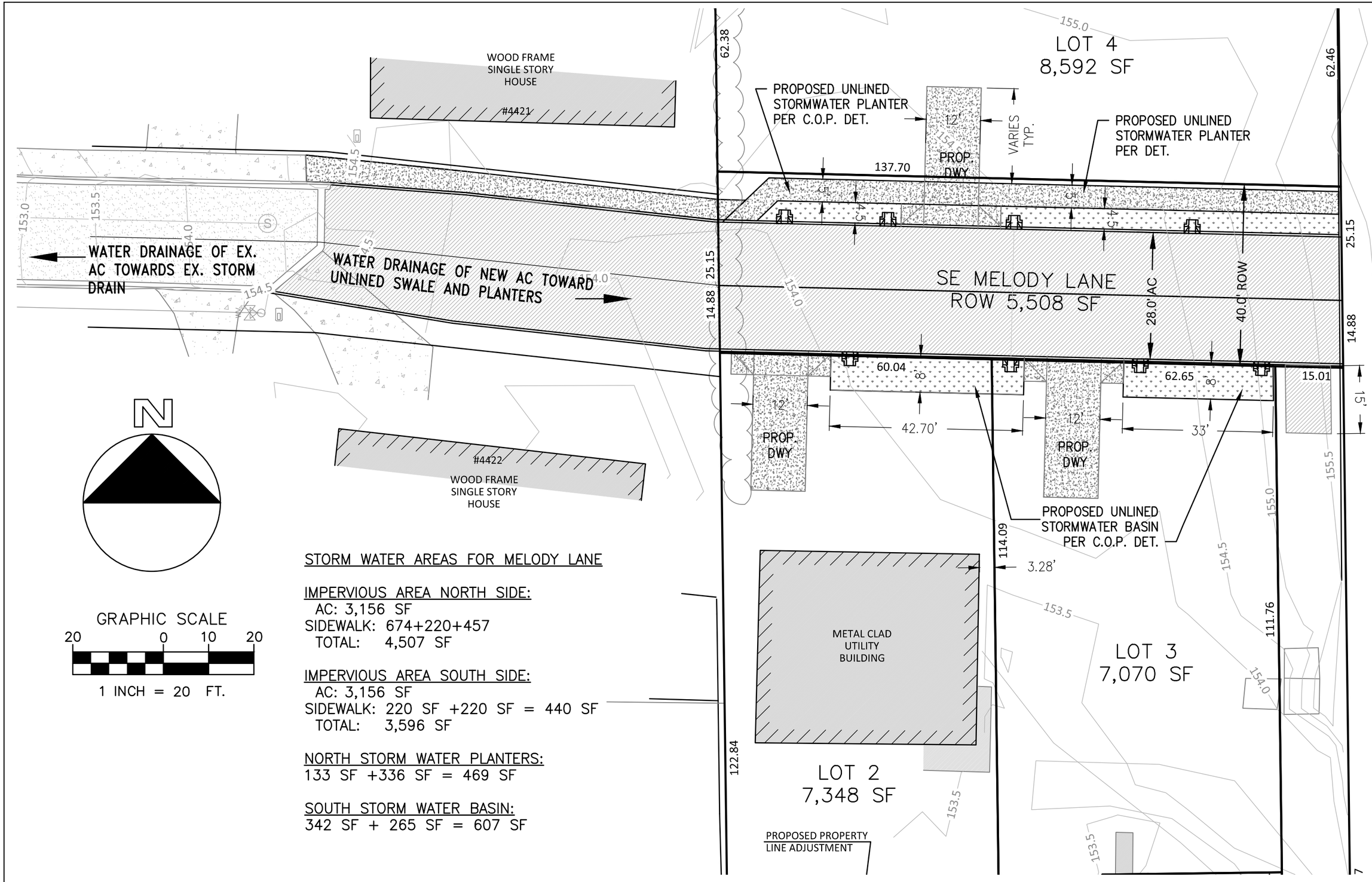
INFILTRATION / WATER QUALITY DESIGN:

- Infiltration Rate: An ultimate infiltration rate of 16.0 inches/hour was measured in the layers of soil at depths of 3 and 5' below ground. Soil was medium brown, very moist, slightly clayey, fine sandy silt. A design infiltration rate of 8.0 inches/hour was used for the design of the subdivision's infiltration system, on the recommendation of the geotechnical engineer, to account for silting and variability of existing soil conditions.

- Water Quality: Water quality for the roof infiltration systems will be provided by a catch basin sump with fine wire mesh on the outlet to the trench system, per Clackamas standard detail and in agreeance with City of Portland stormwater management manual. The public roadway on site will be crowned and drain to street side infiltration planters, per City of Portland. The amended soil mixture used will need to also provide 8.0 inches/hr for these planters. All drainage basins on site within the public ROW or public Easement shall be sized per COP Presumptive Approach Method for both street and sidewalk

- Infiltration Drywell: The roof infiltration drywell was modified from the standard detail to have a larger rock section. The standard detail shows a 48" manhole with 12" of rock surrounding the concrete structure for a roof this size. The proposed infiltration drywell will have a rock section of 36" to accommodate the site conditions of soil infiltration, lot sizes, and lack of acceptable overflow route.

See attached Storm water Basin Map for Areas Calculations.
See attached Presumptive Approach Report for Calculations.



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GRAPHIC SCALE

20 0 10 20

1 INCH = 20 FT.

STORM WATER AREAS FOR MELODY LANE

IMPERVIOUS AREA NORTH SIDE:
AC: 3,156 SF
SIDEWALK: 674+220+457
TOTAL: 4,507 SF

IMPERVIOUS AREA SOUTH SIDE:
AC: 3,156 SF
SIDEWALK: 220 SF +220 SF = 440 SF
TOTAL: 3,596 SF

NORTH STORM WATER PLANTERS:
133 SF +336 SF = 469 SF

SOUTH STORM WATER BASIN:
342 SF + 265 SF = 607 SF

BMP DESIGN LLC
Civil Engineering & Land Surveying
12725 SE 64th Ave, Happy Valley, OR 97086
PH: 360.836.8426, FAX: 360.253.8054
www.bmpdesign.us

5/28/2017

REGISTERED PROFESSIONAL ENGINEER
OREGON
JANUARY 15, 2002
BOGDAN M. POPESCU

EXPIRATION DATE 12/31/18

STORM BASINS AREAS

ROSE BANK ESTATES, MILWAUKIE OREGON

4543 LOGUS ROAD, MILWAUKIE, CLACKAMAS COUNTY, OREGON
NW¼SW¼ SECTION 30, T1S,R2E, W.M.

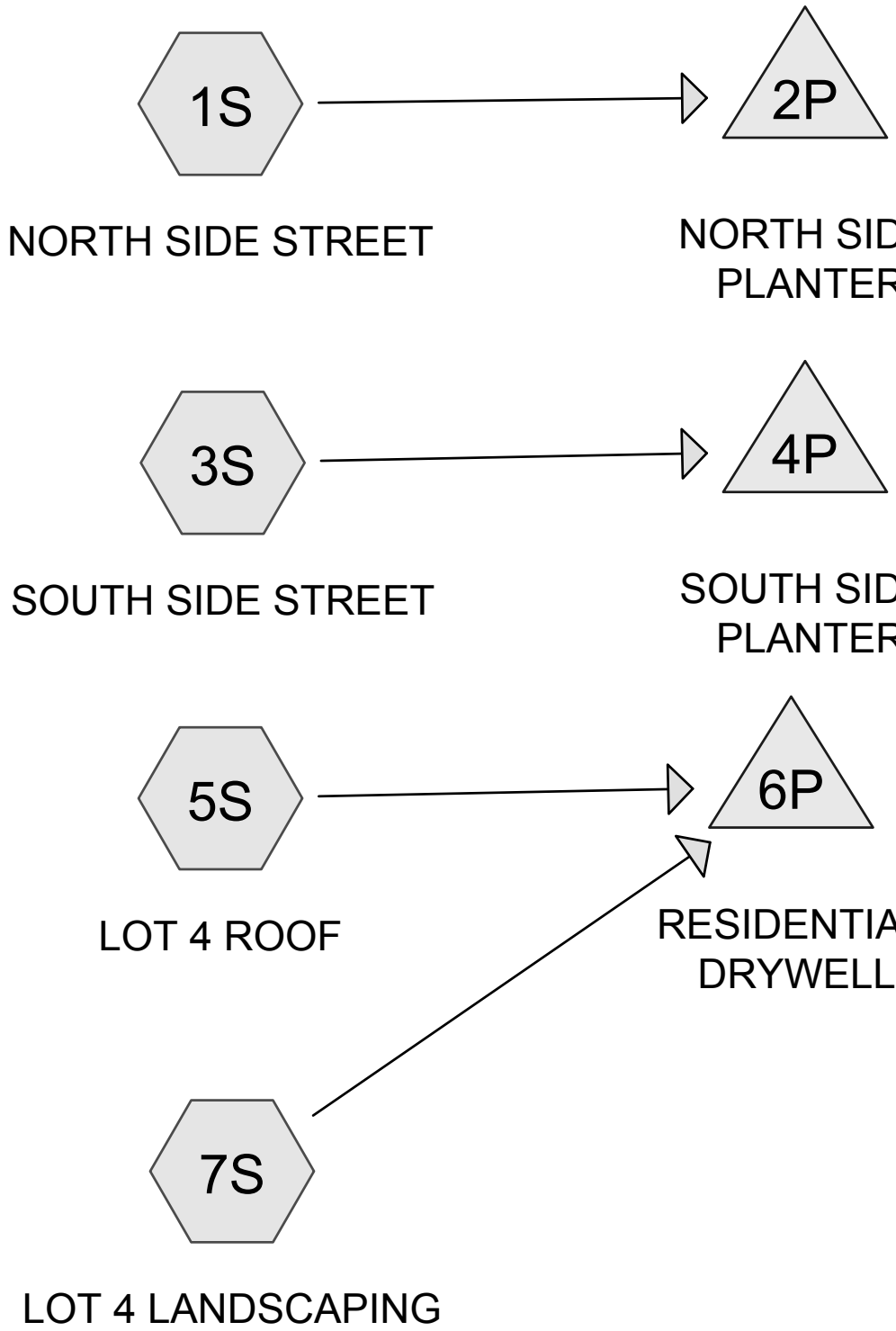
REVISION/DATE	DESCRIPTION	DRAFT BY:	DESIGN BY:	CHECK BY:

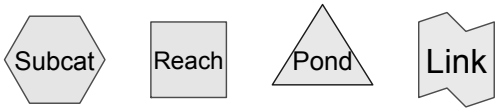
SHEET OF

PROJECT No. 15122

15122_BASE.dwg

PRELIMINARY, SUBJECT TO REVIEWS AND REVISIONS, NOT FOR CONSTRUCTION





Routing Diagram for 15122 LOGUS ROAD STORM
Prepared by {enter your company name here}, Printed 6/1/2016

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.115	61	>75% Grass cover, Good, HSG B (7S)
0.147	98	IMPERVIOUS AREA (1S, 3S)
0.011	100	PLANTER SURFACE (1S, 3S)
0.083	98	Unconnected roofs, HSG B (5S)
0.355	**86**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.197	HSG B	5S, 7S
0.000	HSG C	
0.000	HSG D	
0.158	Other	1S, 3S
0.355		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.115	0.000	0.000	0.000	0.115	>75% Grass cover, Good	7S
0.000	0.000	0.000	0.000	0.147	0.147	IMPERVIOUS AREA	1S, 3S
0.000	0.000	0.000	0.000	0.011	0.011	PLANTER SURFACE	1S, 3S
0.000	0.083	0.000	0.000	0.000	0.083	Unconnected roofs	5S
0.000	**0.197**	**0.000**	**0.000**	**0.158**	**0.355**	**TOTAL AREA**	

Time span=0.00-28.00 hrs, dt=0.01 hrs, 2801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: NORTH SIDE STREET Runoff Area=3,291 sf 100.00% Impervious Runoff Depth=2.17"
Tc=5.0 min CN=98 Runoff=0.04 cfs 0.014 af

Subcatchment 3S: SOUTH SIDE STREET Runoff Area=3,580 sf 100.00% Impervious Runoff Depth=2.17"
Tc=5.0 min CN=98 Runoff=0.05 cfs 0.015 af

Subcatchment 5S: LOT 4 ROOF Runoff Area=3,600 sf 100.00% Impervious Runoff Depth=2.17"
Tc=5.0 min CN=98 Runoff=0.05 cfs 0.015 af

Subcatchment 7S: LOT 4 LANDSCAPING Runoff Area=5,000 sf 0.00% Impervious Runoff Depth=0.17"
Tc=5.0 min CN=61 Runoff=0.00 cfs 0.002 af

Pond 2P: NORTH SIDE PLANTER Peak Elev=0.02' Storage=2 cf Inflow=0.04 cfs 0.014 af
Outflow=0.04 cfs 0.014 af

Pond 4P: SOUTH SIDE PLANTER Peak Elev=0.07' Storage=12 cf Inflow=0.05 cfs 0.015 af
Outflow=0.04 cfs 0.015 af

Pond 6P: RESIDENTIAL DRYWELL Peak Elev=1.75' Storage=0.001 af Inflow=0.05 cfs 0.017 af
Outflow=0.02 cfs 0.017 af

Total Runoff Area = 0.355 ac Runoff Volume = 0.045 af Average Runoff Depth = 1.52"
32.32% Pervious = 0.115 ac 67.68% Impervious = 0.240 ac

Summary for Subcatchment 1S: NORTH SIDE STREET

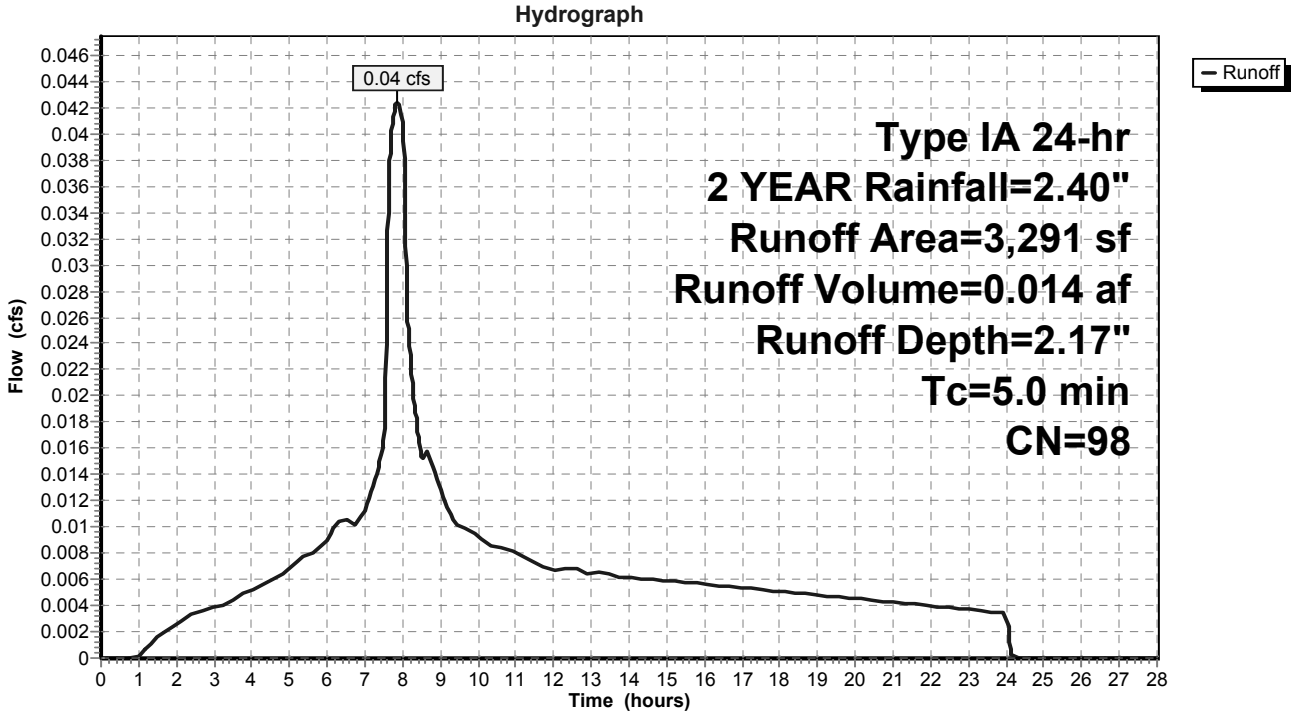
Runoff = 0.04 cfs @ 7.86 hrs, Volume= 0.014 af, Depth= 2.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Type IA 24-hr 2 YEAR Rainfall=2.40"

	Area (sf)	CN	Description
*	3,012	98	IMPERVIOUS AREA
*	279	100	PLANTER SURFACE
	3,291	98	Weighted Average
	3,291		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, MIMIMUM FLOW TIME**

Subcatchment 1S: NORTH SIDE STREET



Hydrograph for Subcatchment 1S: NORTH SIDE STREET

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
0.50	0.02	0.00	0.00
1.00	0.05	0.00	0.00
1.50	0.08	0.01	0.00
2.00	0.12	0.02	0.00
2.50	0.16	0.04	0.00
3.00	0.20	0.07	0.00
3.50	0.24	0.09	0.00
4.00	0.28	0.13	0.01
4.50	0.32	0.16	0.01
5.00	0.37	0.21	0.01
5.50	0.43	0.26	0.01
6.00	0.49	0.31	0.01
6.50	0.57	0.38	0.01
7.00	0.64	0.45	0.01
7.50	0.74	0.55	**0.02**
8.00	1.02	0.81	**0.04**
8.50	1.15	0.94	0.02
9.00	1.25	1.03	0.01
9.50	1.32	1.10	0.01
10.00	1.38	1.17	0.01
10.50	1.44	1.22	0.01
11.00	1.50	1.28	0.01
11.50	1.55	1.33	0.01
12.00	1.59	1.37	0.01
12.50	1.64	1.42	0.01
13.00	1.68	1.46	0.01
13.50	1.73	1.50	0.01
14.00	1.77	1.54	0.01
14.50	1.81	1.58	0.01
15.00	1.85	1.62	0.01
15.50	1.88	1.66	0.01
16.00	1.92	1.70	0.01
16.50	1.96	1.73	0.01
17.00	1.99	1.77	0.01
17.50	2.03	1.80	0.01
18.00	2.06	1.84	0.01
18.50	2.10	1.87	0.00
19.00	2.13	1.90	0.00
19.50	2.16	1.93	0.00
20.00	2.19	1.96	0.00
20.50	2.22	1.99	0.00
21.00	2.25	2.02	0.00
21.50	2.28	2.05	0.00
22.00	2.30	2.07	0.00
22.50	2.33	2.10	0.00
23.00	2.35	2.12	0.00
23.50	2.38	2.15	0.00
24.00	**2.40**	**2.17**	0.00
24.50	2.40	2.17	0.00
25.00	2.40	2.17	0.00
25.50	2.40	2.17	0.00
26.00	2.40	2.17	0.00
26.50	2.40	2.17	0.00
27.00	2.40	2.17	0.00
27.50	2.40	2.17	0.00
28.00	2.40	2.17	0.00

Summary for Subcatchment 3S: SOUTH SIDE STREET

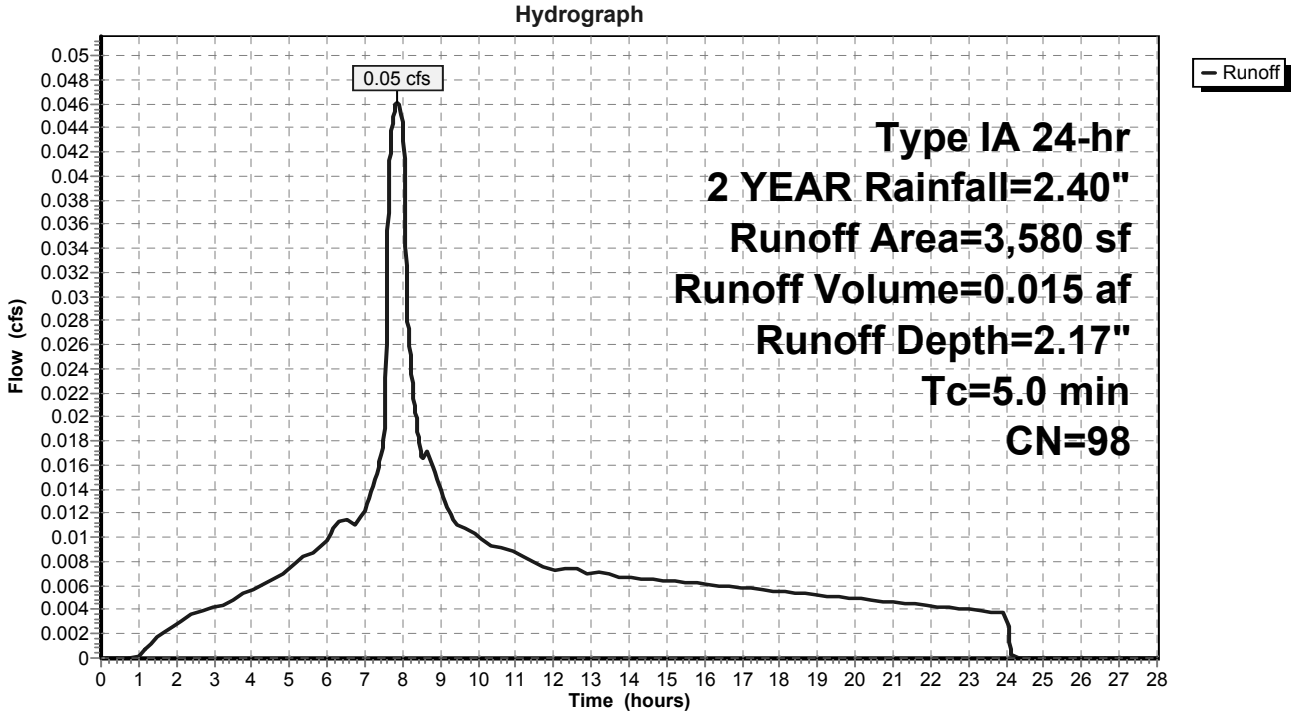
Runoff = 0.05 cfs @ 7.86 hrs, Volume= 0.015 af, Depth= 2.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Type IA 24-hr 2 YEAR Rainfall=2.40"

	Area (sf)	CN	Description
*	3,377	98	IMPERVIOUS AREA
*	203	100	PLANTER SURFACE
	3,580	98	Weighted Average
	3,580		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, MIMIMUM FLOW TIME**

Subcatchment 3S: SOUTH SIDE STREET



Hydrograph for Subcatchment 3S: SOUTH SIDE STREET

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
0.50	0.02	0.00	0.00
1.00	0.05	0.00	0.00
1.50	0.08	0.01	0.00
2.00	0.12	0.02	0.00
2.50	0.16	0.04	0.00
3.00	0.20	0.07	0.00
3.50	0.24	0.09	0.00
4.00	0.28	0.13	0.01
4.50	0.32	0.16	0.01
5.00	0.37	0.21	0.01
5.50	0.43	0.26	0.01
6.00	0.49	0.31	0.01
6.50	0.57	0.38	0.01
7.00	0.64	0.45	0.01
7.50	0.74	0.55	**0.02**
8.00	1.02	0.81	**0.04**
8.50	1.15	0.94	0.02
9.00	1.25	1.03	0.01
9.50	1.32	1.10	0.01
10.00	1.38	1.17	0.01
10.50	1.44	1.22	0.01
11.00	1.50	1.28	0.01
11.50	1.55	1.33	0.01
12.00	1.59	1.37	0.01
12.50	1.64	1.42	0.01
13.00	1.68	1.46	0.01
13.50	1.73	1.50	0.01
14.00	1.77	1.54	0.01
14.50	1.81	1.58	0.01
15.00	1.85	1.62	0.01
15.50	1.88	1.66	0.01
16.00	1.92	1.70	0.01
16.50	1.96	1.73	0.01
17.00	1.99	1.77	0.01
17.50	2.03	1.80	0.01
18.00	2.06	1.84	0.01
18.50	2.10	1.87	0.01
19.00	2.13	1.90	0.01
19.50	2.16	1.93	0.01
20.00	2.19	1.96	0.00
20.50	2.22	1.99	0.00
21.00	2.25	2.02	0.00
21.50	2.28	2.05	0.00
22.00	2.30	2.07	0.00
22.50	2.33	2.10	0.00
23.00	2.35	2.12	0.00
23.50	2.38	2.15	0.00
24.00	**2.40**	**2.17**	0.00
24.50	2.40	2.17	0.00
25.00	2.40	2.17	0.00
25.50	2.40	2.17	0.00
26.00	2.40	2.17	0.00
26.50	2.40	2.17	0.00
27.00	2.40	2.17	0.00
27.50	2.40	2.17	0.00
28.00	2.40	2.17	0.00

Summary for Subcatchment 5S: LOT 4 ROOF

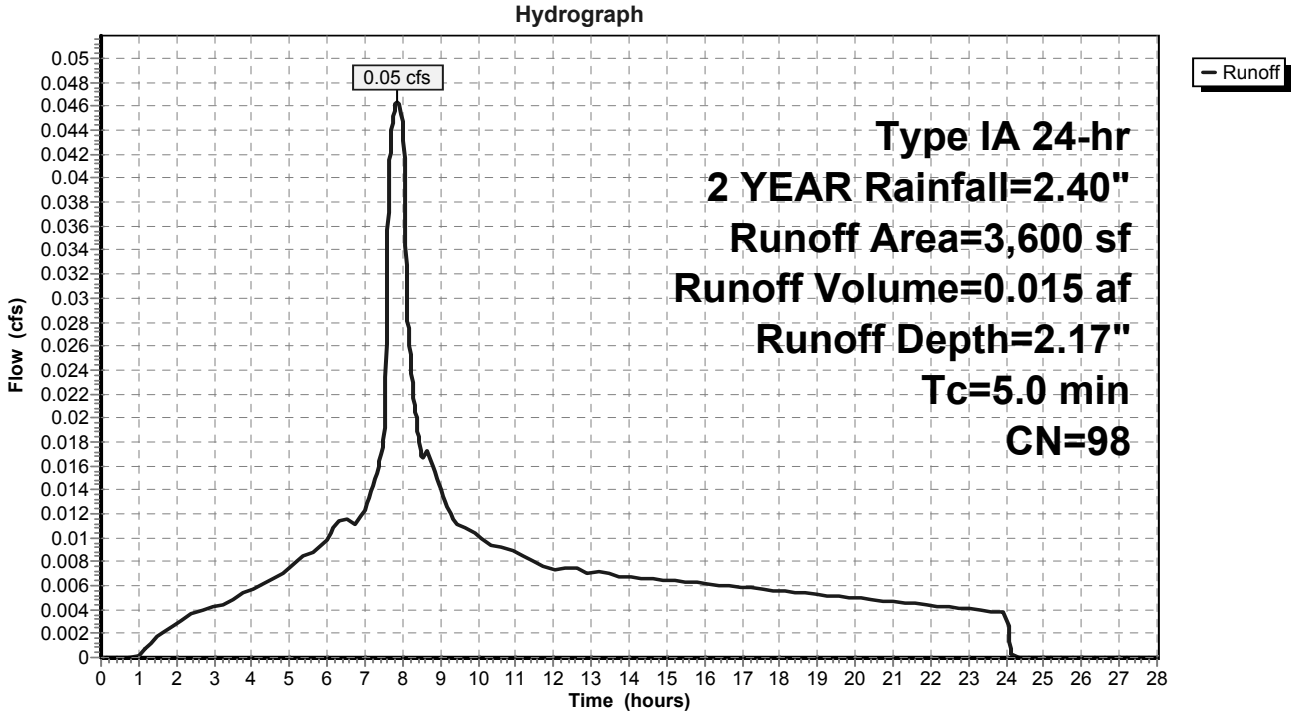
Runoff = 0.05 cfs @ 7.86 hrs, Volume= 0.015 af, Depth= 2.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Type IA 24-hr 2 YEAR Rainfall=2.40"

Area (sf)	CN	Description
3,600	98	Unconnected roofs, HSG B
3,600		100.00% Impervious Area
3,600		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, MINIMUM TC**

Subcatchment 5S: LOT 4 ROOF



Hydrograph for Subcatchment 5S: LOT 4 ROOF

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
0.50	0.02	0.00	0.00
1.00	0.05	0.00	0.00
1.50	0.08	0.01	0.00
2.00	0.12	0.02	0.00
2.50	0.16	0.04	0.00
3.00	0.20	0.07	0.00
3.50	0.24	0.09	0.00
4.00	0.28	0.13	0.01
4.50	0.32	0.16	0.01
5.00	0.37	0.21	0.01
5.50	0.43	0.26	0.01
6.00	0.49	0.31	0.01
6.50	0.57	0.38	0.01
7.00	0.64	0.45	0.01
7.50	0.74	0.55	**0.02**
8.00	1.02	0.81	**0.04**
8.50	1.15	0.94	0.02
9.00	1.25	1.03	0.01
9.50	1.32	1.10	0.01
10.00	1.38	1.17	0.01
10.50	1.44	1.22	0.01
11.00	1.50	1.28	0.01
11.50	1.55	1.33	0.01
12.00	1.59	1.37	0.01
12.50	1.64	1.42	0.01
13.00	1.68	1.46	0.01
13.50	1.73	1.50	0.01
14.00	1.77	1.54	0.01
14.50	1.81	1.58	0.01
15.00	1.85	1.62	0.01
15.50	1.88	1.66	0.01
16.00	1.92	1.70	0.01
16.50	1.96	1.73	0.01
17.00	1.99	1.77	0.01
17.50	2.03	1.80	0.01
18.00	2.06	1.84	0.01
18.50	2.10	1.87	0.01
19.00	2.13	1.90	0.01
19.50	2.16	1.93	0.01
20.00	2.19	1.96	0.00
20.50	2.22	1.99	0.00
21.00	2.25	2.02	0.00
21.50	2.28	2.05	0.00
22.00	2.30	2.07	0.00
22.50	2.33	2.10	0.00
23.00	2.35	2.12	0.00
23.50	2.38	2.15	0.00
24.00	**2.40**	**2.17**	0.00
24.50	2.40	2.17	0.00
25.00	2.40	2.17	0.00
25.50	2.40	2.17	0.00
26.00	2.40	2.17	0.00
26.50	2.40	2.17	0.00
27.00	2.40	2.17	0.00
27.50	2.40	2.17	0.00
28.00	2.40	2.17	0.00

Summary for Subcatchment 7S: LOT 4 LANDSCAPING

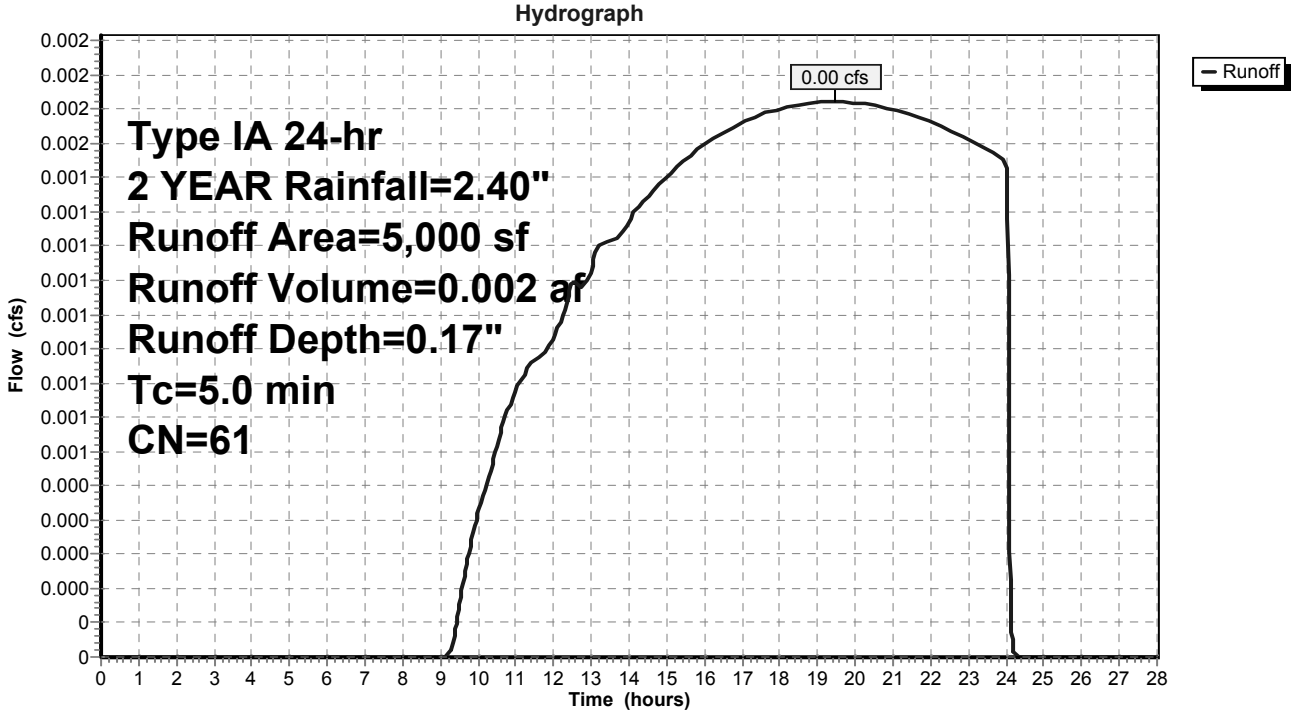
Runoff = 0.00 cfs @ 19.45 hrs, Volume= 0.002 af, Depth= 0.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Type IA 24-hr 2 YEAR Rainfall=2.40"

Area (sf)	CN	Description
5,000	61	>75% Grass cover, Good, HSG B
5,000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, MINIMUM TC**

Subcatchment 7S: LOT 4 LANDSCAPING



Hydrograph for Subcatchment 7S: LOT 4 LANDSCAPING

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
0.50	0.02	0.00	0.00
1.00	0.05	0.00	0.00
1.50	0.08	0.00	0.00
2.00	0.12	0.00	0.00
2.50	0.16	0.00	0.00
3.00	0.20	0.00	0.00
3.50	0.24	0.00	0.00
4.00	0.28	0.00	0.00
4.50	0.32	0.00	0.00
5.00	0.37	0.00	0.00
5.50	0.43	0.00	0.00
6.00	0.49	0.00	0.00
6.50	0.57	0.00	0.00
7.00	0.64	0.00	0.00
7.50	0.74	0.00	0.00
8.00	1.02	0.00	0.00
8.50	1.15	0.00	0.00
9.00	1.25	0.00	0.00
9.50	1.32	0.00	0.00
10.00	1.38	0.00	0.00
10.50	1.44	0.00	0.00
11.00	1.50	0.01	0.00
11.50	1.55	0.01	0.00
12.00	1.59	0.01	0.00
12.50	1.64	0.02	0.00
13.00	1.68	0.02	0.00
13.50	1.73	0.03	0.00
14.00	1.77	0.03	0.00
14.50	1.81	0.04	0.00
15.00	1.85	0.05	0.00
15.50	1.88	0.05	0.00
16.00	1.92	0.06	0.00
16.50	1.96	0.07	0.00
17.00	1.99	0.07	0.00
17.50	2.03	0.08	0.00
18.00	2.06	0.09	0.00
18.50	2.10	0.09	0.00
19.00	2.13	0.10	**0.00**
19.50	2.16	0.11	**0.00**
20.00	2.19	0.11	0.00
20.50	2.22	0.12	0.00
21.00	2.25	0.13	0.00
21.50	2.28	0.13	0.00
22.00	2.30	0.14	0.00
22.50	2.33	0.15	0.00
23.00	2.35	0.15	0.00
23.50	2.38	0.16	0.00
24.00	**2.40**	**0.17**	0.00
24.50	2.40	0.17	0.00
25.00	2.40	0.17	0.00
25.50	2.40	0.17	0.00
26.00	2.40	0.17	0.00
26.50	2.40	0.17	0.00
27.00	2.40	0.17	0.00
27.50	2.40	0.17	0.00
28.00	2.40	0.17	0.00

Summary for Pond 2P: NORTH SIDE PLANTER

Inflow Area = 0.076 ac,100.00% Impervious, Inflow Depth = 2.17" for 2 YEAR event
Inflow = 0.04 cfs @ 7.86 hrs, Volume= 0.014 af
Outflow = 0.04 cfs @ 7.88 hrs, Volume= 0.014 af, Atten= 0%, Lag= 1.3 min
Discarded = 0.04 cfs @ 7.88 hrs, Volume= 0.014 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Peak Elev= 0.02' @ 7.88 hrs Surf.Area= 229 sf Storage= 2 cf

Plug-Flow detention time= 0.3 min calculated for 0.014 af (100% of inflow)
Center-of-Mass det. time= 0.3 min (673.6 - 673.3)

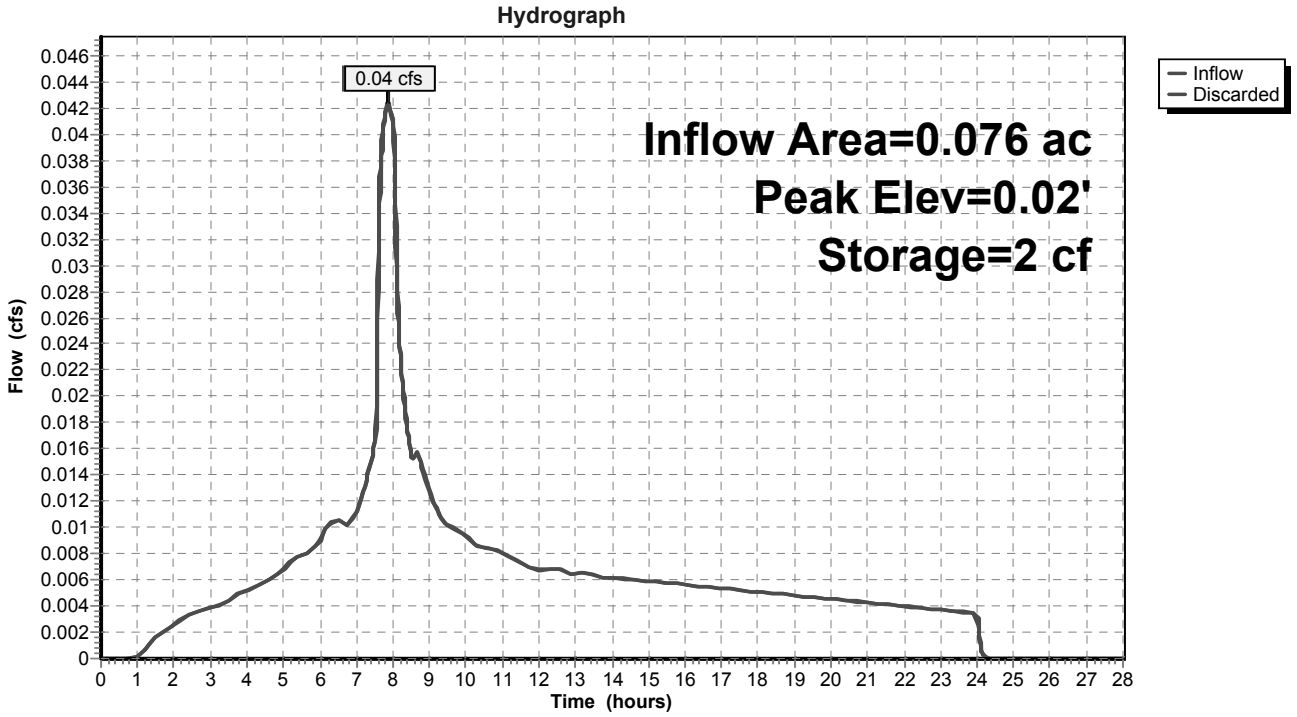
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	151 cf	**PLANTER FREEBOARD (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	1	0	0
0.02	279	3	3
0.55	279	148	151

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**8.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = -20.00'

Discarded OutFlow Max=0.04 cfs @ 7.88 hrs HW=0.02' (Free Discharge)
1=Exfiltration (Controls 0.04 cfs)

Pond 2P: NORTH SIDE PLANTER



Hydrograph for Pond 2P: NORTH SIDE PLANTER

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Discarded (cfs)
0.00	0.00	0	0.00	0.00
1.00	0.00	0	0.00	0.00
2.00	0.00	0	0.00	0.00
3.00	0.00	0	0.00	0.00
4.00	0.01	0	0.00	0.01
5.00	0.01	0	0.00	0.01
6.00	0.01	0	0.00	0.01
7.00	**0.01**	**0**	**0.00**	**0.01**
8.00	**0.04**	**2**	**0.02**	**0.04**
9.00	0.01	0	0.00	0.01
10.00	0.01	0	0.00	0.01
11.00	0.01	0	0.00	0.01
12.00	0.01	0	0.00	0.01
13.00	0.01	0	0.00	0.01
14.00	0.01	0	0.00	0.01
15.00	0.01	0	0.00	0.01
16.00	0.01	0	0.00	0.01
17.00	0.01	0	0.00	0.01
18.00	0.01	0	0.00	0.01
19.00	0.00	0	0.00	0.00
20.00	0.00	0	0.00	0.00
21.00	0.00	0	0.00	0.00
22.00	0.00	0	0.00	0.00
23.00	0.00	0	0.00	0.00
24.00	0.00	0	0.00	0.00
25.00	0.00	0	0.00	0.00
26.00	0.00	0	0.00	0.00
27.00	0.00	0	0.00	0.00
28.00	0.00	0	0.00	0.00

Summary for Pond 4P: SOUTH SIDE PLANTER

Inflow Area = 0.082 ac,100.00% Impervious, Inflow Depth = 2.17" for 2 YEAR event
Inflow = 0.05 cfs @ 7.86 hrs, Volume= 0.015 af
Outflow = 0.04 cfs @ 8.06 hrs, Volume= 0.015 af, Atten= 18%, Lag= 12.0 min
Discarded = 0.04 cfs @ 8.06 hrs, Volume= 0.015 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Peak Elev= 0.07' @ 8.06 hrs Surf.Area= 203 sf Storage= 12 cf

Plug-Flow detention time= 0.7 min calculated for 0.015 af (100% of inflow)
Center-of-Mass det. time= 0.7 min (674.0 - 673.3)

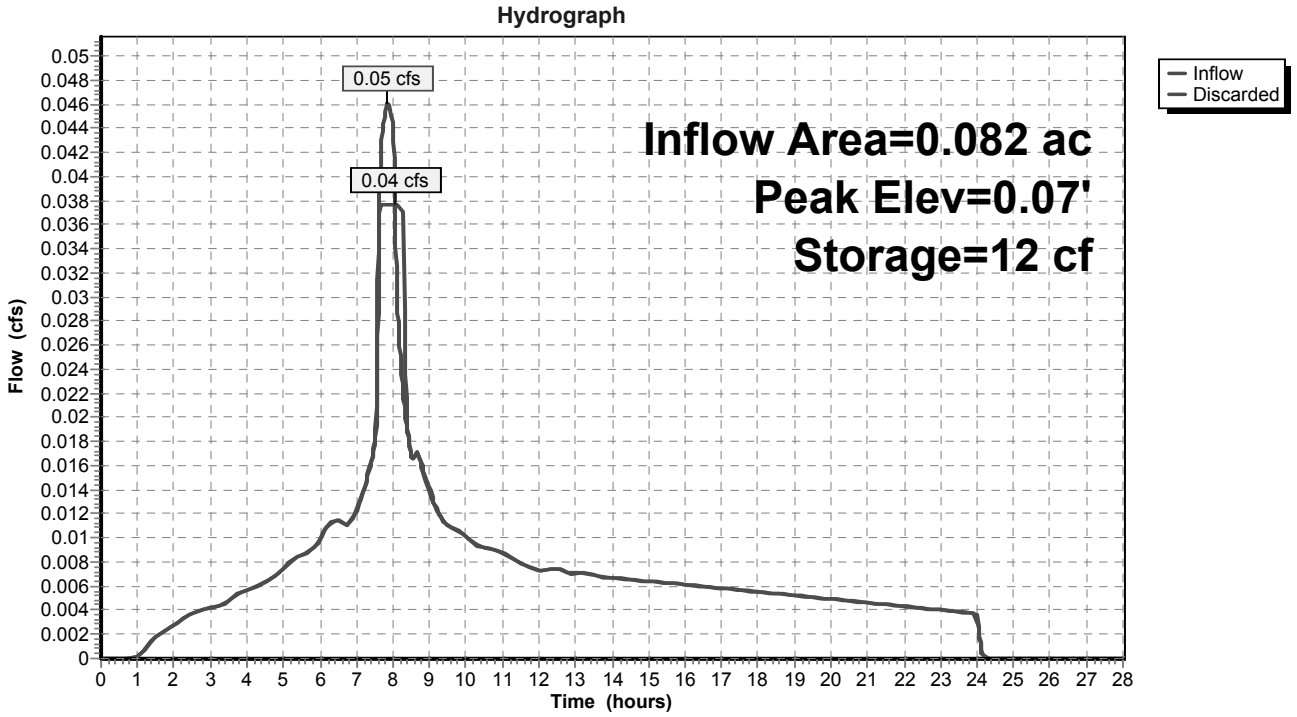
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	134 cf	**PLANTER FREEBOARD (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	1	0	0
0.02	203	2	2
0.67	203	132	134

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**8.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = -20.00'

Discarded OutFlow Max=0.04 cfs @ 8.06 hrs HW=0.07' (Free Discharge)
↑**1=Exfiltration** (Controls 0.04 cfs)

Pond 4P: SOUTH SIDE PLANTER



Hydrograph for Pond 4P: SOUTH SIDE PLANTER

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Discarded (cfs)
0.00	0.00	0	0.00	0.00
1.00	0.00	0	0.00	0.00
2.00	0.00	0	0.00	0.00
3.00	0.00	0	0.00	0.00
4.00	0.01	0	0.00	0.01
5.00	0.01	0	0.00	0.01
6.00	0.01	0	0.01	0.01
7.00	**0.01**	0	0.01	0.01
8.00	**0.04**	**11**	**0.06**	**0.04**
9.00	0.01	**0**	**0.01**	**0.01**
10.00	0.01	0	0.01	0.01
11.00	0.01	0	0.00	0.01
12.00	0.01	0	0.00	0.01
13.00	0.01	0	0.00	0.01
14.00	0.01	0	0.00	0.01
15.00	0.01	0	0.00	0.01
16.00	0.01	0	0.00	0.01
17.00	0.01	0	0.00	0.01
18.00	0.01	0	0.00	0.01
19.00	0.01	0	0.00	0.01
20.00	0.00	0	0.00	0.00
21.00	0.00	0	0.00	0.00
22.00	0.00	0	0.00	0.00
23.00	0.00	0	0.00	0.00
24.00	0.00	0	0.00	0.00
25.00	0.00	0	0.00	0.00
26.00	0.00	0	0.00	0.00
27.00	0.00	0	0.00	0.00
28.00	0.00	0	0.00	0.00

Summary for Pond 6P: RESIDENTIAL DRYWELL

Inflow Area = 0.197 ac, 41.86% Impervious, Inflow Depth = 1.01" for 2 YEAR event
Inflow = 0.05 cfs @ 7.86 hrs, Volume= 0.017 af
Outflow = 0.02 cfs @ 8.46 hrs, Volume= 0.017 af, Atten= 62%, Lag= 36.2 min
Discarded = 0.02 cfs @ 8.46 hrs, Volume= 0.017 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Peak Elev= 1.75' @ 8.46 hrs Surf.Area= 0.002 ac Storage= 0.001 af

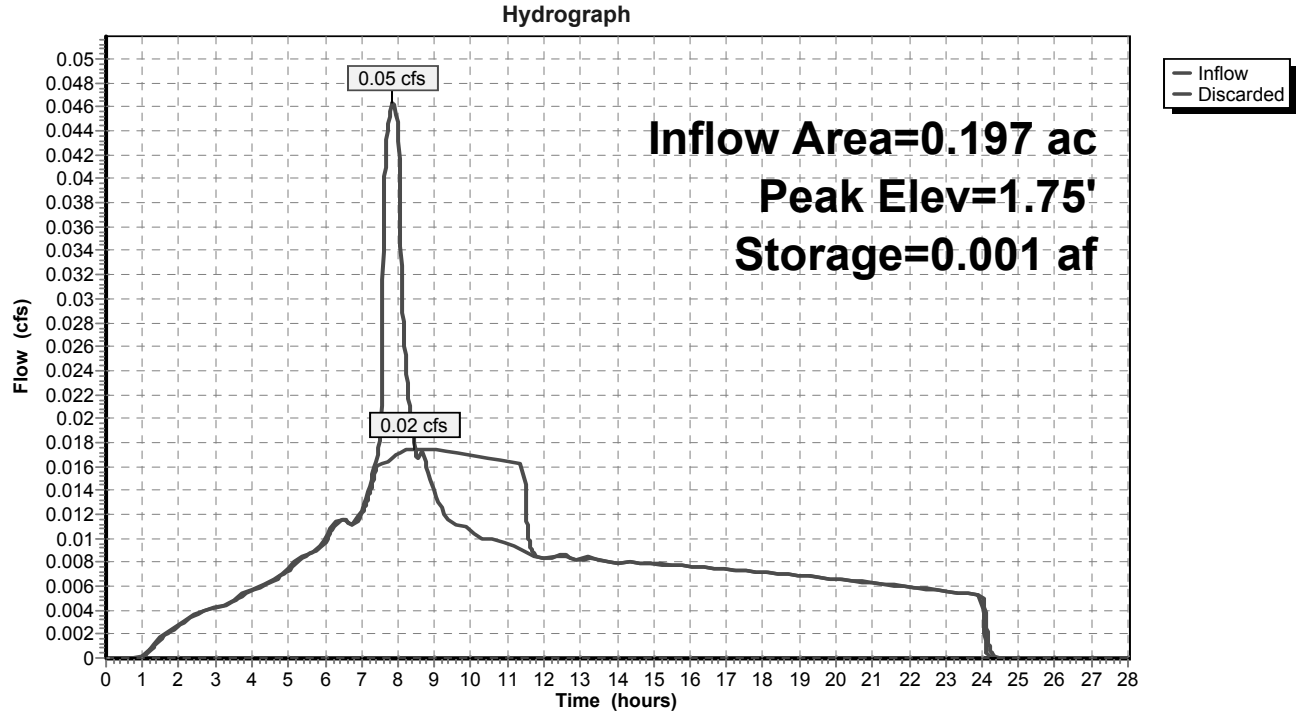
Plug-Flow detention time= 15.3 min calculated for 0.017 af (100% of inflow)
Center-of-Mass det. time= 15.3 min (726.2 - 710.9)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	0.006 af	**10.50'D x 10.50'H ROCK SECTION** 0.021 af Overall - 0.004 af Embedded = 0.017 af x 33.0% Voids
#2	0.00'	0.003 af	**4.00'D x 10.00'H DRYWELL** Inside #1 0.004 af Overall - 4.0" Wall Thickness = 0.003 af
		0.008 af	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**8.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = -20.00'

Discarded OutFlow Max=0.02 cfs @ 8.46 hrs HW=1.75' (Free Discharge)
1=Exfiltration (Controls 0.02 cfs)

Pond 6P: RESIDENTIAL DRYWELL



Hydrograph for Pond 6P: RESIDENTIAL DRYWELL

Time (hours)	Inflow (cfs)	Storage (acre-feet)	Elevation (feet)	Discarded (cfs)
0.00	0.00	0.000	0.00	0.00
1.00	0.00	0.000	0.00	0.00
2.00	0.00	0.000	0.02	0.00
3.00	0.00	0.000	0.03	0.00
4.00	0.01	0.000	0.04	0.01
5.00	0.01	0.000	0.05	0.01
6.00	0.01	0.000	0.06	0.01
7.00	**0.01**	0.000	0.08	0.01
8.00	**0.04**	**0.001**	**1.33**	**0.02**
9.00	0.01	**0.001**	**1.67**	**0.02**
10.00	0.01	0.001	1.11	0.02
11.00	0.01	0.000	0.43	0.02
12.00	0.01	0.000	0.05	0.01
13.00	0.01	0.000	0.05	0.01
14.00	0.01	0.000	0.05	0.01
15.00	0.01	0.000	0.05	0.01
16.00	0.01	0.000	0.05	0.01
17.00	0.01	0.000	0.05	0.01
18.00	0.01	0.000	0.05	0.01
19.00	0.01	0.000	0.04	0.01
20.00	0.01	0.000	0.04	0.01
21.00	0.01	0.000	0.04	0.01
22.00	0.01	0.000	0.04	0.01
23.00	0.01	0.000	0.04	0.01
24.00	0.01	0.000	0.03	0.01
25.00	0.00	0.000	0.00	0.00
26.00	0.00	0.000	0.00	0.00
27.00	0.00	0.000	0.00	0.00
28.00	0.00	0.000	0.00	0.00

Time span=0.00-28.00 hrs, dt=0.01 hrs, 2801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: NORTH SIDE STREET Runoff Area=3,291 sf 100.00% Impervious Runoff Depth=2.77"
Tc=5.0 min CN=98 Runoff=0.05 cfs 0.017 af

Subcatchment 3S: SOUTH SIDE STREET Runoff Area=3,580 sf 100.00% Impervious Runoff Depth=2.77"
Tc=5.0 min CN=98 Runoff=0.06 cfs 0.019 af

Subcatchment 5S: LOT 4 ROOF Runoff Area=3,600 sf 100.00% Impervious Runoff Depth=2.77"
Tc=5.0 min CN=98 Runoff=0.06 cfs 0.019 af

Subcatchment 7S: LOT 4 LANDSCAPING Runoff Area=5,000 sf 0.00% Impervious Runoff Depth=0.37"
Tc=5.0 min CN=61 Runoff=0.00 cfs 0.003 af

Pond 2P: NORTH SIDE PLANTER Peak Elev=0.02' Storage=4 cf Inflow=0.05 cfs 0.017 af
Outflow=0.05 cfs 0.017 af

Pond 4P: SOUTH SIDE PLANTER Peak Elev=0.17' Storage=32 cf Inflow=0.06 cfs 0.019 af
Outflow=0.04 cfs 0.019 af

Pond 6P: RESIDENTIAL DRYWELL Peak Elev=2.94' Storage=0.002 af Inflow=0.06 cfs 0.023 af
Outflow=0.02 cfs 0.023 af

Total Runoff Area = 0.355 ac Runoff Volume = 0.059 af Average Runoff Depth = 1.99"
32.32% Pervious = 0.115 ac 67.68% Impervious = 0.240 ac

Summary for Subcatchment 1S: NORTH SIDE STREET

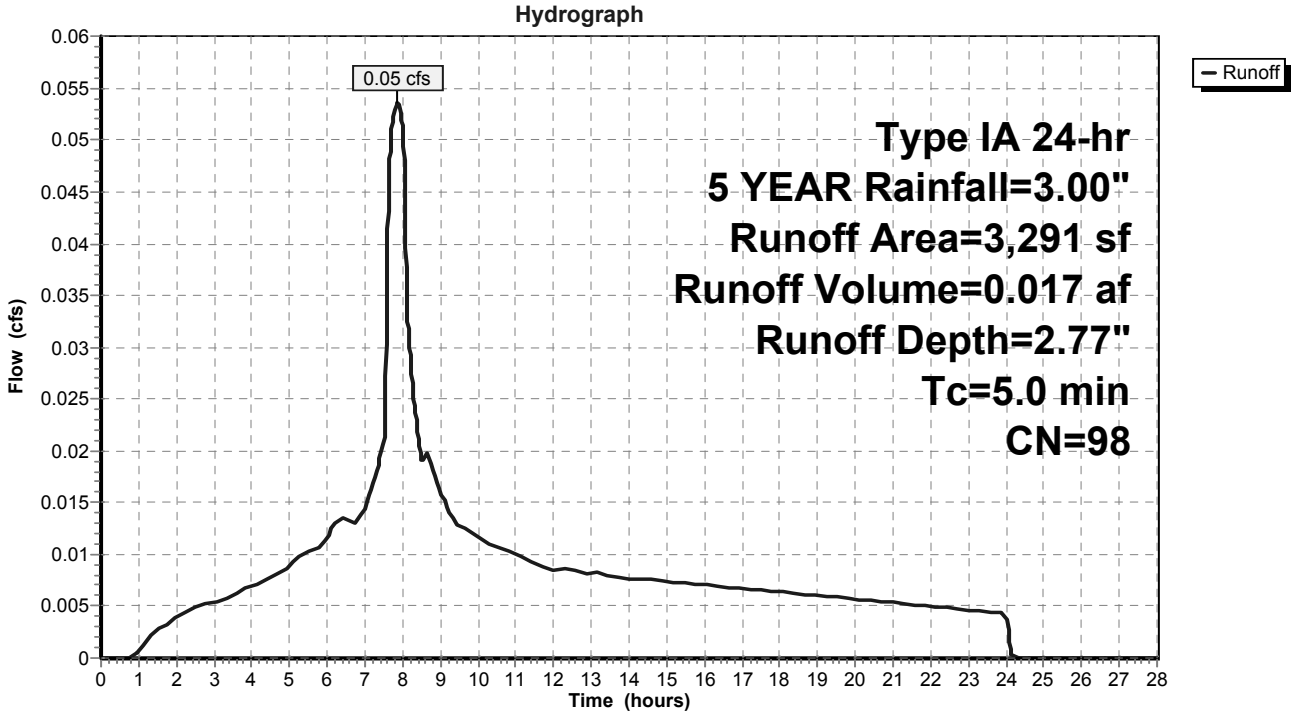
Runoff = 0.05 cfs @ 7.86 hrs, Volume= 0.017 af, Depth= 2.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Type IA 24-hr 5 YEAR Rainfall=3.00"

	Area (sf)	CN	Description
*	3,012	98	IMPERVIOUS AREA
*	279	100	PLANTER SURFACE
	3,291	98	Weighted Average
	3,291		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, MIMIMUM FLOW TIME**

Subcatchment 1S: NORTH SIDE STREET



Hydrograph for Subcatchment 1S: NORTH SIDE STREET

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
0.50	0.03	0.00	0.00
1.00	0.06	0.00	0.00
1.50	0.10	0.02	0.00
2.00	0.15	0.04	0.00
2.50	0.20	0.07	0.00
3.00	0.25	0.10	0.01
3.50	0.29	0.14	0.01
4.00	0.35	0.18	0.01
4.50	0.40	0.23	0.01
5.00	0.47	0.29	0.01
5.50	0.54	0.35	0.01
6.00	0.62	0.43	0.01
6.50	0.71	0.51	0.01
7.00	0.80	0.60	0.01
7.50	0.93	0.72	**0.02**
8.00	1.28	1.06	**0.05**
8.50	1.44	1.22	0.02
9.00	1.56	1.34	0.02
9.50	1.65	1.43	0.01
10.00	1.73	1.51	0.01
10.50	1.80	1.58	0.01
11.00	1.87	1.65	0.01
11.50	1.94	1.71	0.01
12.00	1.99	1.77	0.01
12.50	2.05	1.82	0.01
13.00	2.10	1.88	0.01
13.50	2.16	1.93	0.01
14.00	2.21	1.98	0.01
14.50	2.26	2.03	0.01
15.00	2.31	2.08	0.01
15.50	2.36	2.13	0.01
16.00	2.40	2.17	0.01
16.50	2.45	2.22	0.01
17.00	2.49	2.26	0.01
17.50	2.54	2.31	0.01
18.00	2.58	2.35	0.01
18.50	2.62	2.39	0.01
19.00	2.66	2.43	0.01
19.50	2.70	2.47	0.01
20.00	2.74	2.51	0.01
20.50	2.77	2.54	0.01
21.00	2.81	2.58	0.01
21.50	2.84	2.61	0.01
22.00	2.88	2.65	0.00
22.50	2.91	2.68	0.00
23.00	2.94	2.71	0.00
23.50	2.97	2.74	0.00
24.00	**3.00**	**2.77**	0.00
24.50	3.00	2.77	0.00
25.00	3.00	2.77	0.00
25.50	3.00	2.77	0.00
26.00	3.00	2.77	0.00
26.50	3.00	2.77	0.00
27.00	3.00	2.77	0.00
27.50	3.00	2.77	0.00
28.00	3.00	2.77	0.00

Summary for Subcatchment 3S: SOUTH SIDE STREET

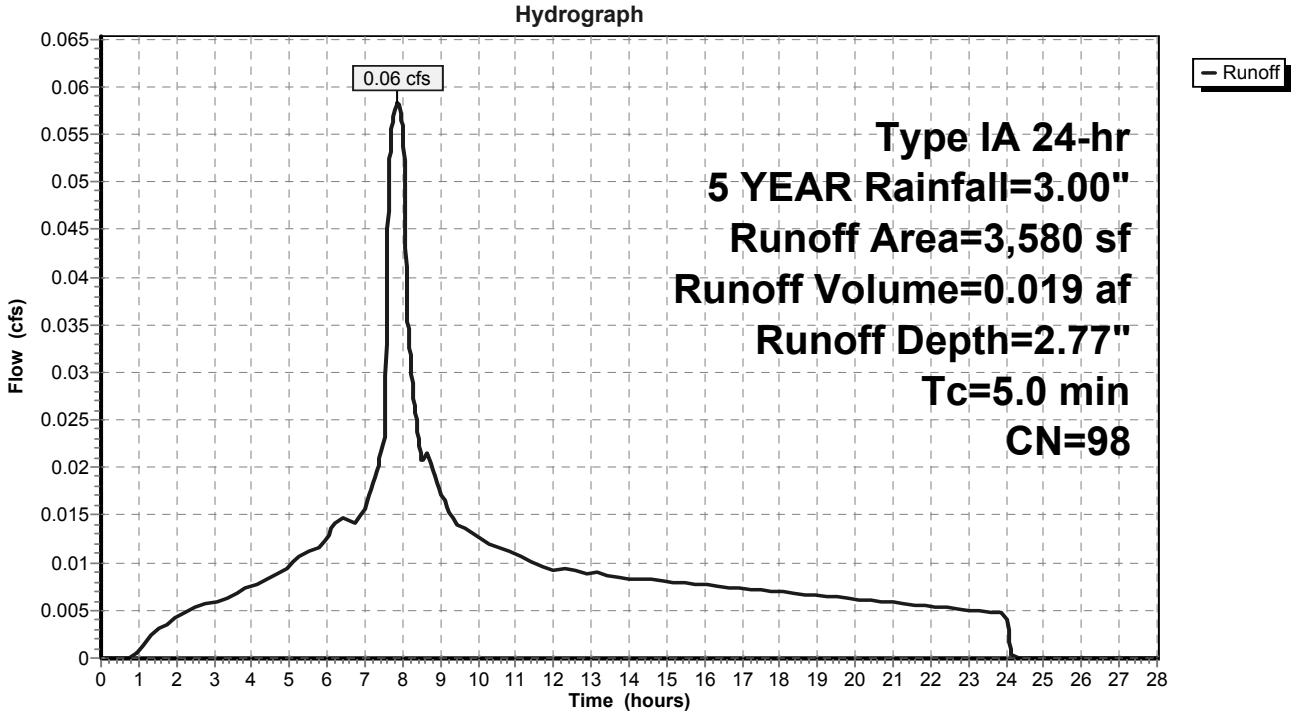
Runoff = 0.06 cfs @ 7.86 hrs, Volume= 0.019 af, Depth= 2.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Type IA 24-hr 5 YEAR Rainfall=3.00"

	Area (sf)	CN	Description
*	3,377	98	IMPERVIOUS AREA
*	203	100	PLANTER SURFACE
	3,580	98	Weighted Average
	3,580		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, MIMIMUM FLOW TIME**

Subcatchment 3S: SOUTH SIDE STREET



Hydrograph for Subcatchment 3S: SOUTH SIDE STREET

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
0.50	0.03	0.00	0.00
1.00	0.06	0.00	0.00
1.50	0.10	0.02	0.00
2.00	0.15	0.04	0.00
2.50	0.20	0.07	0.01
3.00	0.25	0.10	0.01
3.50	0.29	0.14	0.01
4.00	0.35	0.18	0.01
4.50	0.40	0.23	0.01
5.00	0.47	0.29	0.01
5.50	0.54	0.35	0.01
6.00	0.62	0.43	0.01
6.50	0.71	0.51	0.01
7.00	0.80	0.60	0.02
7.50	0.93	0.72	**0.02**
8.00	1.28	1.06	**0.06**
8.50	1.44	1.22	0.02
9.00	1.56	1.34	0.02
9.50	1.65	1.43	0.01
10.00	1.73	1.51	0.01
10.50	1.80	1.58	0.01
11.00	1.87	1.65	0.01
11.50	1.94	1.71	0.01
12.00	1.99	1.77	0.01
12.50	2.05	1.82	0.01
13.00	2.10	1.88	0.01
13.50	2.16	1.93	0.01
14.00	2.21	1.98	0.01
14.50	2.26	2.03	0.01
15.00	2.31	2.08	0.01
15.50	2.36	2.13	0.01
16.00	2.40	2.17	0.01
16.50	2.45	2.22	0.01
17.00	2.49	2.26	0.01
17.50	2.54	2.31	0.01
18.00	2.58	2.35	0.01
18.50	2.62	2.39	0.01
19.00	2.66	2.43	0.01
19.50	2.70	2.47	0.01
20.00	2.74	2.51	0.01
20.50	2.77	2.54	0.01
21.00	2.81	2.58	0.01
21.50	2.84	2.61	0.01
22.00	2.88	2.65	0.01
22.50	2.91	2.68	0.01
23.00	2.94	2.71	0.01
23.50	2.97	2.74	0.00
24.00	**3.00**	**2.77**	0.00
24.50	3.00	2.77	0.00
25.00	3.00	2.77	0.00
25.50	3.00	2.77	0.00
26.00	3.00	2.77	0.00
26.50	3.00	2.77	0.00
27.00	3.00	2.77	0.00
27.50	3.00	2.77	0.00
28.00	3.00	2.77	0.00

Summary for Subcatchment 5S: LOT 4 ROOF

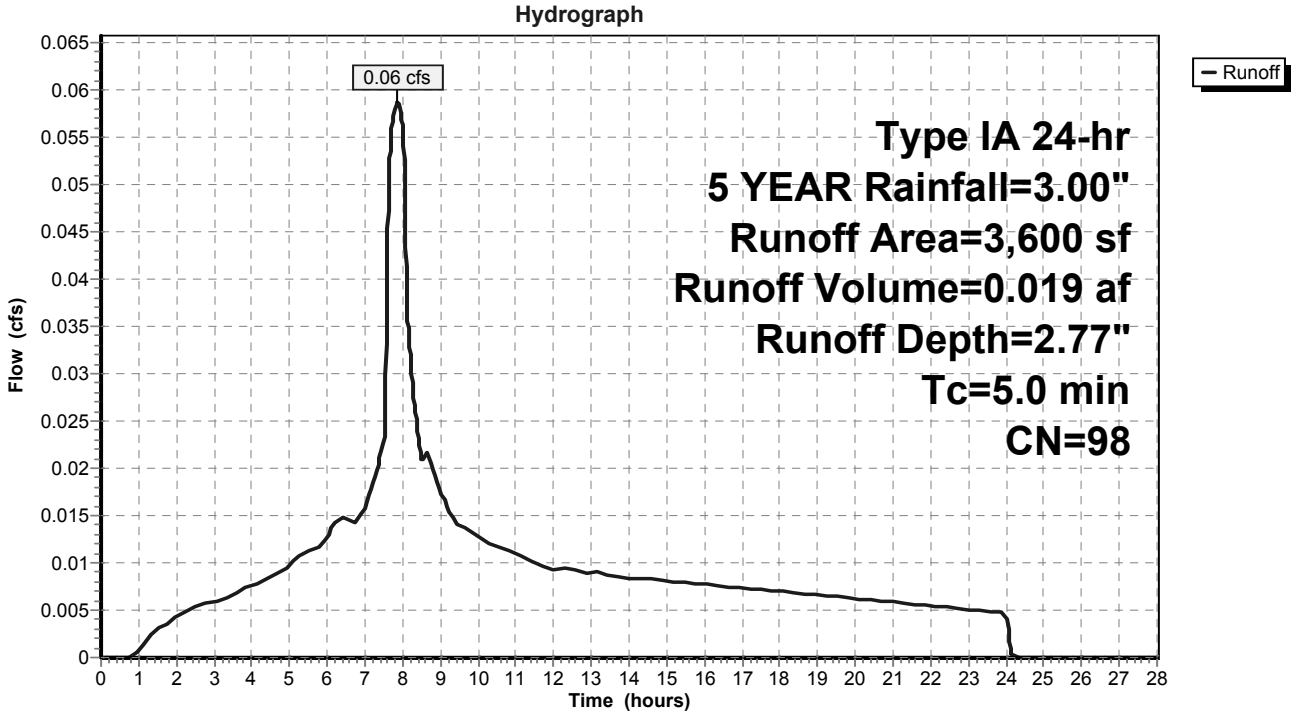
Runoff = 0.06 cfs @ 7.86 hrs, Volume= 0.019 af, Depth= 2.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Type IA 24-hr 5 YEAR Rainfall=3.00"

Area (sf)	CN	Description
3,600	98	Unconnected roofs, HSG B
3,600		100.00% Impervious Area
3,600		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, MINIMUM TC**

Subcatchment 5S: LOT 4 ROOF



Hydrograph for Subcatchment 5S: LOT 4 ROOF

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
0.50	0.03	0.00	0.00
1.00	0.06	0.00	0.00
1.50	0.10	0.02	0.00
2.00	0.15	0.04	0.00
2.50	0.20	0.07	0.01
3.00	0.25	0.10	0.01
3.50	0.29	0.14	0.01
4.00	0.35	0.18	0.01
4.50	0.40	0.23	0.01
5.00	0.47	0.29	0.01
5.50	0.54	0.35	0.01
6.00	0.62	0.43	0.01
6.50	0.71	0.51	0.01
7.00	0.80	0.60	0.02
7.50	0.93	0.72	**0.02**
8.00	1.28	1.06	**0.06**
8.50	1.44	1.22	0.02
9.00	1.56	1.34	0.02
9.50	1.65	1.43	0.01
10.00	1.73	1.51	0.01
10.50	1.80	1.58	0.01
11.00	1.87	1.65	0.01
11.50	1.94	1.71	0.01
12.00	1.99	1.77	0.01
12.50	2.05	1.82	0.01
13.00	2.10	1.88	0.01
13.50	2.16	1.93	0.01
14.00	2.21	1.98	0.01
14.50	2.26	2.03	0.01
15.00	2.31	2.08	0.01
15.50	2.36	2.13	0.01
16.00	2.40	2.17	0.01
16.50	2.45	2.22	0.01
17.00	2.49	2.26	0.01
17.50	2.54	2.31	0.01
18.00	2.58	2.35	0.01
18.50	2.62	2.39	0.01
19.00	2.66	2.43	0.01
19.50	2.70	2.47	0.01
20.00	2.74	2.51	0.01
20.50	2.77	2.54	0.01
21.00	2.81	2.58	0.01
21.50	2.84	2.61	0.01
22.00	2.88	2.65	0.01
22.50	2.91	2.68	0.01
23.00	2.94	2.71	0.01
23.50	2.97	2.74	0.00
24.00	**3.00**	**2.77**	0.00
24.50	3.00	2.77	0.00
25.00	3.00	2.77	0.00
25.50	3.00	2.77	0.00
26.00	3.00	2.77	0.00
26.50	3.00	2.77	0.00
27.00	3.00	2.77	0.00
27.50	3.00	2.77	0.00
28.00	3.00	2.77	0.00

Summary for Subcatchment 7S: LOT 4 LANDSCAPING

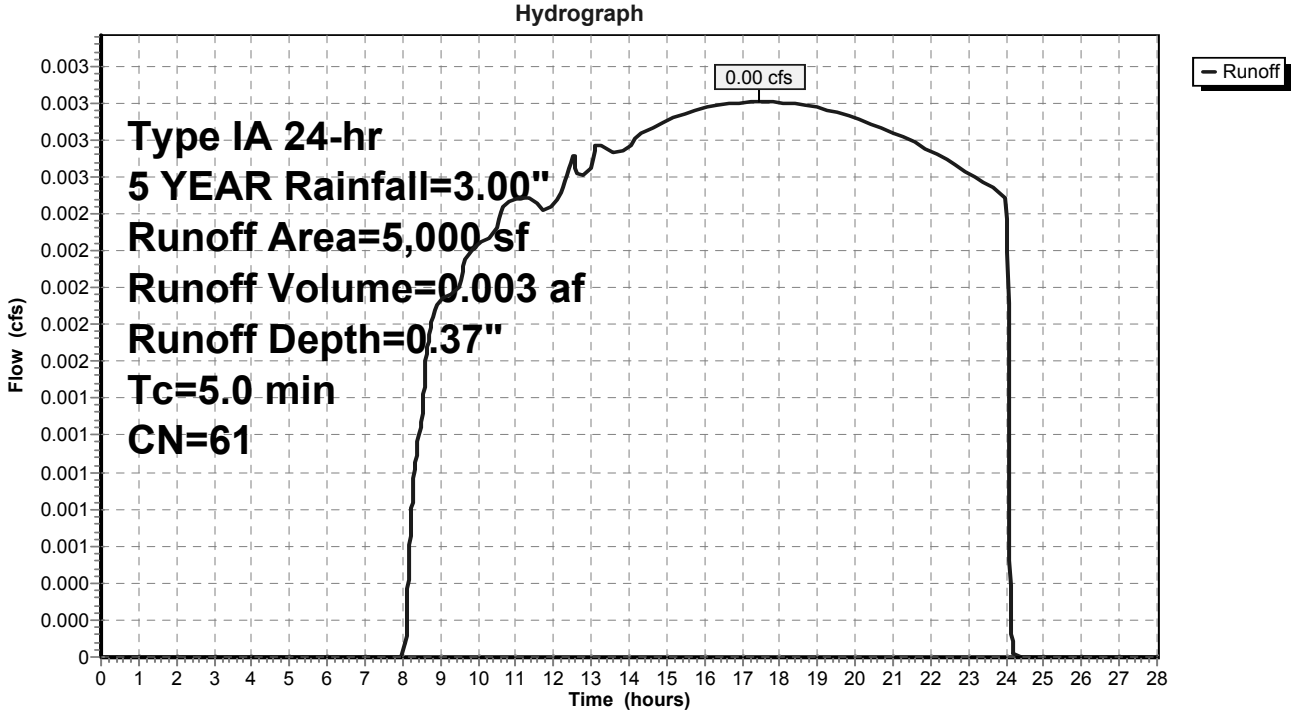
Runoff = 0.00 cfs @ 17.45 hrs, Volume= 0.003 af, Depth= 0.37"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Type IA 24-hr 5 YEAR Rainfall=3.00"

Area (sf)	CN	Description
5,000	61	>75% Grass cover, Good, HSG B
5,000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, MINIMUM TC**

Subcatchment 7S: LOT 4 LANDSCAPING



Hydrograph for Subcatchment 7S: LOT 4 LANDSCAPING

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
0.50	0.03	0.00	0.00
1.00	0.06	0.00	0.00
1.50	0.10	0.00	0.00
2.00	0.15	0.00	0.00
2.50	0.20	0.00	0.00
3.00	0.25	0.00	0.00
3.50	0.29	0.00	0.00
4.00	0.35	0.00	0.00
4.50	0.40	0.00	0.00
5.00	0.47	0.00	0.00
5.50	0.54	0.00	0.00
6.00	0.62	0.00	0.00
6.50	0.71	0.00	0.00
7.00	0.80	0.00	0.00
7.50	0.93	0.00	0.00
8.00	1.28	0.00	0.00
8.50	1.44	0.00	0.00
9.00	1.56	0.01	0.00
9.50	1.65	0.02	0.00
10.00	1.73	0.03	0.00
10.50	1.80	0.04	0.00
11.00	1.87	0.05	0.00
11.50	1.94	0.06	0.00
12.00	1.99	0.07	0.00
12.50	2.05	0.08	0.00
13.00	2.10	0.09	0.00
13.50	2.16	0.11	0.00
14.00	2.21	0.12	0.00
14.50	2.26	0.13	0.00
15.00	2.31	0.14	0.00
15.50	2.36	0.16	0.00
16.00	2.40	0.17	0.00
16.50	2.45	0.18	0.00
17.00	2.49	0.19	**0.00**
17.50	2.54	0.21	**0.00**
18.00	2.58	0.22	0.00
18.50	2.62	0.23	0.00
19.00	2.66	0.25	0.00
19.50	2.70	0.26	0.00
20.00	2.74	0.27	0.00
20.50	2.77	0.28	0.00
21.00	2.81	0.30	0.00
21.50	2.84	0.31	0.00
22.00	2.88	0.32	0.00
22.50	2.91	0.33	0.00
23.00	2.94	0.34	0.00
23.50	2.97	0.35	0.00
24.00	**3.00**	**0.37**	0.00
24.50	3.00	0.37	0.00
25.00	3.00	0.37	0.00
25.50	3.00	0.37	0.00
26.00	3.00	0.37	0.00
26.50	3.00	0.37	0.00
27.00	3.00	0.37	0.00
27.50	3.00	0.37	0.00
28.00	3.00	0.37	0.00

Summary for Pond 2P: NORTH SIDE PLANTER

Inflow Area = 0.076 ac,100.00% Impervious, Inflow Depth = 2.77" for 5 YEAR event
Inflow = 0.05 cfs @ 7.86 hrs, Volume= 0.017 af
Outflow = 0.05 cfs @ 7.98 hrs, Volume= 0.017 af, Atten= 4%, Lag= 7.6 min
Discarded = 0.05 cfs @ 7.98 hrs, Volume= 0.017 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Peak Elev= 0.02' @ 7.98 hrs Surf.Area= 279 sf Storage= 4 cf

Plug-Flow detention time= 0.4 min calculated for 0.017 af (100% of inflow)
Center-of-Mass det. time= 0.4 min (666.7 - 666.4)

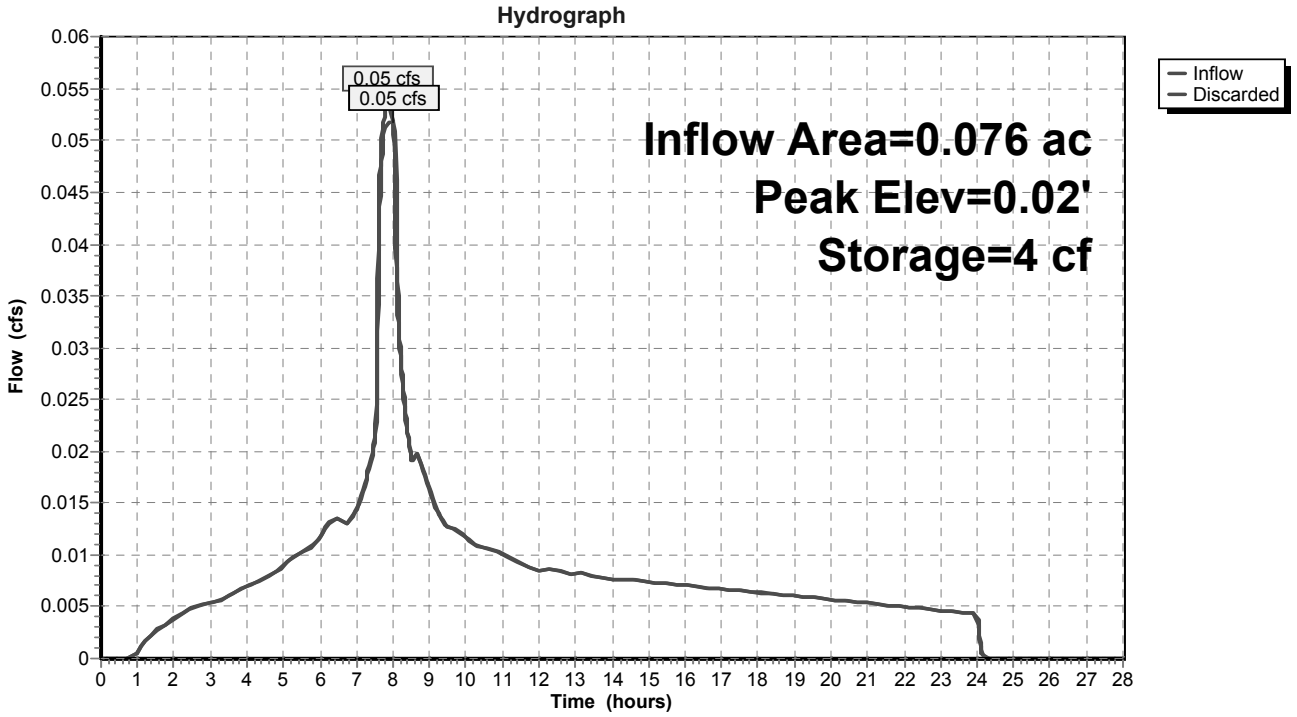
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	151 cf	**PLANTER FREEBOARD (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	1	0	0
0.02	279	3	3
0.55	279	148	151

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**8.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = -20.00'

Discarded OutFlow Max=0.05 cfs @ 7.98 hrs HW=0.02' (Free Discharge)
1=Exfiltration (Controls 0.05 cfs)

Pond 2P: NORTH SIDE PLANTER



Hydrograph for Pond 2P: NORTH SIDE PLANTER

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Discarded (cfs)
0.00	0.00	0	0.00	0.00
1.00	0.00	0	0.00	0.00
2.00	0.00	0	0.00	0.00
3.00	0.01	0	0.00	0.01
4.00	0.01	0	0.00	0.01
5.00	0.01	0	0.00	0.01
6.00	0.01	0	0.00	0.01
7.00	**0.01**	**0**	**0.01**	**0.01**
8.00	**0.05**	**4**	**0.02**	**0.05**
9.00	0.02	0	0.01	0.02
10.00	0.01	0	0.00	0.01
11.00	0.01	0	0.00	0.01
12.00	0.01	0	0.00	0.01
13.00	0.01	0	0.00	0.01
14.00	0.01	0	0.00	0.01
15.00	0.01	0	0.00	0.01
16.00	0.01	0	0.00	0.01
17.00	0.01	0	0.00	0.01
18.00	0.01	0	0.00	0.01
19.00	0.01	0	0.00	0.01
20.00	0.01	0	0.00	0.01
21.00	0.01	0	0.00	0.01
22.00	0.00	0	0.00	0.00
23.00	0.00	0	0.00	0.00
24.00	0.00	0	0.00	0.00
25.00	0.00	0	0.00	0.00
26.00	0.00	0	0.00	0.00
27.00	0.00	0	0.00	0.00
28.00	0.00	0	0.00	0.00

Summary for Pond 4P: SOUTH SIDE PLANTER

Inflow Area = 0.082 ac,100.00% Impervious, Inflow Depth = 2.77" for 5 YEAR event
Inflow = 0.06 cfs @ 7.86 hrs, Volume= 0.019 af
Outflow = 0.04 cfs @ 8.11 hrs, Volume= 0.019 af, Atten= 35%, Lag= 15.3 min
Discarded = 0.04 cfs @ 8.11 hrs, Volume= 0.019 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Peak Elev= 0.17' @ 8.11 hrs Surf.Area= 203 sf Storage= 32 cf

Plug-Flow detention time= 1.9 min calculated for 0.019 af (100% of inflow)
Center-of-Mass det. time= 1.9 min (668.3 - 666.4)

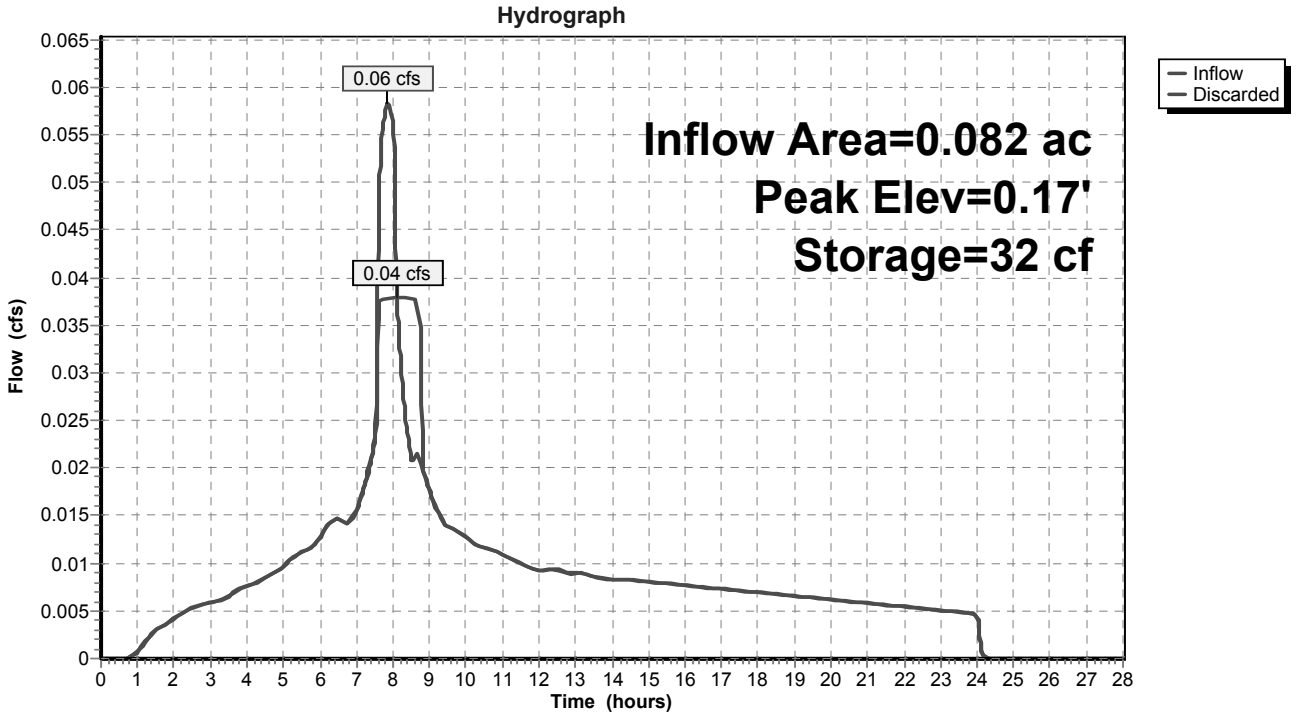
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	134 cf	**PLANTER FREEBOARD (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	1	0	0
0.02	203	2	2
0.67	203	132	134

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**8.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = -20.00'

Discarded OutFlow Max=0.04 cfs @ 8.11 hrs HW=0.17' (Free Discharge)
↑**1=Exfiltration** (Controls 0.04 cfs)

Pond 4P: SOUTH SIDE PLANTER



Hydrograph for Pond 4P: SOUTH SIDE PLANTER

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Discarded (cfs)
0.00	0.00	0	0.00	0.00
1.00	0.00	0	0.00	0.00
2.00	0.00	0	0.00	0.00
3.00	0.01	0	0.00	0.01
4.00	0.01	0	0.00	0.01
5.00	0.01	0	0.01	0.01
6.00	0.01	0	0.01	0.01
7.00	**0.02**	0	0.01	0.02
8.00	**0.06**	**28**	**0.15**	**0.04**
9.00	0.02	**1**	**0.01**	**0.02**
10.00	0.01	0	0.01	0.01
11.00	0.01	0	0.01	0.01
12.00	0.01	0	0.00	0.01
13.00	0.01	0	0.00	0.01
14.00	0.01	0	0.00	0.01
15.00	0.01	0	0.00	0.01
16.00	0.01	0	0.00	0.01
17.00	0.01	0	0.00	0.01
18.00	0.01	0	0.00	0.01
19.00	0.01	0	0.00	0.01
20.00	0.01	0	0.00	0.01
21.00	0.01	0	0.00	0.01
22.00	0.01	0	0.00	0.01
23.00	0.01	0	0.00	0.01
24.00	0.00	0	0.00	0.00
25.00	0.00	0	0.00	0.00
26.00	0.00	0	0.00	0.00
27.00	0.00	0	0.00	0.00
28.00	0.00	0	0.00	0.00

Summary for Pond 6P: RESIDENTIAL DRYWELL

Inflow Area = 0.197 ac, 41.86% Impervious, Inflow Depth = 1.37" for 5 YEAR event
Inflow = 0.06 cfs @ 7.86 hrs, Volume= 0.023 af
Outflow = 0.02 cfs @ 9.11 hrs, Volume= 0.023 af, Atten= 69%, Lag= 74.9 min
Discarded = 0.02 cfs @ 9.11 hrs, Volume= 0.023 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Peak Elev= 2.94' @ 9.11 hrs Surf.Area= 0.002 ac Storage= 0.002 af

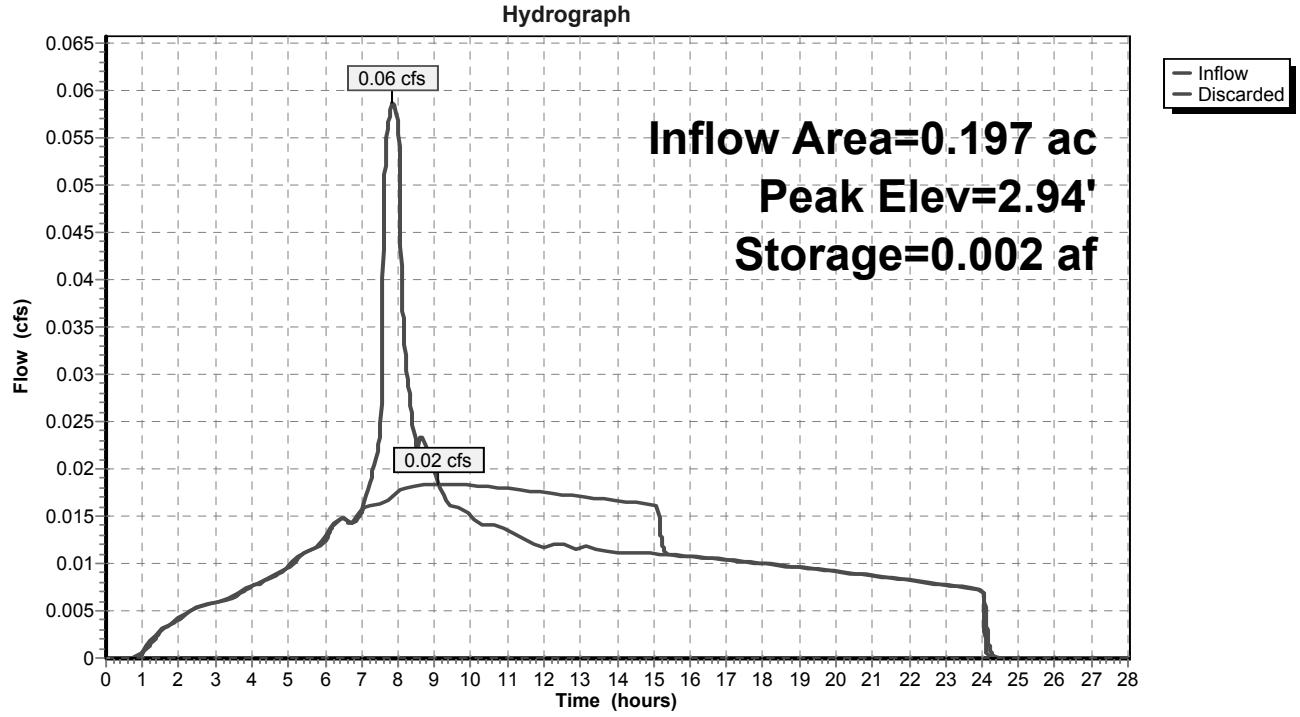
Plug-Flow detention time= 31.7 min calculated for 0.023 af (100% of inflow)
Center-of-Mass det. time= 31.6 min (748.4 - 716.7)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	0.006 af	**10.50'D x 10.50'H ROCK SECTION** 0.021 af Overall - 0.004 af Embedded = 0.017 af x 33.0% Voids
#2	0.00'	0.003 af	**4.00'D x 10.00'H DRYWELL** Inside #1 0.004 af Overall - 4.0" Wall Thickness = 0.003 af
		0.008 af	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**8.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = -20.00'

Discarded OutFlow Max=0.02 cfs @ 9.11 hrs HW=2.94' (Free Discharge)
1=Exfiltration (Controls 0.02 cfs)

Pond 6P: RESIDENTIAL DRYWELL



Hydrograph for Pond 6P: RESIDENTIAL DRYWELL

Time (hours)	Inflow (cfs)	Storage (acre-feet)	Elevation (feet)	Discarded (cfs)
0.00	0.00	0.000	0.00	0.00
1.00	0.00	0.000	0.00	0.00
2.00	0.00	0.000	0.03	0.00
3.00	0.01	0.000	0.04	0.01
4.00	0.01	0.000	0.05	0.01
5.00	0.01	0.000	0.06	0.01
6.00	0.01	0.000	0.08	0.01
7.00	**0.02**	0.000	0.10	0.02
8.00	**0.06**	0.002	1.99	0.02
9.00	0.02	**0.002**	**2.93**	**0.02**
10.00	0.02	**0.002**	**2.74**	**0.02**
11.00	0.01	0.002	2.34	0.02
12.00	0.01	0.001	1.81	0.02
13.00	0.01	0.001	1.26	0.02
14.00	0.01	0.001	0.71	0.02
15.00	0.01	0.000	0.18	0.02
16.00	0.01	0.000	0.07	0.01
17.00	0.01	0.000	0.07	0.01
18.00	0.01	0.000	0.07	0.01
19.00	0.01	0.000	0.06	0.01
20.00	0.01	0.000	0.06	0.01
21.00	0.01	0.000	0.06	0.01
22.00	0.01	0.000	0.05	0.01
23.00	0.01	0.000	0.05	0.01
24.00	0.01	0.000	0.05	0.01
25.00	0.00	0.000	0.00	0.00
26.00	0.00	0.000	0.00	0.00
27.00	0.00	0.000	0.00	0.00
28.00	0.00	0.000	0.00	0.00

Time span=0.00-28.00 hrs, dt=0.01 hrs, 2801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: NORTH SIDE STREET Runoff Area=3,291 sf 100.00% Impervious Runoff Depth=3.27"
Tc=5.0 min CN=98 Runoff=0.06 cfs 0.021 af

Subcatchment 3S: SOUTH SIDE STREET Runoff Area=3,580 sf 100.00% Impervious Runoff Depth=3.27"
Tc=5.0 min CN=98 Runoff=0.07 cfs 0.022 af

Subcatchment 5S: LOT 4 ROOF Runoff Area=3,600 sf 100.00% Impervious Runoff Depth=3.27"
Tc=5.0 min CN=98 Runoff=0.07 cfs 0.022 af

Subcatchment 7S: LOT 4 LANDSCAPING Runoff Area=5,000 sf 0.00% Impervious Runoff Depth=0.57"
Tc=5.0 min CN=61 Runoff=0.00 cfs 0.005 af

Pond 2P: NORTH SIDE PLANTER Peak Elev=0.07' Storage=16 cf Inflow=0.06 cfs 0.021 af
Outflow=0.05 cfs 0.021 af

Pond 4P: SOUTH SIDE PLANTER Peak Elev=0.26' Storage=51 cf Inflow=0.07 cfs 0.022 af
Outflow=0.04 cfs 0.022 af

Pond 6P: RESIDENTIAL DRYWELL Peak Elev=4.47' Storage=0.004 af Inflow=0.07 cfs 0.028 af
Outflow=0.02 cfs 0.028 af

Total Runoff Area = 0.355 ac Runoff Volume = 0.071 af Average Runoff Depth = 2.40"
32.32% Pervious = 0.115 ac 67.68% Impervious = 0.240 ac

Summary for Subcatchment 1S: NORTH SIDE STREET

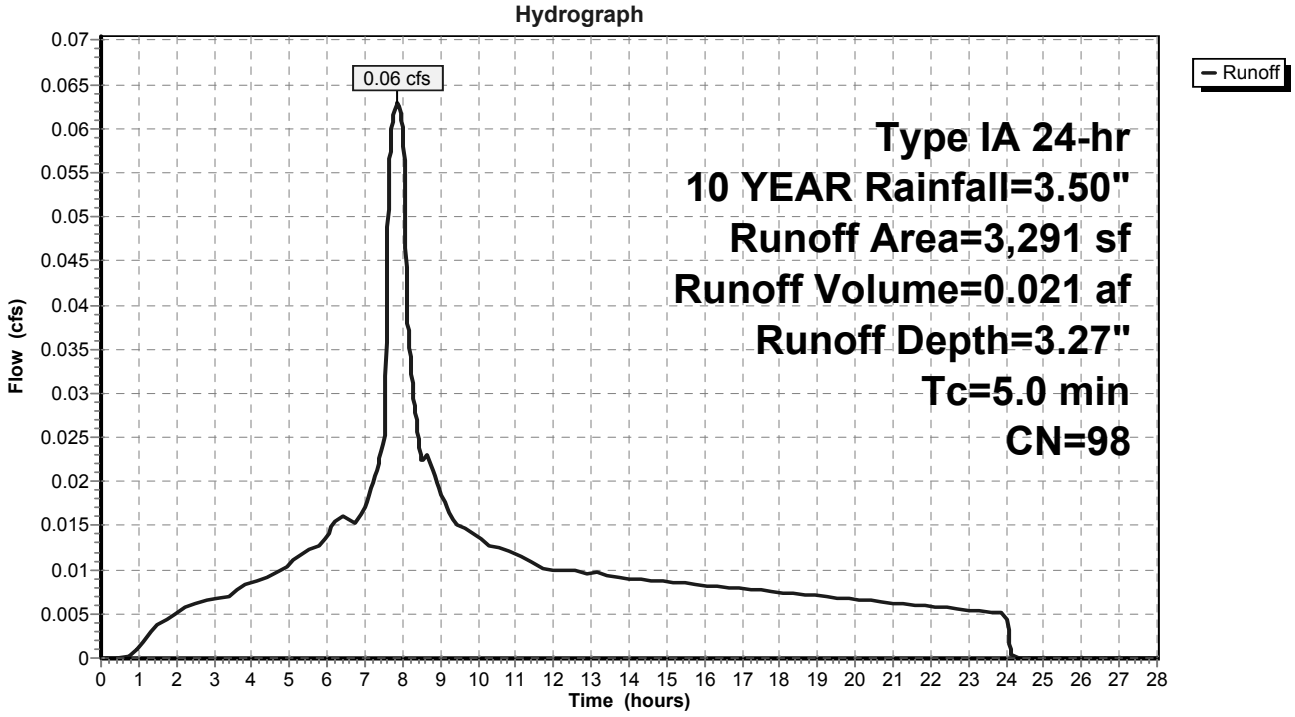
Runoff = 0.06 cfs @ 7.86 hrs, Volume= 0.021 af, Depth= 3.27"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Type IA 24-hr 10 YEAR Rainfall=3.50"

	Area (sf)	CN	Description
*	3,012	98	IMPERVIOUS AREA
*	279	100	PLANTER SURFACE
	3,291	98	Weighted Average
	3,291		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, MIMIMUM FLOW TIME**

Subcatchment 1S: NORTH SIDE STREET



Hydrograph for Subcatchment 1S: NORTH SIDE STREET

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
0.50	0.03	0.00	0.00
1.00	0.07	0.00	0.00
1.50	0.12	0.02	0.00
2.00	0.18	0.05	0.01
2.50	0.23	0.09	0.01
3.00	0.29	0.13	0.01
3.50	0.34	0.18	0.01
4.00	0.41	0.23	0.01
4.50	0.47	0.29	0.01
5.00	0.55	0.36	0.01
5.50	0.63	0.44	0.01
6.00	0.72	0.52	0.01
6.50	0.83	0.63	0.02
7.00	0.94	0.73	0.02
7.50	1.09	0.87	**0.02**
8.00	1.49	1.27	**0.06**
8.50	1.68	1.46	0.02
9.00	1.82	1.60	0.02
9.50	1.92	1.70	0.01
10.00	2.02	1.79	0.01
10.50	2.10	1.88	0.01
11.00	2.18	1.96	0.01
11.50	2.26	2.03	0.01
12.00	2.32	2.10	0.01
12.50	2.39	2.16	0.01
13.00	2.45	2.22	0.01
13.50	2.52	2.29	0.01
14.00	2.58	2.35	0.01
14.50	2.63	2.40	0.01
15.00	2.69	2.46	0.01
15.50	2.75	2.52	0.01
16.00	2.80	2.57	0.01
16.50	2.86	2.63	0.01
17.00	2.91	2.68	0.01
17.50	2.96	2.73	0.01
18.00	3.01	2.78	0.01
18.50	3.06	2.83	0.01
19.00	3.10	2.87	0.01
19.50	3.15	2.92	0.01
20.00	3.19	2.96	0.01
20.50	3.24	3.00	0.01
21.00	3.28	3.05	0.01
21.50	3.32	3.09	0.01
22.00	3.36	3.12	0.01
22.50	3.40	3.16	0.01
23.00	3.43	3.20	0.01
23.50	3.47	3.23	0.01
24.00	**3.50**	**3.27**	0.01
24.50	3.50	3.27	0.00
25.00	3.50	3.27	0.00
25.50	3.50	3.27	0.00
26.00	3.50	3.27	0.00
26.50	3.50	3.27	0.00
27.00	3.50	3.27	0.00
27.50	3.50	3.27	0.00
28.00	3.50	3.27	0.00

Summary for Subcatchment 3S: SOUTH SIDE STREET

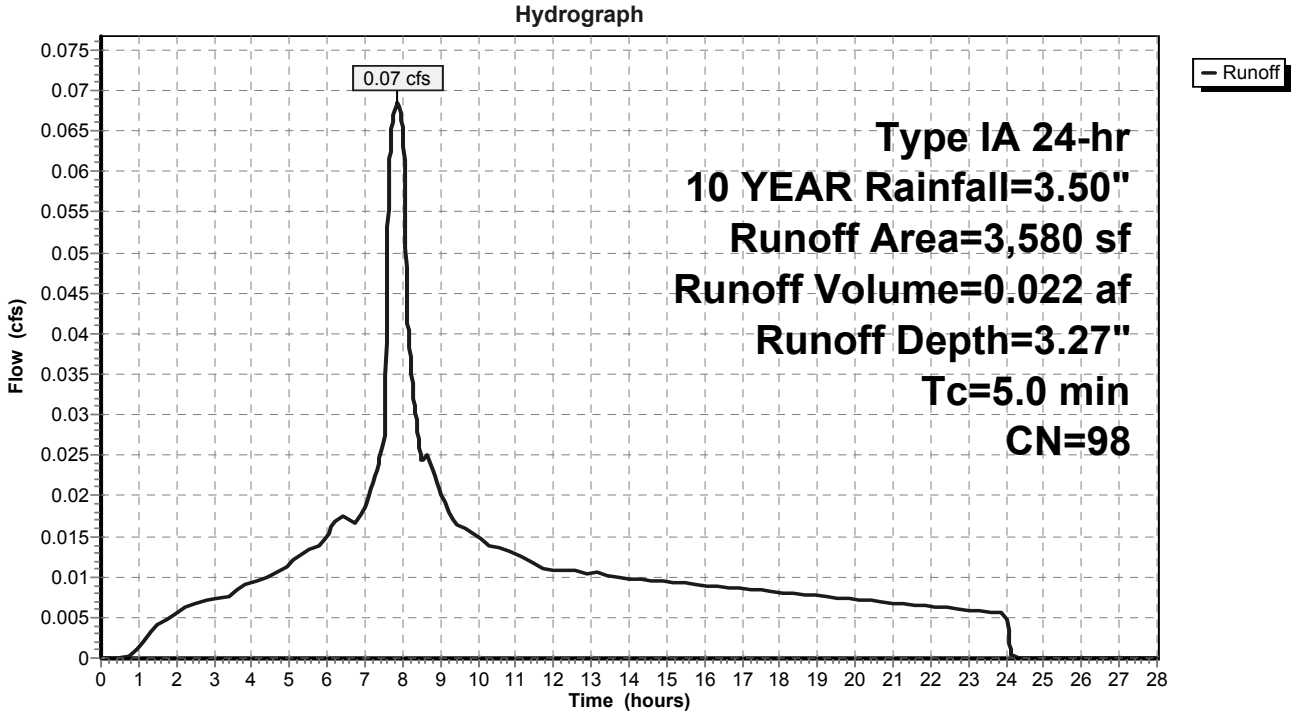
Runoff = 0.07 cfs @ 7.86 hrs, Volume= 0.022 af, Depth= 3.27"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Type IA 24-hr 10 YEAR Rainfall=3.50"

	Area (sf)	CN	Description
*	3,377	98	IMPERVIOUS AREA
*	203	100	PLANTER SURFACE
	3,580	98	Weighted Average
	3,580		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, MIMIMUM FLOW TIME**

Subcatchment 3S: SOUTH SIDE STREET



Hydrograph for Subcatchment 3S: SOUTH SIDE STREET

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
0.50	0.03	0.00	0.00
1.00	0.07	0.00	0.00
1.50	0.12	0.02	0.00
2.00	0.18	0.05	0.01
2.50	0.23	0.09	0.01
3.00	0.29	0.13	0.01
3.50	0.34	0.18	0.01
4.00	0.41	0.23	0.01
4.50	0.47	0.29	0.01
5.00	0.55	0.36	0.01
5.50	0.63	0.44	0.01
6.00	0.72	0.52	0.01
6.50	0.83	0.63	0.02
7.00	0.94	0.73	0.02
7.50	1.09	0.87	**0.03**
8.00	1.49	1.27	**0.07**
8.50	1.68	1.46	0.02
9.00	1.82	1.60	0.02
9.50	1.92	1.70	0.02
10.00	2.02	1.79	0.01
10.50	2.10	1.88	0.01
11.00	2.18	1.96	0.01
11.50	2.26	2.03	0.01
12.00	2.32	2.10	0.01
12.50	2.39	2.16	0.01
13.00	2.45	2.22	0.01
13.50	2.52	2.29	0.01
14.00	2.58	2.35	0.01
14.50	2.63	2.40	0.01
15.00	2.69	2.46	0.01
15.50	2.75	2.52	0.01
16.00	2.80	2.57	0.01
16.50	2.86	2.63	0.01
17.00	2.91	2.68	0.01
17.50	2.96	2.73	0.01
18.00	3.01	2.78	0.01
18.50	3.06	2.83	0.01
19.00	3.10	2.87	0.01
19.50	3.15	2.92	0.01
20.00	3.19	2.96	0.01
20.50	3.24	3.00	0.01
21.00	3.28	3.05	0.01
21.50	3.32	3.09	0.01
22.00	3.36	3.12	0.01
22.50	3.40	3.16	0.01
23.00	3.43	3.20	0.01
23.50	3.47	3.23	0.01
24.00	**3.50**	**3.27**	0.01
24.50	3.50	3.27	0.00
25.00	3.50	3.27	0.00
25.50	3.50	3.27	0.00
26.00	3.50	3.27	0.00
26.50	3.50	3.27	0.00
27.00	3.50	3.27	0.00
27.50	3.50	3.27	0.00
28.00	3.50	3.27	0.00

Summary for Subcatchment 5S: LOT 4 ROOF

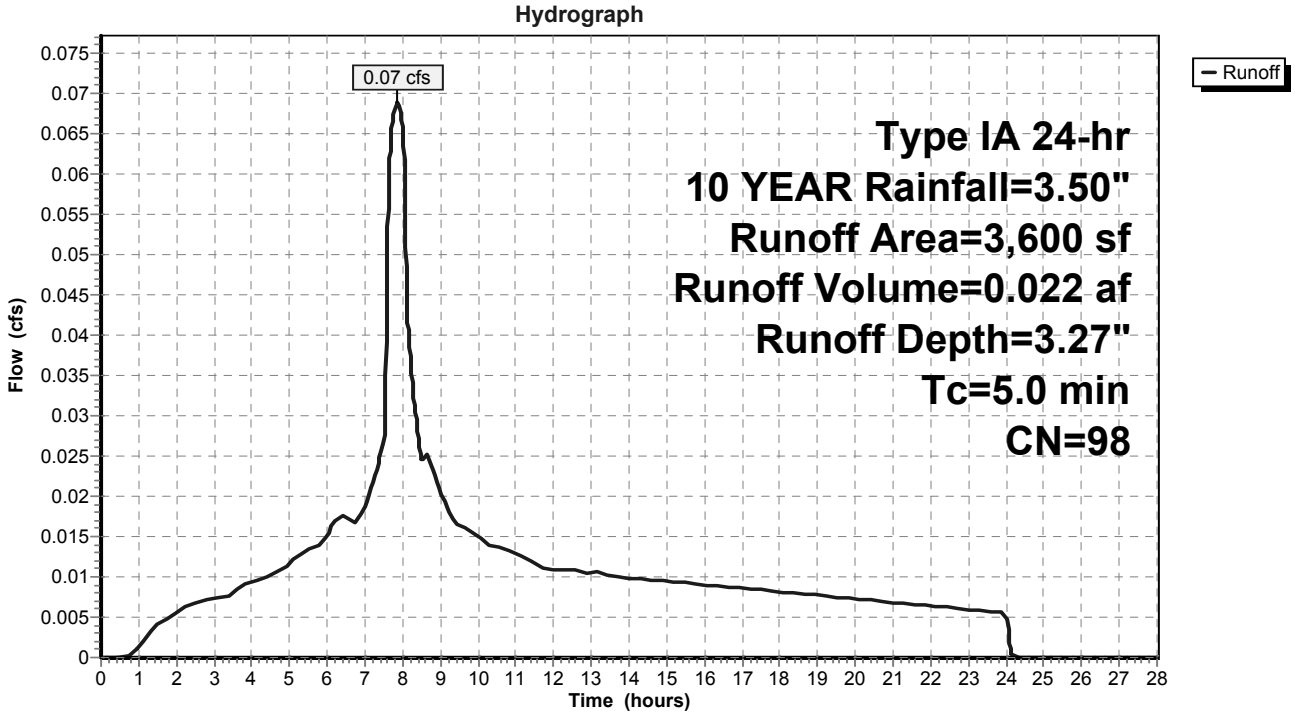
Runoff = 0.07 cfs @ 7.86 hrs, Volume= 0.022 af, Depth= 3.27"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Type IA 24-hr 10 YEAR Rainfall=3.50"

Area (sf)	CN	Description
3,600	98	Unconnected roofs, HSG B
3,600		100.00% Impervious Area
3,600		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, MINIMUM TC**

Subcatchment 5S: LOT 4 ROOF



Hydrograph for Subcatchment 5S: LOT 4 ROOF

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
0.50	0.03	0.00	0.00
1.00	0.07	0.00	0.00
1.50	0.12	0.02	0.00
2.00	0.18	0.05	0.01
2.50	0.23	0.09	0.01
3.00	0.29	0.13	0.01
3.50	0.34	0.18	0.01
4.00	0.41	0.23	0.01
4.50	0.47	0.29	0.01
5.00	0.55	0.36	0.01
5.50	0.63	0.44	0.01
6.00	0.72	0.52	0.02
6.50	0.83	0.63	0.02
7.00	0.94	0.73	0.02
7.50	1.09	0.87	**0.03**
8.00	1.49	1.27	**0.07**
8.50	1.68	1.46	0.02
9.00	1.82	1.60	0.02
9.50	1.92	1.70	0.02
10.00	2.02	1.79	0.02
10.50	2.10	1.88	0.01
11.00	2.18	1.96	0.01
11.50	2.26	2.03	0.01
12.00	2.32	2.10	0.01
12.50	2.39	2.16	0.01
13.00	2.45	2.22	0.01
13.50	2.52	2.29	0.01
14.00	2.58	2.35	0.01
14.50	2.63	2.40	0.01
15.00	2.69	2.46	0.01
15.50	2.75	2.52	0.01
16.00	2.80	2.57	0.01
16.50	2.86	2.63	0.01
17.00	2.91	2.68	0.01
17.50	2.96	2.73	0.01
18.00	3.01	2.78	0.01
18.50	3.06	2.83	0.01
19.00	3.10	2.87	0.01
19.50	3.15	2.92	0.01
20.00	3.19	2.96	0.01
20.50	3.24	3.00	0.01
21.00	3.28	3.05	0.01
21.50	3.32	3.09	0.01
22.00	3.36	3.12	0.01
22.50	3.40	3.16	0.01
23.00	3.43	3.20	0.01
23.50	3.47	3.23	0.01
24.00	**3.50**	**3.27**	0.01
24.50	3.50	3.27	0.00
25.00	3.50	3.27	0.00
25.50	3.50	3.27	0.00
26.00	3.50	3.27	0.00
26.50	3.50	3.27	0.00
27.00	3.50	3.27	0.00
27.50	3.50	3.27	0.00
28.00	3.50	3.27	0.00

Summary for Subcatchment 7S: LOT 4 LANDSCAPING

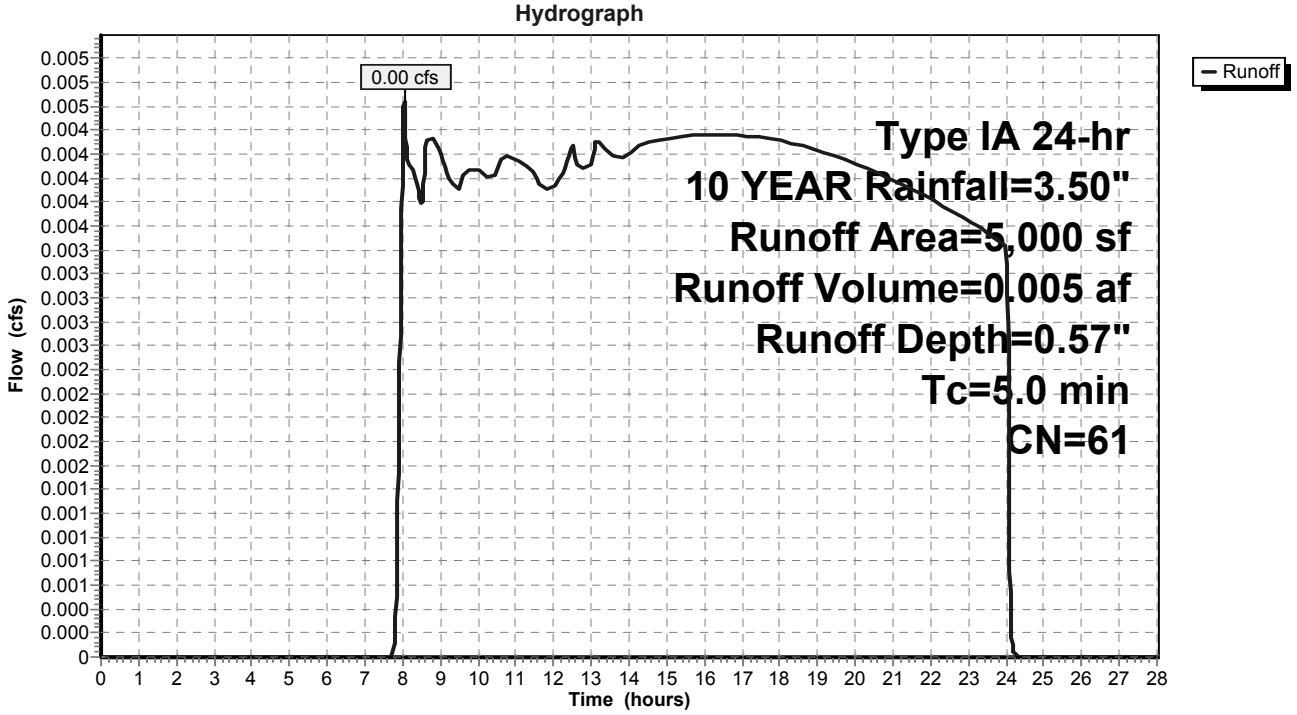
Runoff = 0.00 cfs @ 8.04 hrs, Volume= 0.005 af, Depth= 0.57"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Type IA 24-hr 10 YEAR Rainfall=3.50"

Area (sf)	CN	Description
5,000	61	>75% Grass cover, Good, HSG B
5,000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, MINIMUM TC**

Subcatchment 7S: LOT 4 LANDSCAPING



Hydrograph for Subcatchment 7S: LOT 4 LANDSCAPING

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
0.50	0.03	0.00	0.00
1.00	0.07	0.00	0.00
1.50	0.12	0.00	0.00
2.00	0.18	0.00	0.00
2.50	0.23	0.00	0.00
3.00	0.29	0.00	0.00
3.50	0.34	0.00	0.00
4.00	0.41	0.00	0.00
4.50	0.47	0.00	0.00
5.00	0.55	0.00	0.00
5.50	0.63	0.00	0.00
6.00	0.72	0.00	0.00
6.50	0.83	0.00	0.00
7.00	0.94	0.00	0.00
7.50	1.09	0.00	0.00
8.00	1.49	0.01	**0.00**
8.50	1.68	0.02	**0.00**
9.00	1.82	0.04	0.00
9.50	1.92	0.06	0.00
10.00	2.02	0.08	0.00
10.50	2.10	0.09	0.00
11.00	2.18	0.11	0.00
11.50	2.26	0.13	0.00
12.00	2.32	0.15	0.00
12.50	2.39	0.16	0.00
13.00	2.45	0.18	0.00
13.50	2.52	0.20	0.00
14.00	2.58	0.22	0.00
14.50	2.63	0.24	0.00
15.00	2.69	0.26	0.00
15.50	2.75	0.27	0.00
16.00	2.80	0.29	0.00
16.50	2.86	0.31	0.00
17.00	2.91	0.33	0.00
17.50	2.96	0.35	0.00
18.00	3.01	0.37	0.00
18.50	3.06	0.39	0.00
19.00	3.10	0.41	0.00
19.50	3.15	0.42	0.00
20.00	3.19	0.44	0.00
20.50	3.24	0.46	0.00
21.00	3.28	0.48	0.00
21.50	3.32	0.49	0.00
22.00	3.36	0.51	0.00
22.50	3.40	0.53	0.00
23.00	3.43	0.54	0.00
23.50	3.47	0.56	0.00
24.00	**3.50**	**0.57**	0.00
24.50	3.50	0.57	0.00
25.00	3.50	0.57	0.00
25.50	3.50	0.57	0.00
26.00	3.50	0.57	0.00
26.50	3.50	0.57	0.00
27.00	3.50	0.57	0.00
27.50	3.50	0.57	0.00
28.00	3.50	0.57	0.00

Summary for Pond 2P: NORTH SIDE PLANTER

Inflow Area = 0.076 ac,100.00% Impervious, Inflow Depth = 3.27" for 10 YEAR event
Inflow = 0.06 cfs @ 7.86 hrs, Volume= 0.021 af
Outflow = 0.05 cfs @ 8.06 hrs, Volume= 0.021 af, Atten= 18%, Lag= 12.2 min
Discarded = 0.05 cfs @ 8.06 hrs, Volume= 0.021 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Peak Elev= 0.07' @ 8.06 hrs Surf.Area= 279 sf Storage= 16 cf

Plug-Flow detention time= 0.7 min calculated for 0.021 af (100% of inflow)
Center-of-Mass det. time= 0.7 min (662.9 - 662.2)

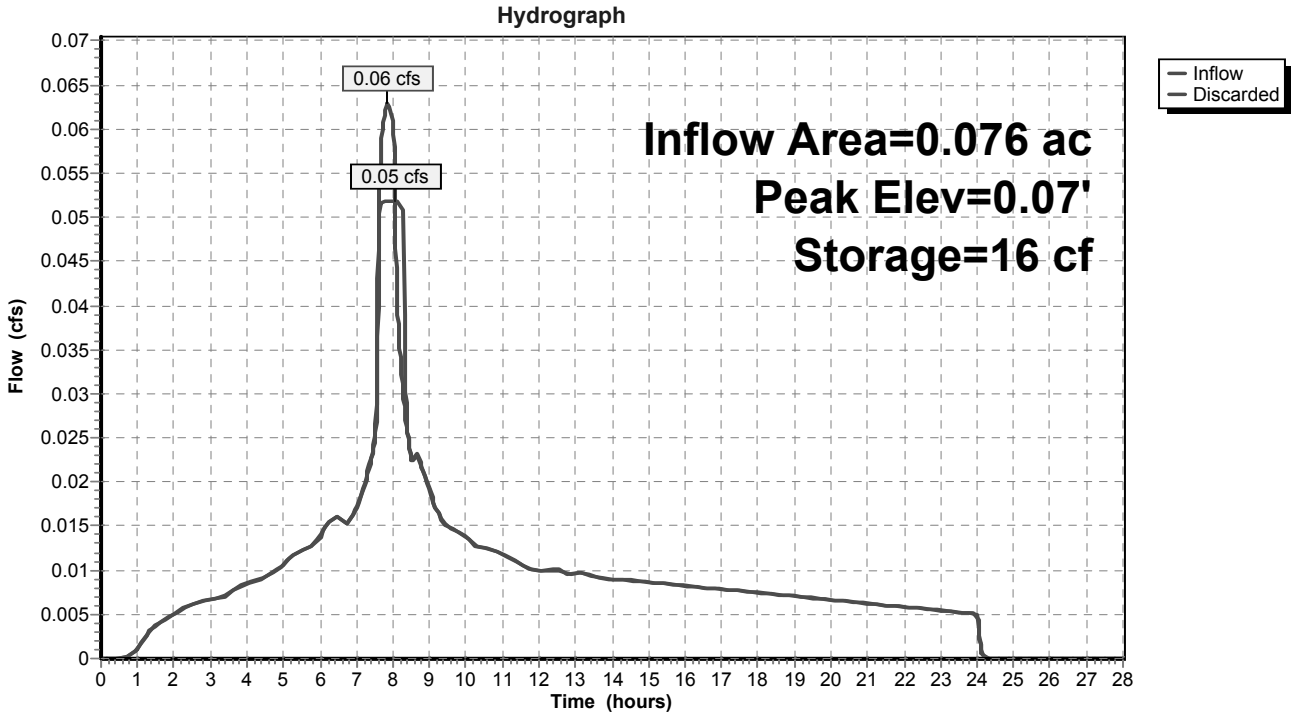
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	151 cf	**PLANTER FREEBOARD (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	1	0	0
0.02	279	3	3
0.55	279	148	151

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**8.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = -20.00'

Discarded OutFlow Max=0.05 cfs @ 8.06 hrs HW=0.07' (Free Discharge)
1=Exfiltration (Controls 0.05 cfs)

Pond 2P: NORTH SIDE PLANTER



Hydrograph for Pond 2P: NORTH SIDE PLANTER

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Discarded (cfs)
0.00	0.00	0	0.00	0.00
1.00	0.00	0	0.00	0.00
2.00	0.01	0	0.00	0.00
3.00	0.01	0	0.00	0.01
4.00	0.01	0	0.00	0.01
5.00	0.01	0	0.00	0.01
6.00	0.01	0	0.01	0.01
7.00	**0.02**	0	0.01	0.02
8.00	**0.06**	**15**	**0.06**	**0.05**
9.00	0.02	**0**	**0.01**	**0.02**
10.00	0.01	0	0.01	0.01
11.00	0.01	0	0.00	0.01
12.00	0.01	0	0.00	0.01
13.00	0.01	0	0.00	0.01
14.00	0.01	0	0.00	0.01
15.00	0.01	0	0.00	0.01
16.00	0.01	0	0.00	0.01
17.00	0.01	0	0.00	0.01
18.00	0.01	0	0.00	0.01
19.00	0.01	0	0.00	0.01
20.00	0.01	0	0.00	0.01
21.00	0.01	0	0.00	0.01
22.00	0.01	0	0.00	0.01
23.00	0.01	0	0.00	0.01
24.00	0.01	0	0.00	0.01
25.00	0.00	0	0.00	0.00
26.00	0.00	0	0.00	0.00
27.00	0.00	0	0.00	0.00
28.00	0.00	0	0.00	0.00

Summary for Pond 4P: SOUTH SIDE PLANTER

Inflow Area = 0.082 ac,100.00% Impervious, Inflow Depth = 3.27" for 10 YEAR event
Inflow = 0.07 cfs @ 7.86 hrs, Volume= 0.022 af
Outflow = 0.04 cfs @ 8.18 hrs, Volume= 0.022 af, Atten= 44%, Lag= 19.6 min
Discarded = 0.04 cfs @ 8.18 hrs, Volume= 0.022 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Peak Elev= 0.26' @ 8.18 hrs Surf.Area= 203 sf Storage= 51 cf

Plug-Flow detention time= 3.3 min calculated for 0.022 af (100% of inflow)
Center-of-Mass det. time= 3.3 min (665.5 - 662.2)

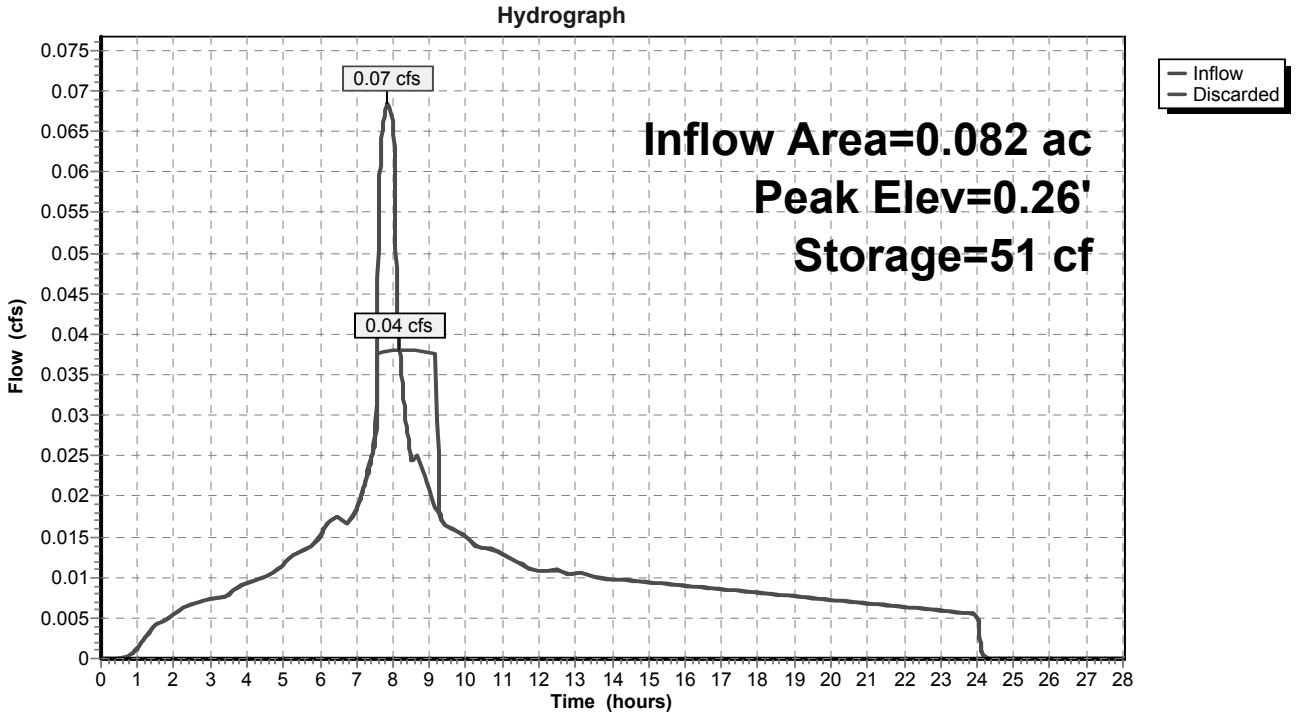
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	134 cf	**PLANTER FREEBOARD (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	1	0	0
0.02	203	2	2
0.67	203	132	134

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**8.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = -20.00'

Discarded OutFlow Max=0.04 cfs @ 8.18 hrs HW=0.26' (Free Discharge)
↑**1=Exfiltration** (Controls 0.04 cfs)

Pond 4P: SOUTH SIDE PLANTER



Hydrograph for Pond 4P: SOUTH SIDE PLANTER

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Discarded (cfs)
0.00	0.00	0	0.00	0.00
1.00	0.00	0	0.00	0.00
2.00	0.01	0	0.00	0.01
3.00	0.01	0	0.00	0.01
4.00	0.01	0	0.00	0.01
5.00	0.01	0	0.01	0.01
6.00	0.01	0	0.01	0.01
7.00	**0.02**	1	0.01	0.02
8.00	**0.07**	**43**	**0.22**	**0.04**
9.00	0.02	**16**	**0.09**	**0.04**
10.00	0.01	0	0.01	0.01
11.00	0.01	0	0.01	0.01
12.00	0.01	0	0.01	0.01
13.00	0.01	0	0.01	0.01
14.00	0.01	0	0.01	0.01
15.00	0.01	0	0.00	0.01
16.00	0.01	0	0.00	0.01
17.00	0.01	0	0.00	0.01
18.00	0.01	0	0.00	0.01
19.00	0.01	0	0.00	0.01
20.00	0.01	0	0.00	0.01
21.00	0.01	0	0.00	0.01
22.00	0.01	0	0.00	0.01
23.00	0.01	0	0.00	0.01
24.00	0.01	0	0.00	0.01
25.00	0.00	0	0.00	0.00
26.00	0.00	0	0.00	0.00
27.00	0.00	0	0.00	0.00
28.00	0.00	0	0.00	0.00

Summary for Pond 6P: RESIDENTIAL DRYWELL

Inflow Area = 0.197 ac, 41.86% Impervious, Inflow Depth = 1.70" for 10 YEAR event
Inflow = 0.07 cfs @ 7.93 hrs, Volume= 0.028 af
Outflow = 0.02 cfs @ 9.85 hrs, Volume= 0.028 af, Atten= 72%, Lag= 115.1 min
Discarded = 0.02 cfs @ 9.85 hrs, Volume= 0.028 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Peak Elev= 4.47' @ 9.85 hrs Surf.Area= 0.002 ac Storage= 0.004 af

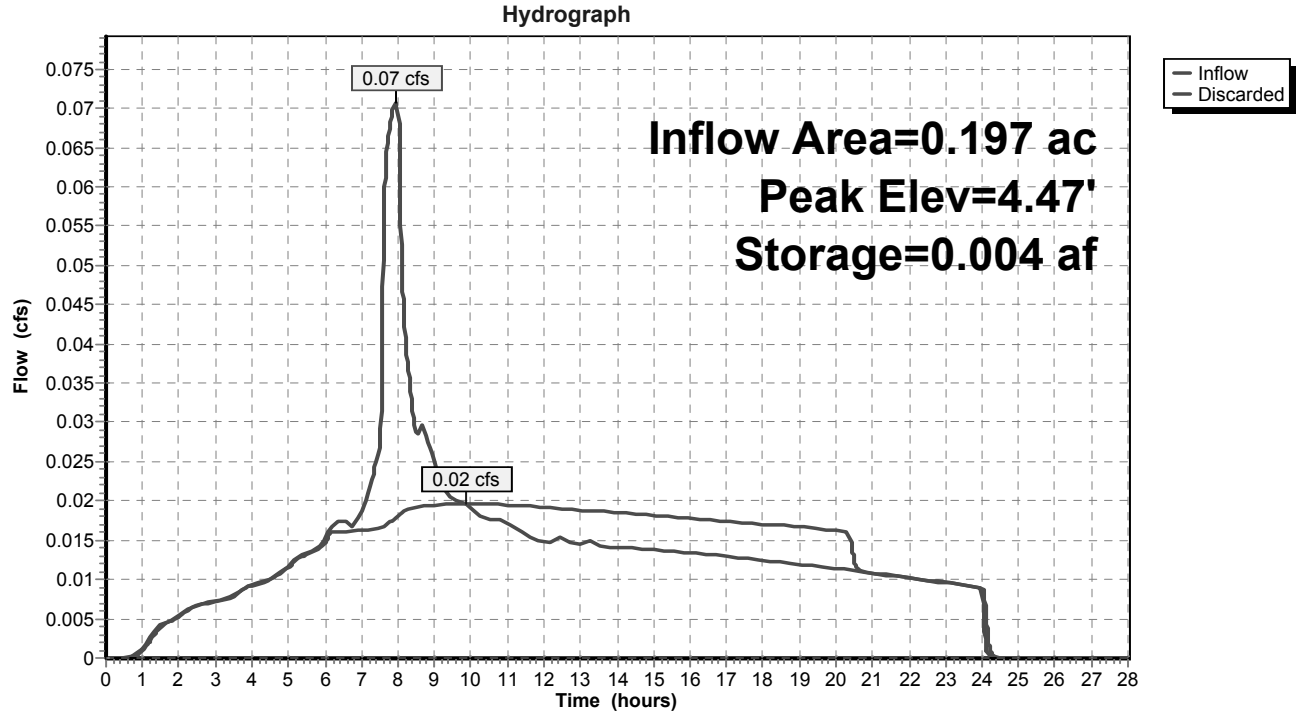
Plug-Flow detention time= 62.4 min calculated for 0.028 af (100% of inflow)
Center-of-Mass det. time= 62.4 min (781.5 - 719.1)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	0.006 af	**10.50'D x 10.50'H ROCK SECTION** 0.021 af Overall - 0.004 af Embedded = 0.017 af x 33.0% Voids
#2	0.00'	0.003 af	**4.00'D x 10.00'H DRYWELL** Inside #1 0.004 af Overall - 4.0" Wall Thickness = 0.003 af
		0.008 af	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**8.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = -20.00'

Discarded OutFlow Max=0.02 cfs @ 9.85 hrs HW=4.47' (Free Discharge)
1=Exfiltration (Controls 0.02 cfs)

Pond 6P: RESIDENTIAL DRYWELL



Hydrograph for Pond 6P: RESIDENTIAL DRYWELL

Time (hours)	Inflow (cfs)	Storage (acre-feet)	Elevation (feet)	Discarded (cfs)
0.00	0.00	0.000	0.00	0.00
1.00	0.00	0.000	0.01	0.00
2.00	0.01	0.000	0.03	0.01
3.00	0.01	0.000	0.05	0.01
4.00	0.01	0.000	0.06	0.01
5.00	0.01	0.000	0.07	0.01
6.00	0.02	0.000	0.10	0.01
7.00	**0.02**	0.000	0.20	0.02
8.00	**0.07**	0.002	2.72	0.02
9.00	0.02	**0.004**	**4.33**	**0.02**
10.00	0.02	**0.004**	**4.46**	**0.02**
11.00	0.02	0.003	4.29	0.02
12.00	0.01	0.003	3.92	0.02
13.00	0.01	0.003	3.50	0.02
14.00	0.01	0.003	3.07	0.02
15.00	0.01	0.002	2.63	0.02
16.00	0.01	0.002	2.18	0.02
17.00	0.01	0.001	1.73	0.02
18.00	0.01	0.001	1.27	0.02
19.00	0.01	0.001	0.80	0.02
20.00	0.01	0.000	0.31	0.02
21.00	0.01	0.000	0.07	0.01
22.00	0.01	0.000	0.07	0.01
23.00	0.01	0.000	0.06	0.01
24.00	0.01	0.000	0.06	0.01
25.00	0.00	0.000	0.00	0.00
26.00	0.00	0.000	0.00	0.00
27.00	0.00	0.000	0.00	0.00
28.00	0.00	0.000	0.00	0.00

Time span=0.00-28.00 hrs, dt=0.01 hrs, 2801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: NORTH SIDE STREET Runoff Area=3,291 sf 100.00% Impervious Runoff Depth=3.77"
Tc=5.0 min CN=98 Runoff=0.07 cfs 0.024 af

Subcatchment 3S: SOUTH SIDE STREET Runoff Area=3,580 sf 100.00% Impervious Runoff Depth=3.77"
Tc=5.0 min CN=98 Runoff=0.08 cfs 0.026 af

Subcatchment 5S: LOT 4 ROOF Runoff Area=3,600 sf 100.00% Impervious Runoff Depth=3.77"
Tc=5.0 min CN=98 Runoff=0.08 cfs 0.026 af

Subcatchment 7S: LOT 4 LANDSCAPING Runoff Area=5,000 sf 0.00% Impervious Runoff Depth=0.81"
Tc=5.0 min CN=61 Runoff=0.01 cfs 0.008 af

Pond 2P: NORTH SIDE PLANTER Peak Elev=0.12' Storage=31 cf Inflow=0.07 cfs 0.024 af
Outflow=0.05 cfs 0.024 af

Pond 4P: SOUTH SIDE PLANTER Peak Elev=0.36' Storage=72 cf Inflow=0.08 cfs 0.026 af
Outflow=0.04 cfs 0.026 af

Pond 6P: RESIDENTIAL DRYWELL Peak Elev=6.55' Storage=0.005 af Inflow=0.09 cfs 0.034 af
Outflow=0.02 cfs 0.034 af

Total Runoff Area = 0.355 ac Runoff Volume = 0.083 af Average Runoff Depth = 2.81"
32.32% Pervious = 0.115 ac 67.68% Impervious = 0.240 ac

Summary for Subcatchment 1S: NORTH SIDE STREET

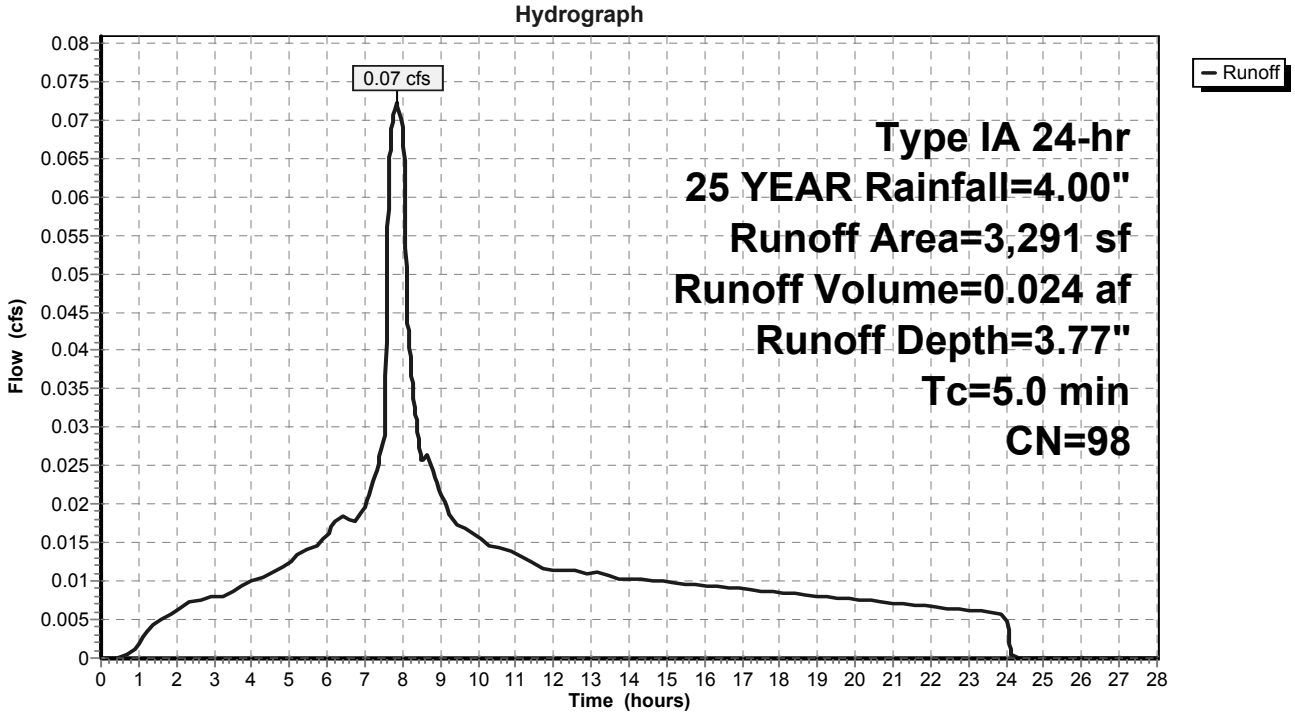
Runoff = 0.07 cfs @ 7.86 hrs, Volume= 0.024 af, Depth= 3.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Type IA 24-hr 25 YEAR Rainfall=4.00"

	Area (sf)	CN	Description
*	3,012	98	IMPERVIOUS AREA
*	279	100	PLANTER SURFACE
	3,291	98	Weighted Average
	3,291		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, MIMIMUM FLOW TIME**

Subcatchment 1S: NORTH SIDE STREET



Hydrograph for Subcatchment 1S: NORTH SIDE STREET

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
0.50	0.04	0.00	0.00
1.00	0.08	0.01	0.00
1.50	0.14	0.03	0.00
2.00	0.20	0.07	0.01
2.50	0.26	0.12	0.01
3.00	0.33	0.17	0.01
3.50	0.39	0.22	0.01
4.00	0.46	0.29	0.01
4.50	0.54	0.35	0.01
5.00	0.62	0.43	0.01
5.50	0.72	0.52	0.01
6.00	0.82	0.62	0.02
6.50	0.95	0.74	0.02
7.00	1.07	0.86	0.02
7.50	1.24	1.02	**0.03**
8.00	1.70	1.48	**0.07**
8.50	1.92	1.70	0.03
9.00	2.08	1.85	0.02
9.50	2.20	1.97	0.02
10.00	2.31	2.08	0.02
10.50	2.40	2.18	0.01
11.00	2.50	2.27	0.01
11.50	2.58	2.35	0.01
12.00	2.66	2.43	0.01
12.50	2.73	2.50	0.01
13.00	2.80	2.57	0.01
13.50	2.88	2.64	0.01
14.00	2.94	2.71	0.01
14.50	3.01	2.78	0.01
15.00	3.08	2.84	0.01
15.50	3.14	2.91	0.01
16.00	3.20	2.97	0.01
16.50	3.26	3.03	0.01
17.00	3.32	3.09	0.01
17.50	3.38	3.15	0.01
18.00	3.44	3.21	0.01
18.50	3.49	3.26	0.01
19.00	3.55	3.31	0.01
19.50	3.60	3.37	0.01
20.00	3.65	3.42	0.01
20.50	3.70	3.47	0.01
21.00	3.75	3.51	0.01
21.50	3.79	3.56	0.01
22.00	3.84	3.60	0.01
22.50	3.88	3.65	0.01
23.00	3.92	3.69	0.01
23.50	3.96	3.73	0.01
24.00	**4.00**	**3.77**	0.01
24.50	4.00	3.77	0.00
25.00	4.00	3.77	0.00
25.50	4.00	3.77	0.00
26.00	4.00	3.77	0.00
26.50	4.00	3.77	0.00
27.00	4.00	3.77	0.00
27.50	4.00	3.77	0.00
28.00	4.00	3.77	0.00

Summary for Subcatchment 3S: SOUTH SIDE STREET

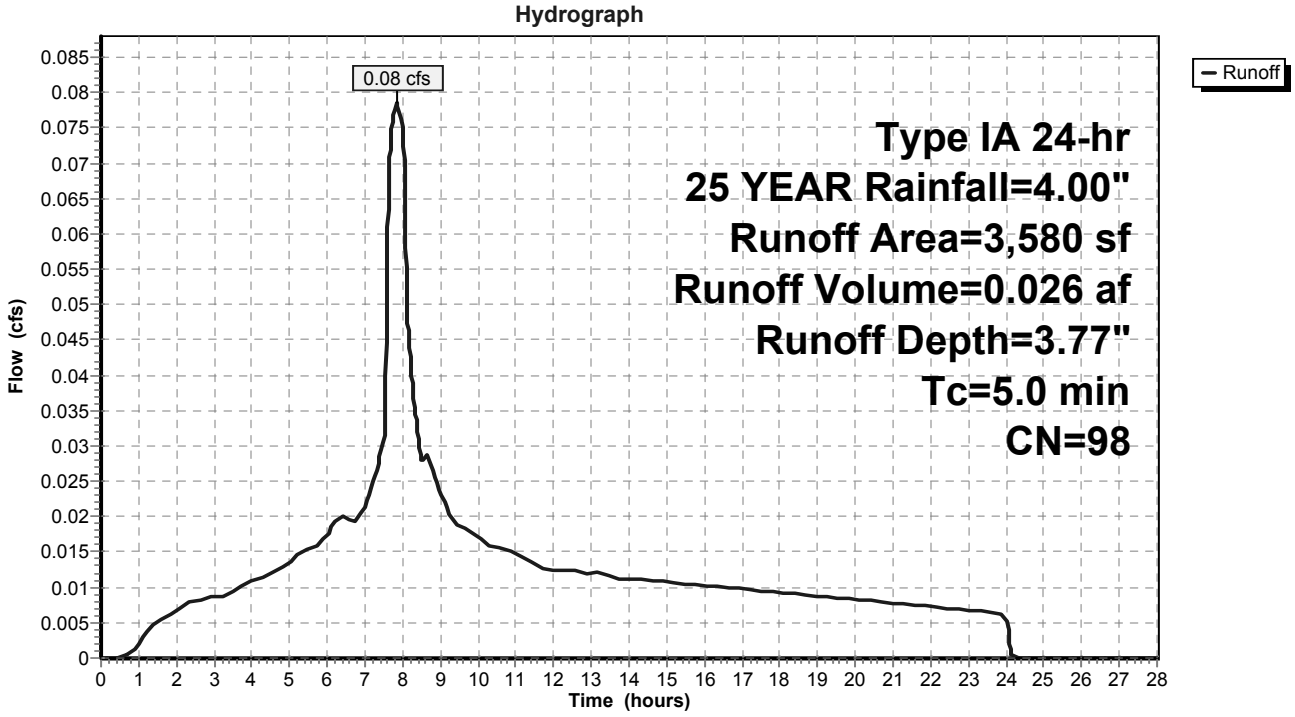
Runoff = 0.08 cfs @ 7.86 hrs, Volume= 0.026 af, Depth= 3.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Type IA 24-hr 25 YEAR Rainfall=4.00"

	Area (sf)	CN	Description
*	3,377	98	IMPERVIOUS AREA
*	203	100	PLANTER SURFACE
	3,580	98	Weighted Average
	3,580		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, MIMIMUM FLOW TIME**

Subcatchment 3S: SOUTH SIDE STREET



Hydrograph for Subcatchment 3S: SOUTH SIDE STREET

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
0.50	0.04	0.00	0.00
1.00	0.08	0.01	0.00
1.50	0.14	0.03	0.01
2.00	0.20	0.07	0.01
2.50	0.26	0.12	0.01
3.00	0.33	0.17	0.01
3.50	0.39	0.22	0.01
4.00	0.46	0.29	0.01
4.50	0.54	0.35	0.01
5.00	0.62	0.43	0.01
5.50	0.72	0.52	0.02
6.00	0.82	0.62	0.02
6.50	0.95	0.74	0.02
7.00	1.07	0.86	0.02
7.50	1.24	1.02	**0.03**
8.00	1.70	1.48	**0.07**
8.50	1.92	1.70	0.03
9.00	2.08	1.85	0.02
9.50	2.20	1.97	0.02
10.00	2.31	2.08	0.02
10.50	2.40	2.18	0.02
11.00	2.50	2.27	0.01
11.50	2.58	2.35	0.01
12.00	2.66	2.43	0.01
12.50	2.73	2.50	0.01
13.00	2.80	2.57	0.01
13.50	2.88	2.64	0.01
14.00	2.94	2.71	0.01
14.50	3.01	2.78	0.01
15.00	3.08	2.84	0.01
15.50	3.14	2.91	0.01
16.00	3.20	2.97	0.01
16.50	3.26	3.03	0.01
17.00	3.32	3.09	0.01
17.50	3.38	3.15	0.01
18.00	3.44	3.21	0.01
18.50	3.49	3.26	0.01
19.00	3.55	3.31	0.01
19.50	3.60	3.37	0.01
20.00	3.65	3.42	0.01
20.50	3.70	3.47	0.01
21.00	3.75	3.51	0.01
21.50	3.79	3.56	0.01
22.00	3.84	3.60	0.01
22.50	3.88	3.65	0.01
23.00	3.92	3.69	0.01
23.50	3.96	3.73	0.01
24.00	**4.00**	**3.77**	0.01
24.50	4.00	3.77	0.00
25.00	4.00	3.77	0.00
25.50	4.00	3.77	0.00
26.00	4.00	3.77	0.00
26.50	4.00	3.77	0.00
27.00	4.00	3.77	0.00
27.50	4.00	3.77	0.00
28.00	4.00	3.77	0.00

Summary for Subcatchment 5S: LOT 4 ROOF

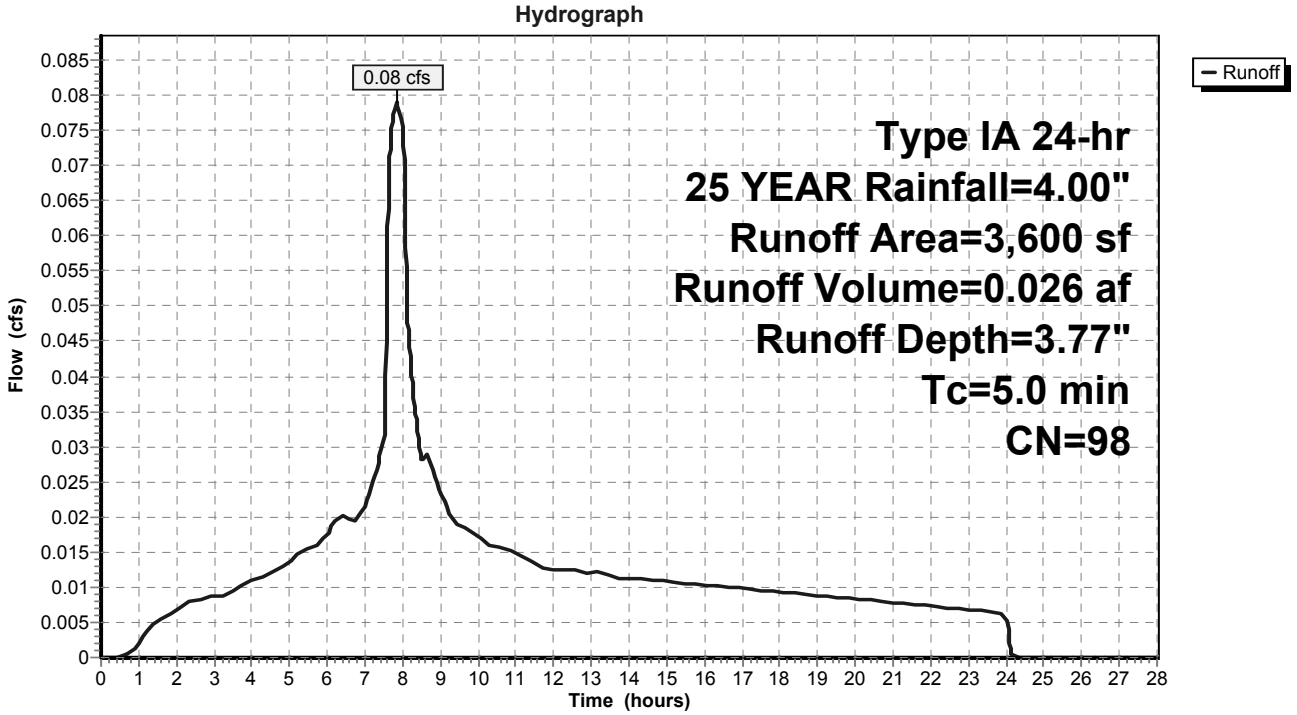
Runoff = 0.08 cfs @ 7.86 hrs, Volume= 0.026 af, Depth= 3.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Type IA 24-hr 25 YEAR Rainfall=4.00"

Area (sf)	CN	Description
3,600	98	Unconnected roofs, HSG B
3,600		100.00% Impervious Area
3,600		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, MINIMUM TC**

Subcatchment 5S: LOT 4 ROOF



Hydrograph for Subcatchment 5S: LOT 4 ROOF

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
0.50	0.04	0.00	0.00
1.00	0.08	0.01	0.00
1.50	0.14	0.03	0.01
2.00	0.20	0.07	0.01
2.50	0.26	0.12	0.01
3.00	0.33	0.17	0.01
3.50	0.39	0.22	0.01
4.00	0.46	0.29	0.01
4.50	0.54	0.35	0.01
5.00	0.62	0.43	0.01
5.50	0.72	0.52	0.02
6.00	0.82	0.62	0.02
6.50	0.95	0.74	0.02
7.00	1.07	0.86	0.02
7.50	1.24	1.02	**0.03**
8.00	1.70	1.48	**0.08**
8.50	1.92	1.70	0.03
9.00	2.08	1.85	0.02
9.50	2.20	1.97	0.02
10.00	2.31	2.08	0.02
10.50	2.40	2.18	0.02
11.00	2.50	2.27	0.01
11.50	2.58	2.35	0.01
12.00	2.66	2.43	0.01
12.50	2.73	2.50	0.01
13.00	2.80	2.57	0.01
13.50	2.88	2.64	0.01
14.00	2.94	2.71	0.01
14.50	3.01	2.78	0.01
15.00	3.08	2.84	0.01
15.50	3.14	2.91	0.01
16.00	3.20	2.97	0.01
16.50	3.26	3.03	0.01
17.00	3.32	3.09	0.01
17.50	3.38	3.15	0.01
18.00	3.44	3.21	0.01
18.50	3.49	3.26	0.01
19.00	3.55	3.31	0.01
19.50	3.60	3.37	0.01
20.00	3.65	3.42	0.01
20.50	3.70	3.47	0.01
21.00	3.75	3.51	0.01
21.50	3.79	3.56	0.01
22.00	3.84	3.60	0.01
22.50	3.88	3.65	0.01
23.00	3.92	3.69	0.01
23.50	3.96	3.73	0.01
24.00	**4.00**	**3.77**	0.01
24.50	4.00	3.77	0.00
25.00	4.00	3.77	0.00
25.50	4.00	3.77	0.00
26.00	4.00	3.77	0.00
26.50	4.00	3.77	0.00
27.00	4.00	3.77	0.00
27.50	4.00	3.77	0.00
28.00	4.00	3.77	0.00

Summary for Subcatchment 7S: LOT 4 LANDSCAPING

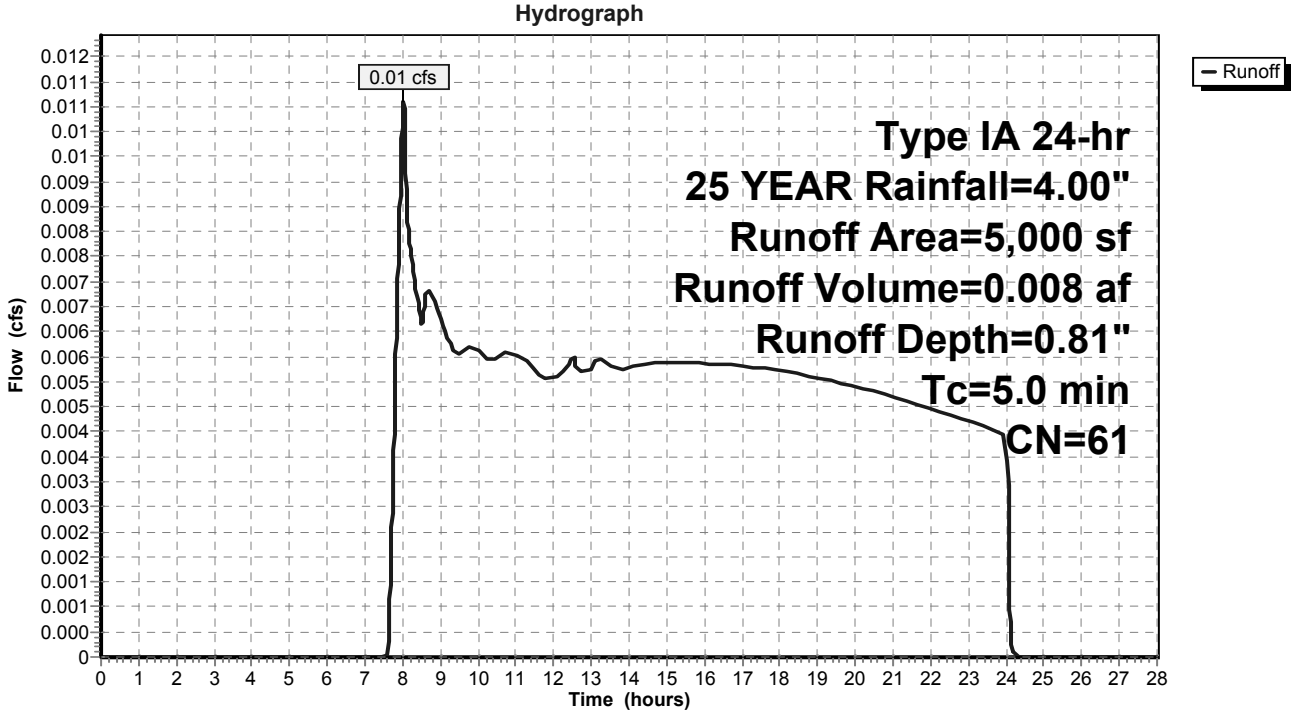
Runoff = 0.01 cfs @ 8.03 hrs, Volume= 0.008 af, Depth= 0.81"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Type IA 24-hr 25 YEAR Rainfall=4.00"

Area (sf)	CN	Description
5,000	61	>75% Grass cover, Good, HSG B
5,000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, MINIMUM TC**

Subcatchment 7S: LOT 4 LANDSCAPING



Hydrograph for Subcatchment 7S: LOT 4 LANDSCAPING

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
0.50	0.04	0.00	0.00
1.00	0.08	0.00	0.00
1.50	0.14	0.00	0.00
2.00	0.20	0.00	0.00
2.50	0.26	0.00	0.00
3.00	0.33	0.00	0.00
3.50	0.39	0.00	0.00
4.00	0.46	0.00	0.00
4.50	0.54	0.00	0.00
5.00	0.62	0.00	0.00
5.50	0.72	0.00	0.00
6.00	0.82	0.00	0.00
6.50	0.95	0.00	0.00
7.00	1.07	0.00	0.00
7.50	1.24	0.00	0.00
8.00	1.70	0.03	**0.01**
8.50	1.92	0.06	**0.01**
9.00	2.08	0.09	0.01
9.50	2.20	0.12	0.01
10.00	2.31	0.14	0.01
10.50	2.40	0.17	0.01
11.00	2.50	0.19	0.01
11.50	2.58	0.22	0.01
12.00	2.66	0.24	0.01
12.50	2.73	0.27	0.01
13.00	2.80	0.29	0.01
13.50	2.88	0.32	0.01
14.00	2.94	0.34	0.01
14.50	3.01	0.37	0.01
15.00	3.08	0.39	0.01
15.50	3.14	0.42	0.01
16.00	3.20	0.45	0.01
16.50	3.26	0.47	0.01
17.00	3.32	0.50	0.01
17.50	3.38	0.52	0.01
18.00	3.44	0.55	0.01
18.50	3.49	0.57	0.01
19.00	3.55	0.59	0.01
19.50	3.60	0.62	0.01
20.00	3.65	0.64	0.01
20.50	3.70	0.66	0.01
21.00	3.75	0.69	0.01
21.50	3.79	0.71	0.01
22.00	3.84	0.73	0.00
22.50	3.88	0.75	0.00
23.00	3.92	0.77	0.00
23.50	3.96	0.79	0.00
24.00	**4.00**	**0.81**	0.00
24.50	4.00	0.81	0.00
25.00	4.00	0.81	0.00
25.50	4.00	0.81	0.00
26.00	4.00	0.81	0.00
26.50	4.00	0.81	0.00
27.00	4.00	0.81	0.00
27.50	4.00	0.81	0.00
28.00	4.00	0.81	0.00

Summary for Pond 2P: NORTH SIDE PLANTER

Inflow Area = 0.076 ac,100.00% Impervious, Inflow Depth = 3.77" for 25 YEAR event
Inflow = 0.07 cfs @ 7.86 hrs, Volume= 0.024 af
Outflow = 0.05 cfs @ 8.09 hrs, Volume= 0.024 af, Atten= 28%, Lag= 13.8 min
Discarded = 0.05 cfs @ 8.09 hrs, Volume= 0.024 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Peak Elev= 0.12' @ 8.09 hrs Surf.Area= 279 sf Storage= 31 cf

Plug-Flow detention time= 1.2 min calculated for 0.024 af (100% of inflow)
Center-of-Mass det. time= 1.2 min (660.1 - 658.9)

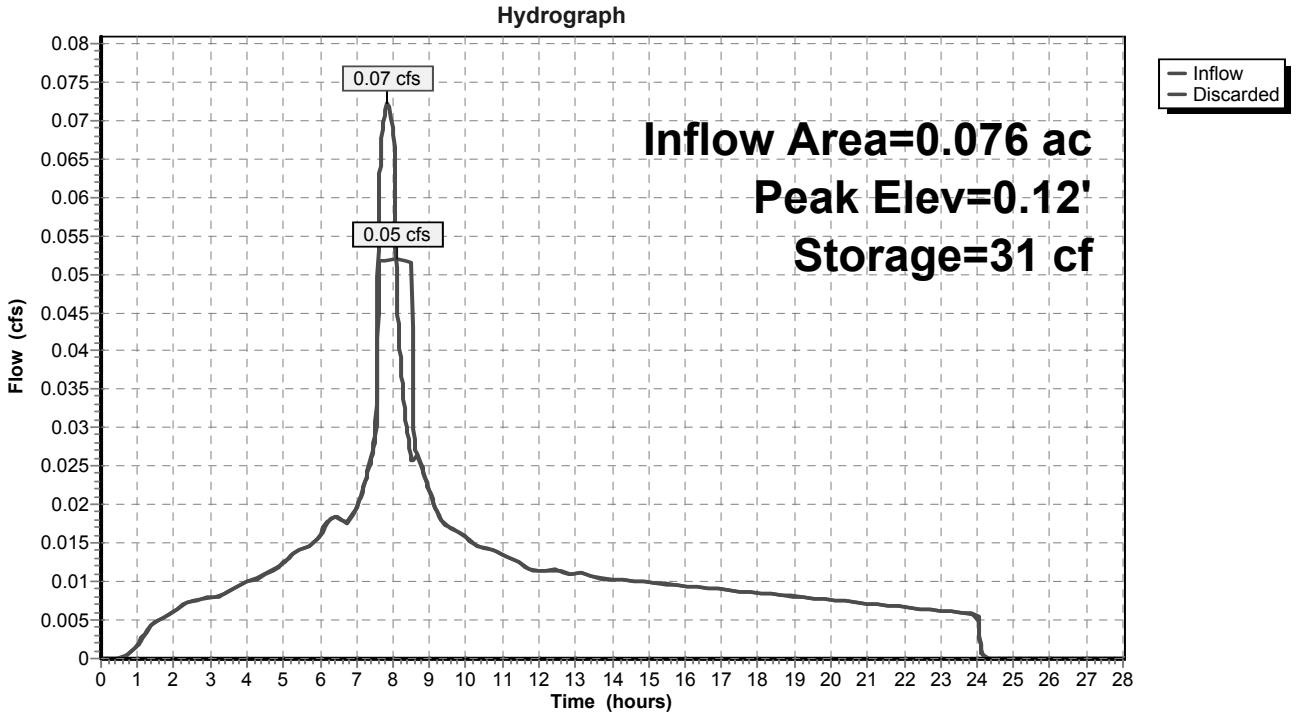
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	151 cf	**PLANTER FREEBOARD (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	1	0	0
0.02	279	3	3
0.55	279	148	151

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**8.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = -20.00'

Discarded OutFlow Max=0.05 cfs @ 8.09 hrs HW=0.12' (Free Discharge)
1=Exfiltration (Controls 0.05 cfs)

Pond 2P: NORTH SIDE PLANTER



Hydrograph for Pond 2P: NORTH SIDE PLANTER

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Discarded (cfs)
0.00	0.00	0	0.00	0.00
1.00	0.00	0	0.00	0.00
2.00	0.01	0	0.00	0.01
3.00	0.01	0	0.00	0.01
4.00	0.01	0	0.00	0.01
5.00	0.01	0	0.00	0.01
6.00	0.02	0	0.01	0.02
7.00	**0.02**	0	0.01	0.02
8.00	**0.07**	**27**	**0.11**	**0.05**
9.00	0.02	**1**	**0.01**	**0.02**
10.00	0.02	0	0.01	0.02
11.00	0.01	0	0.01	0.01
12.00	0.01	0	0.00	0.01
13.00	0.01	0	0.00	0.01
14.00	0.01	0	0.00	0.01
15.00	0.01	0	0.00	0.01
16.00	0.01	0	0.00	0.01
17.00	0.01	0	0.00	0.01
18.00	0.01	0	0.00	0.01
19.00	0.01	0	0.00	0.01
20.00	0.01	0	0.00	0.01
21.00	0.01	0	0.00	0.01
22.00	0.01	0	0.00	0.01
23.00	0.01	0	0.00	0.01
24.00	0.01	0	0.00	0.01
25.00	0.00	0	0.00	0.00
26.00	0.00	0	0.00	0.00
27.00	0.00	0	0.00	0.00
28.00	0.00	0	0.00	0.00

Summary for Pond 4P: SOUTH SIDE PLANTER

Inflow Area = 0.082 ac,100.00% Impervious, Inflow Depth = 3.77" for 25 YEAR event
Inflow = 0.08 cfs @ 7.86 hrs, Volume= 0.026 af
Outflow = 0.04 cfs @ 8.26 hrs, Volume= 0.026 af, Atten= 51%, Lag= 24.6 min
Discarded = 0.04 cfs @ 8.26 hrs, Volume= 0.026 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Peak Elev= 0.36' @ 8.26 hrs Surf.Area= 203 sf Storage= 72 cf

Plug-Flow detention time= 5.2 min calculated for 0.026 af (100% of inflow)
Center-of-Mass det. time= 5.2 min (664.1 - 658.9)

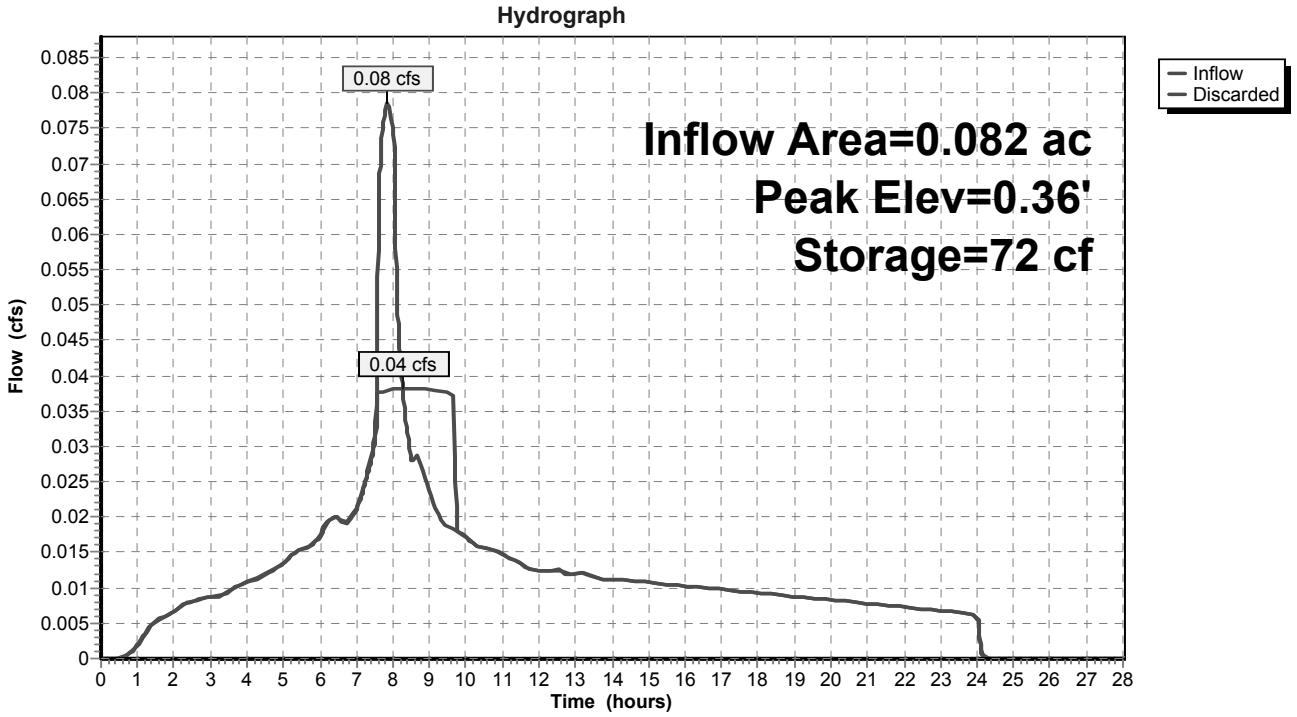
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	134 cf	**PLANTER FREEBOARD (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	1	0	0
0.02	203	2	2
0.67	203	132	134

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**8.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = -20.00'

Discarded OutFlow Max=0.04 cfs @ 8.26 hrs HW=0.36' (Free Discharge)
1=Exfiltration (Controls 0.04 cfs)

Pond 4P: SOUTH SIDE PLANTER



Hydrograph for Pond 4P: SOUTH SIDE PLANTER

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Discarded (cfs)
0.00	0.00	0	0.00	0.00
1.00	0.00	0	0.00	0.00
2.00	0.01	0	0.00	0.01
3.00	0.01	0	0.00	0.01
4.00	0.01	0	0.01	0.01
5.00	0.01	0	0.01	0.01
6.00	0.02	0	0.01	0.02
7.00	**0.02**	1	0.01	0.02
8.00	**0.07**	**58**	**0.30**	**0.04**
9.00	0.02	**47**	**0.24**	**0.04**
10.00	0.02	0	0.01	0.02
11.00	0.01	0	0.01	0.01
12.00	0.01	0	0.01	0.01
13.00	0.01	0	0.01	0.01
14.00	0.01	0	0.01	0.01
15.00	0.01	0	0.01	0.01
16.00	0.01	0	0.01	0.01
17.00	0.01	0	0.01	0.01
18.00	0.01	0	0.00	0.01
19.00	0.01	0	0.00	0.01
20.00	0.01	0	0.00	0.01
21.00	0.01	0	0.00	0.01
22.00	0.01	0	0.00	0.01
23.00	0.01	0	0.00	0.01
24.00	0.01	0	0.00	0.01
25.00	0.00	0	0.00	0.00
26.00	0.00	0	0.00	0.00
27.00	0.00	0	0.00	0.00
28.00	0.00	0	0.00	0.00

Summary for Pond 6P: RESIDENTIAL DRYWELL

Inflow Area = 0.197 ac, 41.86% Impervious, Inflow Depth = 2.05" for 25 YEAR event
Inflow = 0.09 cfs @ 7.93 hrs, Volume= 0.034 af
Outflow = 0.02 cfs @ 10.84 hrs, Volume= 0.034 af, Atten= 76%, Lag= 174.8 min
Discarded = 0.02 cfs @ 10.84 hrs, Volume= 0.034 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Peak Elev= 6.55' @ 10.84 hrs Surf.Area= 0.002 ac Storage= 0.005 af

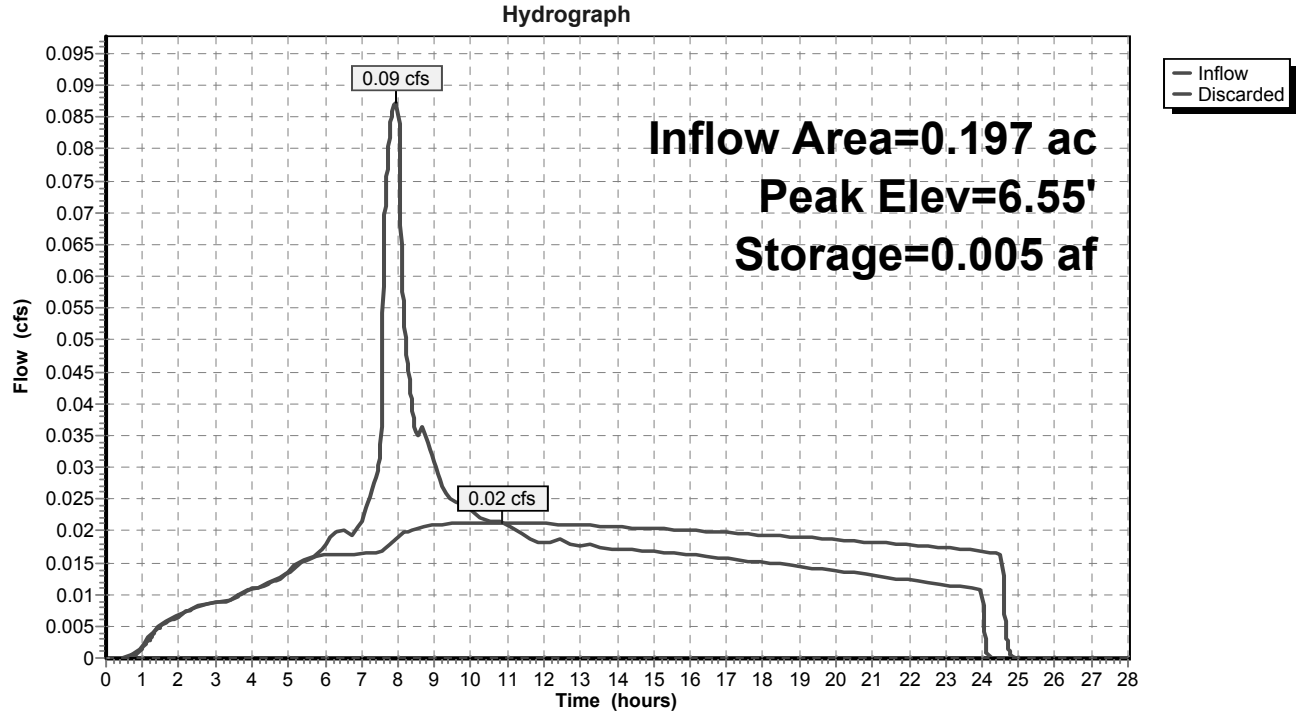
Plug-Flow detention time= 108.5 min calculated for 0.034 af (100% of inflow)
Center-of-Mass det. time= 108.4 min (828.5 - 720.1)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	0.006 af	**10.50'D x 10.50'H ROCK SECTION** 0.021 af Overall - 0.004 af Embedded = 0.017 af x 33.0% Voids
#2	0.00'	0.003 af	**4.00'D x 10.00'H DRYWELL** Inside #1 0.004 af Overall - 4.0" Wall Thickness = 0.003 af
		0.008 af	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**8.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = -20.00'

Discarded OutFlow Max=0.02 cfs @ 10.84 hrs HW=6.55' (Free Discharge)
1=Exfiltration (Controls 0.02 cfs)

Pond 6P: RESIDENTIAL DRYWELL



Hydrograph for Pond 6P: RESIDENTIAL DRYWELL

Time (hours)	Inflow (cfs)	Storage (acre-feet)	Elevation (feet)	Discarded (cfs)
0.00	0.00	0.000	0.00	0.00
1.00	0.00	0.000	0.01	0.00
2.00	0.01	0.000	0.04	0.01
3.00	0.01	0.000	0.06	0.01
4.00	0.01	0.000	0.07	0.01
5.00	0.01	0.000	0.09	0.01
6.00	0.02	0.000	0.12	0.02
7.00	**0.02**	0.000	0.46	0.02
8.00	**0.09**	0.003	3.74	0.02
9.00	0.03	0.005	6.04	0.02
10.00	0.02	**0.005**	**6.50**	**0.02**
11.00	0.02	**0.005**	**6.55**	**0.02**
12.00	0.02	0.005	6.34	0.02
13.00	0.02	0.005	6.04	0.02
14.00	0.02	0.005	5.71	0.02
15.00	0.02	0.004	5.35	0.02
16.00	0.02	0.004	4.97	0.02
17.00	0.02	0.004	4.57	0.02
18.00	0.02	0.003	4.15	0.02
19.00	0.01	0.003	3.69	0.02
20.00	0.01	0.003	3.21	0.02
21.00	0.01	0.002	2.70	0.02
22.00	0.01	0.002	2.16	0.02
23.00	0.01	0.001	1.59	0.02
24.00	0.01	0.001	0.98	0.02
25.00	0.00	0.000	0.00	0.00
26.00	0.00	0.000	0.00	0.00
27.00	0.00	0.000	0.00	0.00
28.00	0.00	0.000	0.00	0.00

Time span=0.00-28.00 hrs, dt=0.01 hrs, 2801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: NORTH SIDE STREET Runoff Area=3,291 sf 100.00% Impervious Runoff Depth=4.46"
Tc=5.0 min CN=98 Runoff=0.09 cfs 0.028 af

Subcatchment 3S: SOUTH SIDE STREET Runoff Area=3,580 sf 100.00% Impervious Runoff Depth=4.46"
Tc=5.0 min CN=98 Runoff=0.09 cfs 0.031 af

Subcatchment 5S: LOT 4 ROOF Runoff Area=3,600 sf 100.00% Impervious Runoff Depth=4.46"
Tc=5.0 min CN=98 Runoff=0.09 cfs 0.031 af

Subcatchment 7S: LOT 4 LANDSCAPING Runoff Area=5,000 sf 0.00% Impervious Runoff Depth=1.19"
Tc=5.0 min CN=61 Runoff=0.02 cfs 0.011 af

Pond 2P: NORTH SIDE PLANTER Peak Elev=0.20' Storage=53 cf Inflow=0.09 cfs 0.028 af
Outflow=0.05 cfs 0.028 af

Pond 4P: SOUTH SIDE PLANTER Peak Elev=0.52' Storage=103 cf Inflow=0.09 cfs 0.031 af
Outflow=0.04 cfs 0.031 af

Pond 6P: RESIDENTIAL DRYWELL Peak Elev=10.21' Storage=0.008 af Inflow=0.11 cfs 0.042 af
Outflow=0.02 cfs 0.042 af

Total Runoff Area = 0.355 ac Runoff Volume = 0.101 af Average Runoff Depth = 3.41"
32.32% Pervious = 0.115 ac 67.68% Impervious = 0.240 ac

Summary for Subcatchment 1S: NORTH SIDE STREET

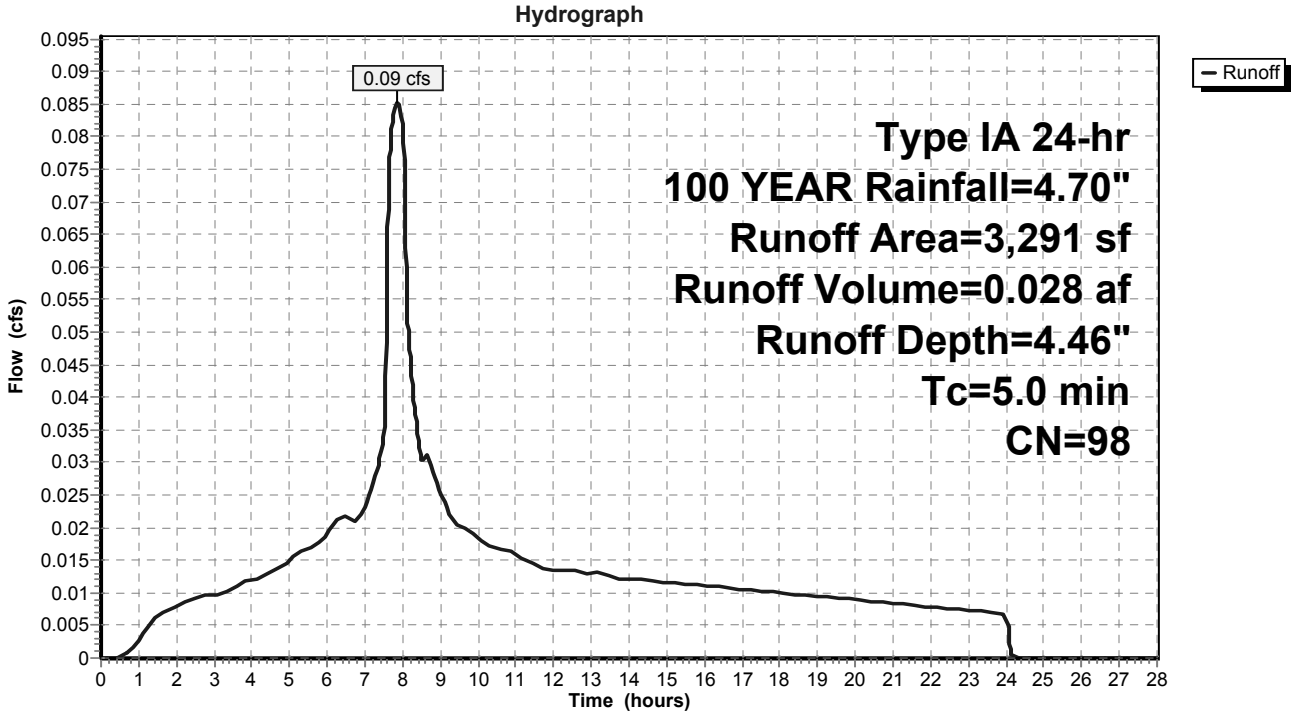
Runoff = 0.09 cfs @ 7.85 hrs, Volume= 0.028 af, Depth= 4.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Type IA 24-hr 100 YEAR Rainfall=4.70"

	Area (sf)	CN	Description
*	3,012	98	IMPERVIOUS AREA
*	279	100	PLANTER SURFACE
	3,291	98	Weighted Average
	3,291		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, MIMIMUM FLOW TIME**

Subcatchment 1S: NORTH SIDE STREET



Hydrograph for Subcatchment 1S: NORTH SIDE STREET

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
0.50	0.05	0.00	0.00
1.00	0.09	0.01	0.00
1.50	0.16	0.05	0.01
2.00	0.24	0.09	0.01
2.50	0.31	0.15	0.01
3.00	0.39	0.22	0.01
3.50	0.46	0.28	0.01
4.00	0.55	0.36	0.01
4.50	0.63	0.44	0.01
5.00	0.73	0.53	0.01
5.50	0.85	0.64	0.02
6.00	0.97	0.76	0.02
6.50	1.11	0.90	0.02
7.00	1.26	1.04	0.02
7.50	1.46	1.24	**0.03**
8.00	2.00	1.77	**0.08**
8.50	2.26	2.03	0.03
9.00	2.44	2.22	0.03
9.50	2.58	2.36	0.02
10.00	2.71	2.48	0.02
10.50	2.82	2.59	0.02
11.00	2.93	2.70	0.02
11.50	3.03	2.80	0.01
12.00	3.12	2.89	0.01
12.50	3.21	2.98	0.01
13.00	3.29	3.06	0.01
13.50	3.38	3.15	0.01
14.00	3.46	3.23	0.01
14.50	3.54	3.30	0.01
15.00	3.62	3.38	0.01
15.50	3.69	3.46	0.01
16.00	3.76	3.53	0.01
16.50	3.84	3.60	0.01
17.00	3.91	3.67	0.01
17.50	3.97	3.74	0.01
18.00	4.04	3.81	0.01
18.50	4.11	3.87	0.01
19.00	4.17	3.93	0.01
19.50	4.23	3.99	0.01
20.00	4.29	4.05	0.01
20.50	4.35	4.11	0.01
21.00	4.40	4.17	0.01
21.50	4.46	4.22	0.01
22.00	4.51	4.27	0.01
22.50	4.56	4.32	0.01
23.00	4.61	4.37	0.01
23.50	4.65	4.42	0.01
24.00	**4.70**	**4.46**	0.01
24.50	4.70	4.46	0.00
25.00	4.70	4.46	0.00
25.50	4.70	4.46	0.00
26.00	4.70	4.46	0.00
26.50	4.70	4.46	0.00
27.00	4.70	4.46	0.00
27.50	4.70	4.46	0.00
28.00	4.70	4.46	0.00

Summary for Subcatchment 3S: SOUTH SIDE STREET

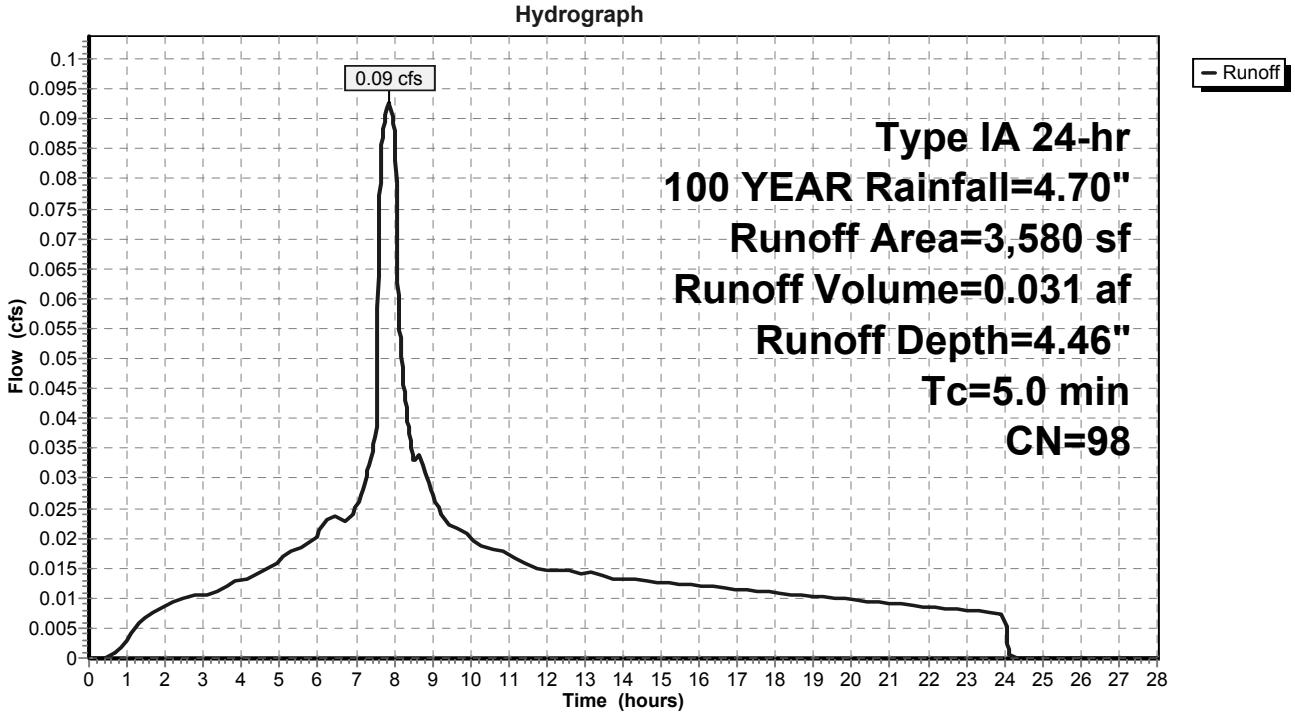
Runoff = 0.09 cfs @ 7.85 hrs, Volume= 0.031 af, Depth= 4.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Type IA 24-hr 100 YEAR Rainfall=4.70"

	Area (sf)	CN	Description
*	3,377	98	IMPERVIOUS AREA
*	203	100	PLANTER SURFACE
	3,580	98	Weighted Average
	3,580		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, MIMIMUM FLOW TIME**

Subcatchment 3S: SOUTH SIDE STREET



Hydrograph for Subcatchment 3S: SOUTH SIDE STREET

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
0.50	0.05	0.00	0.00
1.00	0.09	0.01	0.00
1.50	0.16	0.05	0.01
2.00	0.24	0.09	0.01
2.50	0.31	0.15	0.01
3.00	0.39	0.22	0.01
3.50	0.46	0.28	0.01
4.00	0.55	0.36	0.01
4.50	0.63	0.44	0.01
5.00	0.73	0.53	0.02
5.50	0.85	0.64	0.02
6.00	0.97	0.76	0.02
6.50	1.11	0.90	0.02
7.00	1.26	1.04	0.03
7.50	1.46	1.24	**0.04**
8.00	2.00	1.77	**0.09**
8.50	2.26	2.03	0.03
9.00	2.44	2.22	0.03
9.50	2.58	2.36	0.02
10.00	2.71	2.48	0.02
10.50	2.82	2.59	0.02
11.00	2.93	2.70	0.02
11.50	3.03	2.80	0.02
12.00	3.12	2.89	0.01
12.50	3.21	2.98	0.02
13.00	3.29	3.06	0.01
13.50	3.38	3.15	0.01
14.00	3.46	3.23	0.01
14.50	3.54	3.30	0.01
15.00	3.62	3.38	0.01
15.50	3.69	3.46	0.01
16.00	3.76	3.53	0.01
16.50	3.84	3.60	0.01
17.00	3.91	3.67	0.01
17.50	3.97	3.74	0.01
18.00	4.04	3.81	0.01
18.50	4.11	3.87	0.01
19.00	4.17	3.93	0.01
19.50	4.23	3.99	0.01
20.00	4.29	4.05	0.01
20.50	4.35	4.11	0.01
21.00	4.40	4.17	0.01
21.50	4.46	4.22	0.01
22.00	4.51	4.27	0.01
22.50	4.56	4.32	0.01
23.00	4.61	4.37	0.01
23.50	4.65	4.42	0.01
24.00	**4.70**	**4.46**	0.01
24.50	4.70	4.46	0.00
25.00	4.70	4.46	0.00
25.50	4.70	4.46	0.00
26.00	4.70	4.46	0.00
26.50	4.70	4.46	0.00
27.00	4.70	4.46	0.00
27.50	4.70	4.46	0.00
28.00	4.70	4.46	0.00

Summary for Subcatchment 5S: LOT 4 ROOF

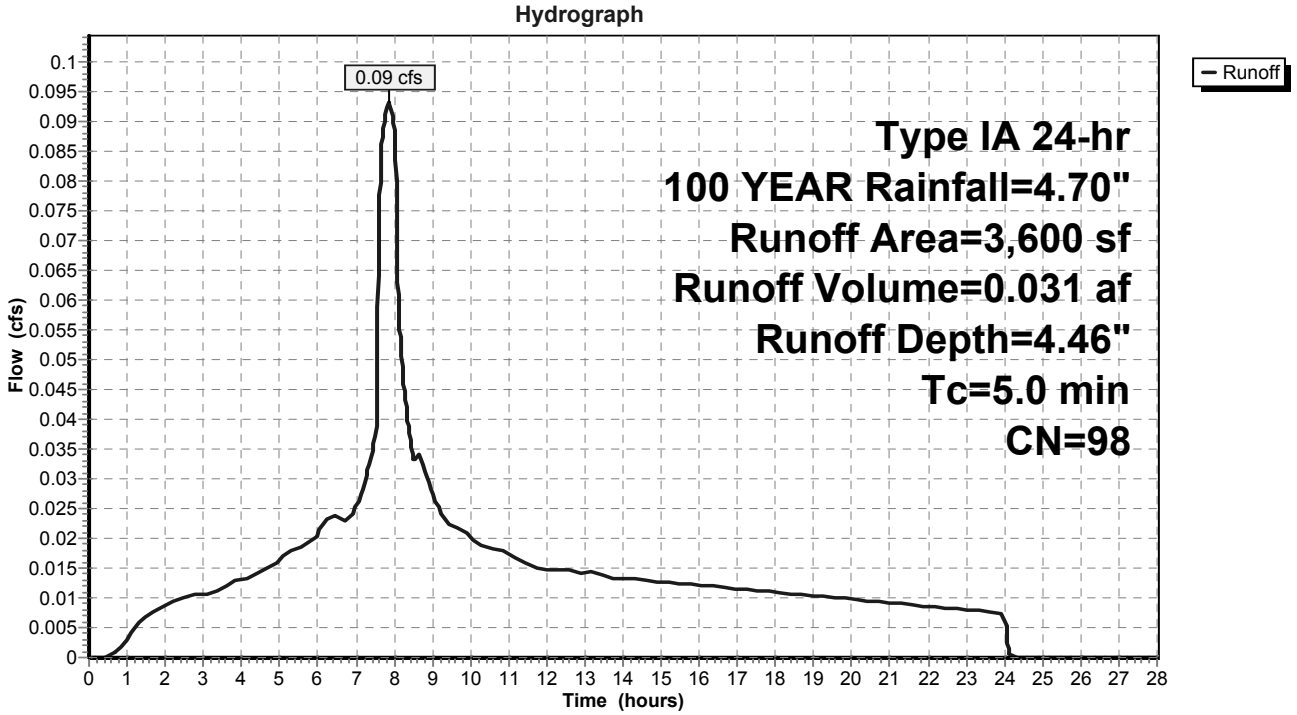
Runoff = 0.09 cfs @ 7.85 hrs, Volume= 0.031 af, Depth= 4.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Type IA 24-hr 100 YEAR Rainfall=4.70"

Area (sf)	CN	Description
3,600	98	Unconnected roofs, HSG B
3,600		100.00% Impervious Area
3,600		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, MINIMUM TC**

Subcatchment 5S: LOT 4 ROOF



Hydrograph for Subcatchment 5S: LOT 4 ROOF

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
0.50	0.05	0.00	0.00
1.00	0.09	0.01	0.00
1.50	0.16	0.05	0.01
2.00	0.24	0.09	0.01
2.50	0.31	0.15	0.01
3.00	0.39	0.22	0.01
3.50	0.46	0.28	0.01
4.00	0.55	0.36	0.01
4.50	0.63	0.44	0.01
5.00	0.73	0.53	0.02
5.50	0.85	0.64	0.02
6.00	0.97	0.76	0.02
6.50	1.11	0.90	0.02
7.00	1.26	1.04	0.03
7.50	1.46	1.24	**0.04**
8.00	2.00	1.77	**0.09**
8.50	2.26	2.03	0.03
9.00	2.44	2.22	0.03
9.50	2.58	2.36	0.02
10.00	2.71	2.48	0.02
10.50	2.82	2.59	0.02
11.00	2.93	2.70	0.02
11.50	3.03	2.80	0.02
12.00	3.12	2.89	0.01
12.50	3.21	2.98	0.02
13.00	3.29	3.06	0.01
13.50	3.38	3.15	0.01
14.00	3.46	3.23	0.01
14.50	3.54	3.30	0.01
15.00	3.62	3.38	0.01
15.50	3.69	3.46	0.01
16.00	3.76	3.53	0.01
16.50	3.84	3.60	0.01
17.00	3.91	3.67	0.01
17.50	3.97	3.74	0.01
18.00	4.04	3.81	0.01
18.50	4.11	3.87	0.01
19.00	4.17	3.93	0.01
19.50	4.23	3.99	0.01
20.00	4.29	4.05	0.01
20.50	4.35	4.11	0.01
21.00	4.40	4.17	0.01
21.50	4.46	4.22	0.01
22.00	4.51	4.27	0.01
22.50	4.56	4.32	0.01
23.00	4.61	4.37	0.01
23.50	4.65	4.42	0.01
24.00	**4.70**	**4.46**	0.01
24.50	4.70	4.46	0.00
25.00	4.70	4.46	0.00
25.50	4.70	4.46	0.00
26.00	4.70	4.46	0.00
26.50	4.70	4.46	0.00
27.00	4.70	4.46	0.00
27.50	4.70	4.46	0.00
28.00	4.70	4.46	0.00

Summary for Subcatchment 7S: LOT 4 LANDSCAPING

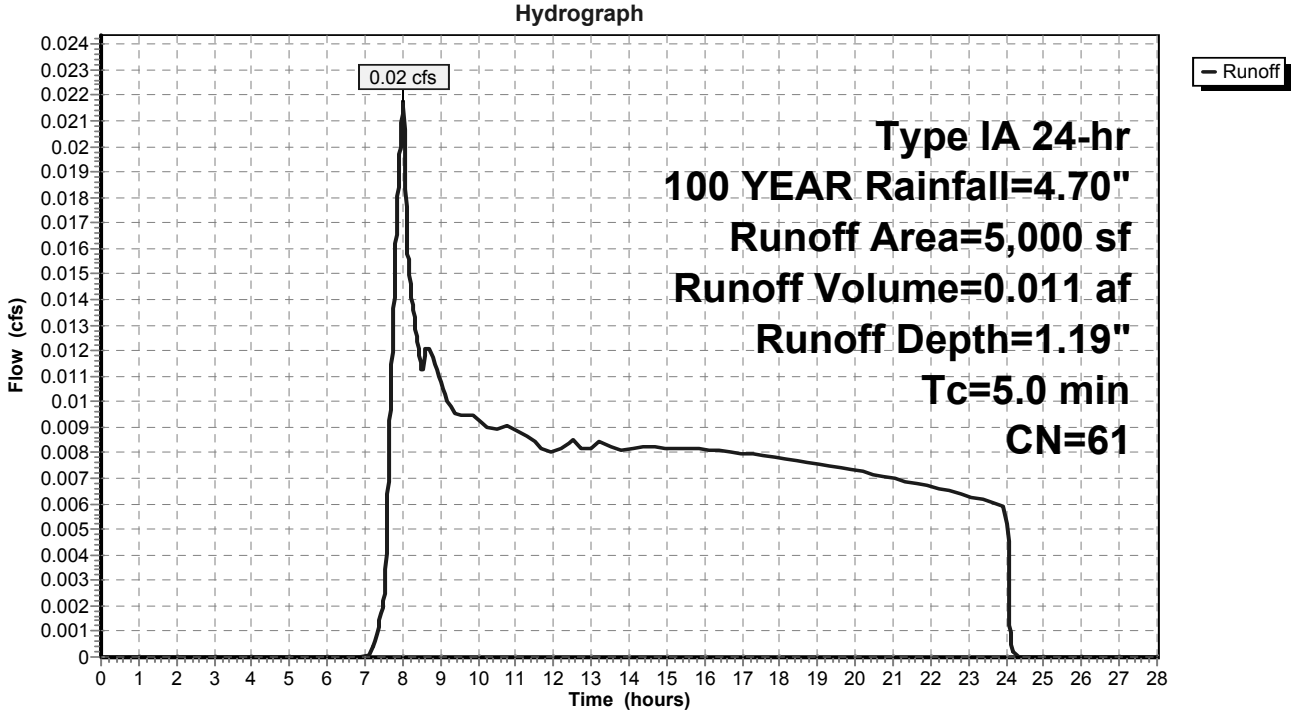
Runoff = 0.02 cfs @ 8.02 hrs, Volume= 0.011 af, Depth= 1.19"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Type IA 24-hr 100 YEAR Rainfall=4.70"

Area (sf)	CN	Description
5,000	61	>75% Grass cover, Good, HSG B
5,000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, MINIMUM TC**

Subcatchment 7S: LOT 4 LANDSCAPING



Hydrograph for Subcatchment 7S: LOT 4 LANDSCAPING

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
0.50	0.05	0.00	0.00
1.00	0.09	0.00	0.00
1.50	0.16	0.00	0.00
2.00	0.24	0.00	0.00
2.50	0.31	0.00	0.00
3.00	0.39	0.00	0.00
3.50	0.46	0.00	0.00
4.00	0.55	0.00	0.00
4.50	0.63	0.00	0.00
5.00	0.73	0.00	0.00
5.50	0.85	0.00	0.00
6.00	0.97	0.00	0.00
6.50	1.11	0.00	0.00
7.00	1.26	0.00	0.00
7.50	1.46	0.00	0.00
8.00	2.00	0.07	**0.02**
8.50	2.26	0.13	**0.01**
9.00	2.44	0.18	0.01
9.50	2.58	0.22	0.01
10.00	2.71	0.26	0.01
10.50	2.82	0.30	0.01
11.00	2.93	0.34	0.01
11.50	3.03	0.38	0.01
12.00	3.12	0.41	0.01
12.50	3.21	0.45	0.01
13.00	3.29	0.48	0.01
13.50	3.38	0.52	0.01
14.00	3.46	0.55	0.01
14.50	3.54	0.59	0.01
15.00	3.62	0.63	0.01
15.50	3.69	0.66	0.01
16.00	3.76	0.70	0.01
16.50	3.84	0.73	0.01
17.00	3.91	0.77	0.01
17.50	3.97	0.80	0.01
18.00	4.04	0.83	0.01
18.50	4.11	0.87	0.01
19.00	4.17	0.90	0.01
19.50	4.23	0.93	0.01
20.00	4.29	0.96	0.01
20.50	4.35	1.00	0.01
21.00	4.40	1.03	0.01
21.50	4.46	1.06	0.01
22.00	4.51	1.08	0.01
22.50	4.56	1.11	0.01
23.00	4.61	1.14	0.01
23.50	4.65	1.17	0.01
24.00	**4.70**	**1.19**	0.01
24.50	4.70	1.19	0.00
25.00	4.70	1.19	0.00
25.50	4.70	1.19	0.00
26.00	4.70	1.19	0.00
26.50	4.70	1.19	0.00
27.00	4.70	1.19	0.00
27.50	4.70	1.19	0.00
28.00	4.70	1.19	0.00

Summary for Pond 2P: NORTH SIDE PLANTER

Inflow Area = 0.076 ac,100.00% Impervious, Inflow Depth = 4.46" for 100 YEAR event
Inflow = 0.09 cfs @ 7.85 hrs, Volume= 0.028 af
Outflow = 0.05 cfs @ 8.13 hrs, Volume= 0.028 af, Atten= 39%, Lag= 16.8 min
Discarded = 0.05 cfs @ 8.13 hrs, Volume= 0.028 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Peak Elev= 0.20' @ 8.13 hrs Surf.Area= 279 sf Storage= 53 cf

Plug-Flow detention time= 2.3 min calculated for 0.028 af (100% of inflow)
Center-of-Mass det. time= 2.3 min (657.6 - 655.3)

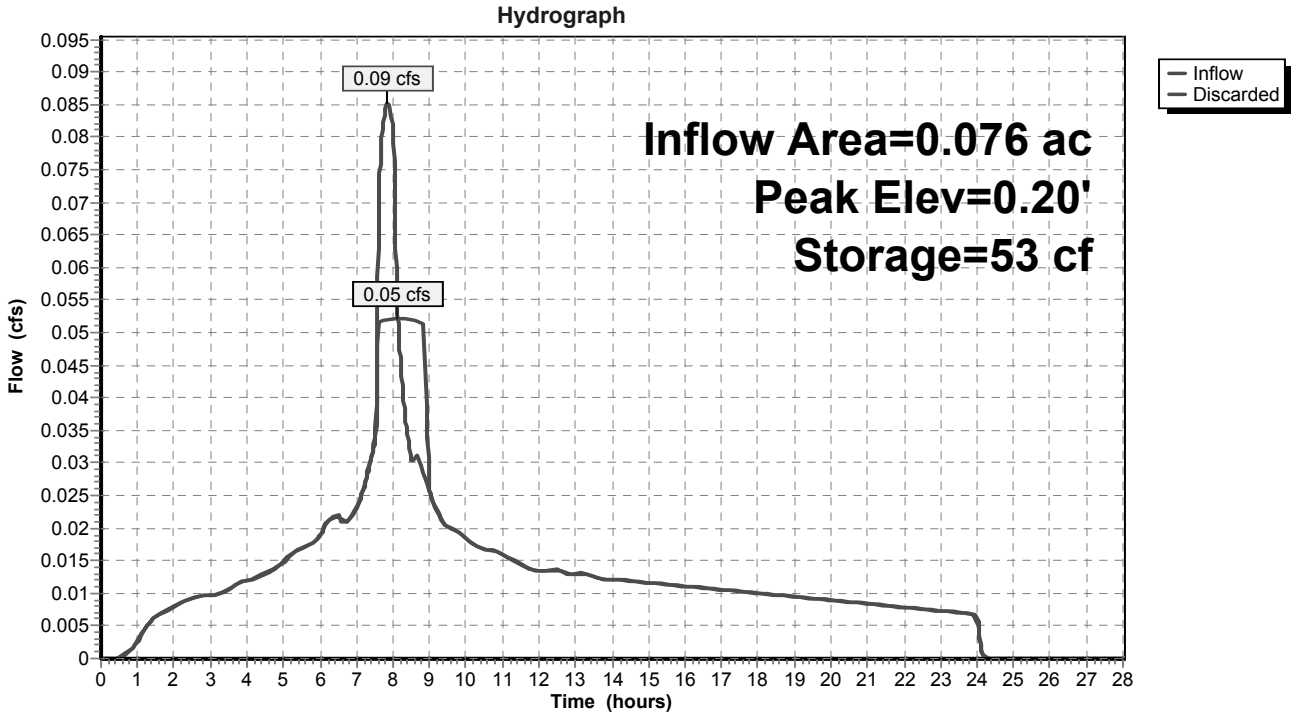
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	151 cf	**PLANTER FREEBOARD (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	1	0	0
0.02	279	3	3
0.55	279	148	151

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**8.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = -20.00'

Discarded OutFlow Max=0.05 cfs @ 8.13 hrs HW=0.20' (Free Discharge)
1=Exfiltration (Controls 0.05 cfs)

Pond 2P: NORTH SIDE PLANTER



Hydrograph for Pond 2P: NORTH SIDE PLANTER

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Discarded (cfs)
0.00	0.00	0	0.00	0.00
1.00	0.00	0	0.00	0.00
2.00	0.01	0	0.00	0.01
3.00	0.01	0	0.00	0.01
4.00	0.01	0	0.00	0.01
5.00	0.01	0	0.01	0.01
6.00	0.02	0	0.01	0.02
7.00	**0.02**	1	0.01	0.02
8.00	**0.08**	**46**	**0.17**	**0.05**
9.00	0.03	**1**	**0.01**	**0.03**
10.00	0.02	0	0.01	0.02
11.00	0.02	0	0.01	0.02
12.00	0.01	0	0.01	0.01
13.00	0.01	0	0.00	0.01
14.00	0.01	0	0.00	0.01
15.00	0.01	0	0.00	0.01
16.00	0.01	0	0.00	0.01
17.00	0.01	0	0.00	0.01
18.00	0.01	0	0.00	0.01
19.00	0.01	0	0.00	0.01
20.00	0.01	0	0.00	0.01
21.00	0.01	0	0.00	0.01
22.00	0.01	0	0.00	0.01
23.00	0.01	0	0.00	0.01
24.00	0.01	0	0.00	0.01
25.00	0.00	0	0.00	0.00
26.00	0.00	0	0.00	0.00
27.00	0.00	0	0.00	0.00
28.00	0.00	0	0.00	0.00

Summary for Pond 4P: SOUTH SIDE PLANTER

Inflow Area = 0.082 ac,100.00% Impervious, Inflow Depth = 4.46" for 100 YEAR event
Inflow = 0.09 cfs @ 7.85 hrs, Volume= 0.031 af
Outflow = 0.04 cfs @ 8.38 hrs, Volume= 0.031 af, Atten= 58%, Lag= 31.3 min
Discarded = 0.04 cfs @ 8.38 hrs, Volume= 0.031 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Peak Elev= 0.52' @ 8.38 hrs Surf.Area= 203 sf Storage= 103 cf

Plug-Flow detention time= 8.7 min calculated for 0.031 af (100% of inflow)
Center-of-Mass det. time= 8.7 min (664.0 - 655.3)

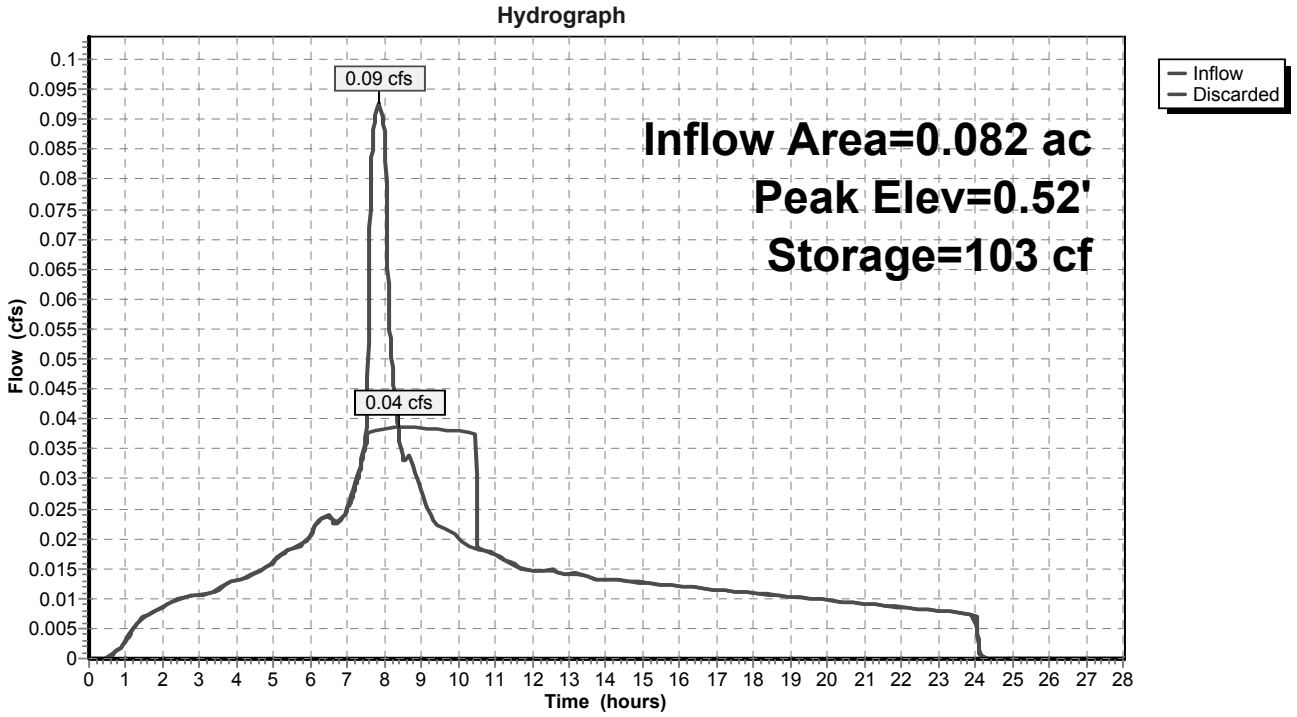
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	134 cf	**PLANTER FREEBOARD (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	1	0	0
0.02	203	2	2
0.67	203	132	134

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**8.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = -20.00'

Discarded OutFlow Max=0.04 cfs @ 8.38 hrs HW=0.52' (Free Discharge)
1=Exfiltration (Controls 0.04 cfs)

Pond 4P: SOUTH SIDE PLANTER



Hydrograph for Pond 4P: SOUTH SIDE PLANTER

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Discarded (cfs)
0.00	0.00	0	0.00	0.00
1.00	0.00	0	0.00	0.00
2.00	0.01	0	0.00	0.01
3.00	0.01	0	0.01	0.01
4.00	0.01	0	0.01	0.01
5.00	0.02	0	0.01	0.02
6.00	0.02	1	0.01	0.02
7.00	**0.03**	1	0.01	0.03
8.00	**0.09**	**80**	**0.40**	**0.04**
9.00	0.03	**90**	**0.45**	**0.04**
10.00	0.02	34	0.18	0.04
11.00	0.02	0	0.01	0.02
12.00	0.01	0	0.01	0.01
13.00	0.01	0	0.01	0.01
14.00	0.01	0	0.01	0.01
15.00	0.01	0	0.01	0.01
16.00	0.01	0	0.01	0.01
17.00	0.01	0	0.01	0.01
18.00	0.01	0	0.01	0.01
19.00	0.01	0	0.01	0.01
20.00	0.01	0	0.01	0.01
21.00	0.01	0	0.00	0.01
22.00	0.01	0	0.00	0.01
23.00	0.01	0	0.00	0.01
24.00	0.01	0	0.00	0.01
25.00	0.00	0	0.00	0.00
26.00	0.00	0	0.00	0.00
27.00	0.00	0	0.00	0.00
28.00	0.00	0	0.00	0.00

Summary for Pond 6P: RESIDENTIAL DRYWELL

Inflow Area = 0.197 ac, 41.86% Impervious, Inflow Depth = 2.56" for 100 YEAR event
Inflow = 0.11 cfs @ 7.92 hrs, Volume= 0.042 af
Outflow = 0.02 cfs @ 11.51 hrs, Volume= 0.042 af, Atten= 78%, Lag= 215.3 min
Discarded = 0.02 cfs @ 11.51 hrs, Volume= 0.042 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Peak Elev= 10.21' @ 11.51 hrs Surf.Area= 0.002 ac Storage= 0.008 af

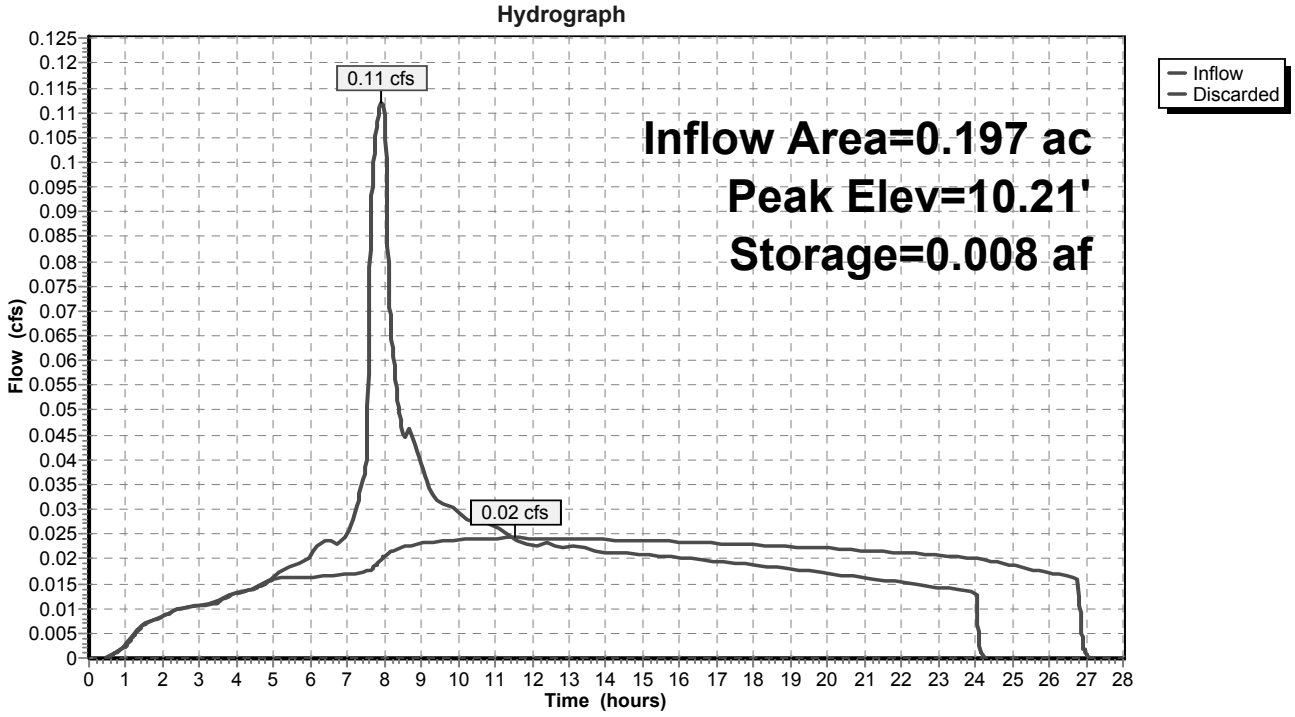
Plug-Flow detention time= 169.7 min calculated for 0.042 af (100% of inflow)
Center-of-Mass det. time= 169.7 min (889.9 - 720.2)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	0.006 af	**10.50'D x 10.50'H ROCK SECTION** 0.021 af Overall - 0.004 af Embedded = 0.017 af x 33.0% Voids
#2	0.00'	0.003 af	**4.00'D x 10.00'H DRYWELL** Inside #1 0.004 af Overall - 4.0" Wall Thickness = 0.003 af
		0.008 af	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**8.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = -20.00'

Discarded OutFlow Max=0.02 cfs @ 11.51 hrs HW=10.21' (Free Discharge)
1=Exfiltration (Controls 0.02 cfs)

Pond 6P: RESIDENTIAL DRYWELL



Hydrograph for Pond 6P: RESIDENTIAL DRYWELL

Time (hours)	Inflow (cfs)	Storage (acre-feet)	Elevation (feet)	Discarded (cfs)
0.00	0.00	0.000	0.00	0.00
1.00	0.00	0.000	0.02	0.00
2.00	0.01	0.000	0.05	0.01
3.00	0.01	0.000	0.07	0.01
4.00	0.01	0.000	0.09	0.01
5.00	0.02	0.000	0.10	0.02
6.00	0.02	0.000	0.33	0.02
7.00	**0.03**	0.001	1.01	0.02
8.00	**0.11**	0.005	5.55	0.02
9.00	0.04	0.007	8.86	0.02
10.00	0.03	0.008	9.76	0.02
11.00	0.03	**0.008**	**10.15**	**0.02**
12.00	0.02	**0.008**	**10.15**	**0.02**
13.00	0.02	0.008	9.98	0.02
14.00	0.02	0.008	9.78	0.02
15.00	0.02	0.008	9.52	0.02
16.00	0.02	0.008	9.22	0.02
17.00	0.02	0.007	8.87	0.02
18.00	0.02	0.007	8.48	0.02
19.00	0.02	0.007	8.05	0.02
20.00	0.02	0.006	7.56	0.02
21.00	0.02	0.006	7.03	0.02
22.00	0.02	0.005	6.45	0.02
23.00	0.01	0.005	5.82	0.02
24.00	0.01	0.004	5.15	0.02
25.00	0.00	0.003	3.28	0.02
26.00	0.00	0.001	1.46	0.02
27.00	0.00	0.000	0.00	0.00
28.00	0.00	0.000	0.00	0.00

Time span=0.00-28.00 hrs, dt=0.01 hrs, 2801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: NORTH SIDE STREET Runoff Area=3,291 sf 100.00% Impervious Runoff Depth=0.79"
Tc=5.0 min CN=98 Runoff=0.02 cfs 0.005 af

Subcatchment 3S: SOUTH SIDE STREET Runoff Area=3,580 sf 100.00% Impervious Runoff Depth=0.79"
Tc=5.0 min CN=98 Runoff=0.02 cfs 0.005 af

Subcatchment 5S: LOT 4 ROOF Runoff Area=3,600 sf 100.00% Impervious Runoff Depth=0.79"
Tc=5.0 min CN=98 Runoff=0.02 cfs 0.005 af

Subcatchment 7S: LOT 4 LANDSCAPING Runoff Area=5,000 sf 0.00% Impervious Runoff Depth=0.00"
Tc=5.0 min CN=61 Runoff=0.00 cfs 0.000 af

Pond 2P: NORTH SIDE PLANTER Peak Elev=0.01' Storage=0 cf Inflow=0.02 cfs 0.005 af
Outflow=0.02 cfs 0.005 af

Pond 4P: SOUTH SIDE PLANTER Peak Elev=0.01' Storage=0 cf Inflow=0.02 cfs 0.005 af
Outflow=0.02 cfs 0.005 af

Pond 6P: RESIDENTIAL DRYWELL Peak Elev=0.12' Storage=0.000 af Inflow=0.02 cfs 0.005 af
Outflow=0.02 cfs 0.005 af

Total Runoff Area = 0.355 ac Runoff Volume = 0.016 af Average Runoff Depth = 0.54"
32.32% Pervious = 0.115 ac 67.68% Impervious = 0.240 ac

Summary for Subcatchment 1S: NORTH SIDE STREET

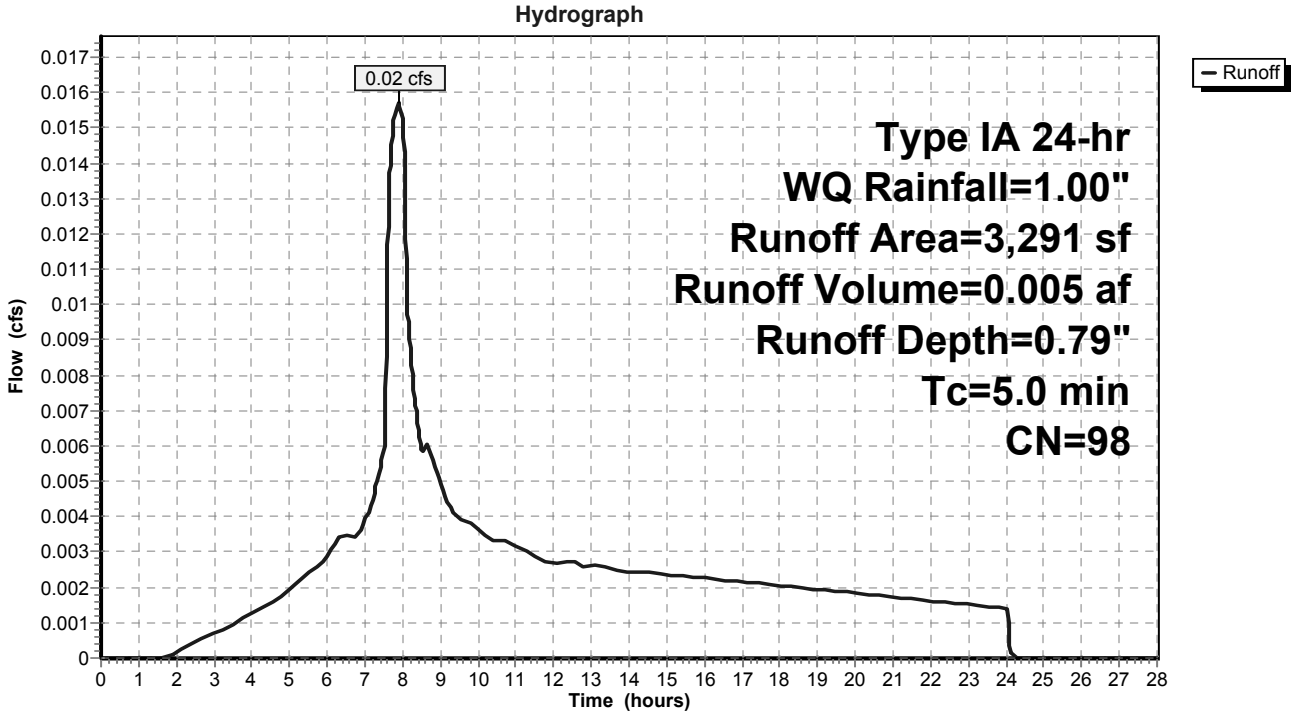
Runoff = 0.02 cfs @ 7.88 hrs, Volume= 0.005 af, Depth= 0.79"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Type IA 24-hr WQ Rainfall=1.00"

	Area (sf)	CN	Description
*	3,012	98	IMPERVIOUS AREA
*	279	100	PLANTER SURFACE
	3,291	98	Weighted Average
	3,291		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, MIMIMUM FLOW TIME**

Subcatchment 1S: NORTH SIDE STREET



Hydrograph for Subcatchment 1S: NORTH SIDE STREET

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
0.50	0.01	0.00	0.00
1.00	0.02	0.00	0.00
1.50	0.03	0.00	0.00
2.00	0.05	0.00	0.00
2.50	0.07	0.00	0.00
3.00	0.08	0.01	0.00
3.50	0.10	0.01	0.00
4.00	0.12	0.02	0.00
4.50	0.13	0.03	0.00
5.00	0.16	0.04	0.00
5.50	0.18	0.06	0.00
6.00	0.21	0.07	0.00
6.50	0.24	0.10	0.00
7.00	0.27	0.12	0.00
7.50	0.31	0.15	**0.01**
8.00	0.43	0.25	**0.02**
8.50	0.48	0.30	0.01
9.00	0.52	0.34	0.00
9.50	0.55	0.36	0.00
10.00	0.58	0.39	0.00
10.50	0.60	0.41	0.00
11.00	0.62	0.43	0.00
11.50	0.64	0.45	0.00
12.00	0.66	0.47	0.00
12.50	0.68	0.49	0.00
13.00	0.70	0.50	0.00
13.50	0.72	0.52	0.00
14.00	0.74	0.54	0.00
14.50	0.75	0.55	0.00
15.00	0.77	0.57	0.00
15.50	0.79	0.58	0.00
16.00	0.80	0.60	0.00
16.50	0.82	0.61	0.00
17.00	0.83	0.63	0.00
17.50	0.85	0.64	0.00
18.00	0.86	0.66	0.00
18.50	0.87	0.67	0.00
19.00	0.89	0.68	0.00
19.50	0.90	0.69	0.00
20.00	0.91	0.71	0.00
20.50	0.92	0.72	0.00
21.00	0.94	0.73	0.00
21.50	0.95	0.74	0.00
22.00	0.96	0.75	0.00
22.50	0.97	0.76	0.00
23.00	0.98	0.77	0.00
23.50	0.99	0.78	0.00
24.00	**1.00**	**0.79**	0.00
24.50	1.00	0.79	0.00
25.00	1.00	0.79	0.00
25.50	1.00	0.79	0.00
26.00	1.00	0.79	0.00
26.50	1.00	0.79	0.00
27.00	1.00	0.79	0.00
27.50	1.00	0.79	0.00
28.00	1.00	0.79	0.00

Summary for Subcatchment 3S: SOUTH SIDE STREET

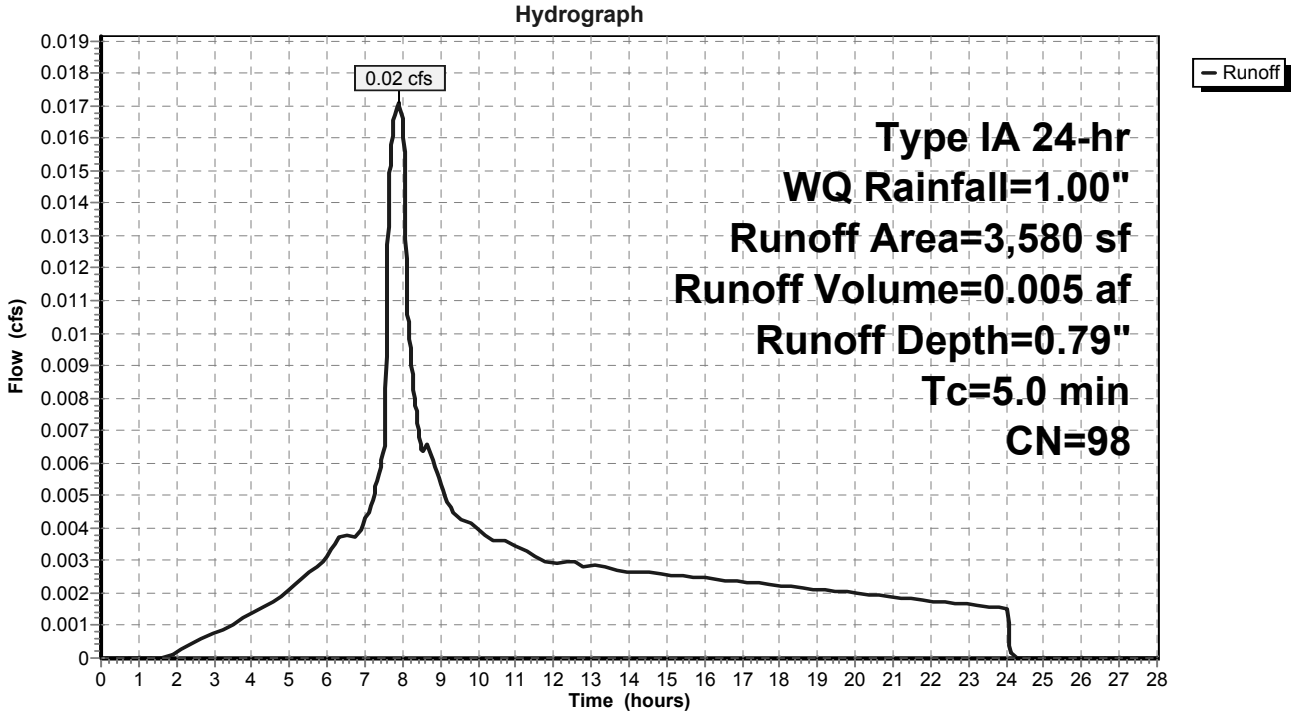
Runoff = 0.02 cfs @ 7.88 hrs, Volume= 0.005 af, Depth= 0.79"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Type IA 24-hr WQ Rainfall=1.00"

	Area (sf)	CN	Description
*	3,377	98	IMPERVIOUS AREA
*	203	100	PLANTER SURFACE
	3,580	98	Weighted Average
	3,580		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, MIMIMUM FLOW TIME**

Subcatchment 3S: SOUTH SIDE STREET



Hydrograph for Subcatchment 3S: SOUTH SIDE STREET

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
0.50	0.01	0.00	0.00
1.00	0.02	0.00	0.00
1.50	0.03	0.00	0.00
2.00	0.05	0.00	0.00
2.50	0.07	0.00	0.00
3.00	0.08	0.01	0.00
3.50	0.10	0.01	0.00
4.00	0.12	0.02	0.00
4.50	0.13	0.03	0.00
5.00	0.16	0.04	0.00
5.50	0.18	0.06	0.00
6.00	0.21	0.07	0.00
6.50	0.24	0.10	0.00
7.00	0.27	0.12	0.00
7.50	0.31	0.15	**0.01**
8.00	0.43	0.25	**0.02**
8.50	0.48	0.30	0.01
9.00	0.52	0.34	0.01
9.50	0.55	0.36	0.00
10.00	0.58	0.39	0.00
10.50	0.60	0.41	0.00
11.00	0.62	0.43	0.00
11.50	0.64	0.45	0.00
12.00	0.66	0.47	0.00
12.50	0.68	0.49	0.00
13.00	0.70	0.50	0.00
13.50	0.72	0.52	0.00
14.00	0.74	0.54	0.00
14.50	0.75	0.55	0.00
15.00	0.77	0.57	0.00
15.50	0.79	0.58	0.00
16.00	0.80	0.60	0.00
16.50	0.82	0.61	0.00
17.00	0.83	0.63	0.00
17.50	0.85	0.64	0.00
18.00	0.86	0.66	0.00
18.50	0.87	0.67	0.00
19.00	0.89	0.68	0.00
19.50	0.90	0.69	0.00
20.00	0.91	0.71	0.00
20.50	0.92	0.72	0.00
21.00	0.94	0.73	0.00
21.50	0.95	0.74	0.00
22.00	0.96	0.75	0.00
22.50	0.97	0.76	0.00
23.00	0.98	0.77	0.00
23.50	0.99	0.78	0.00
24.00	**1.00**	**0.79**	0.00
24.50	1.00	0.79	0.00
25.00	1.00	0.79	0.00
25.50	1.00	0.79	0.00
26.00	1.00	0.79	0.00
26.50	1.00	0.79	0.00
27.00	1.00	0.79	0.00
27.50	1.00	0.79	0.00
28.00	1.00	0.79	0.00

Summary for Subcatchment 5S: LOT 4 ROOF

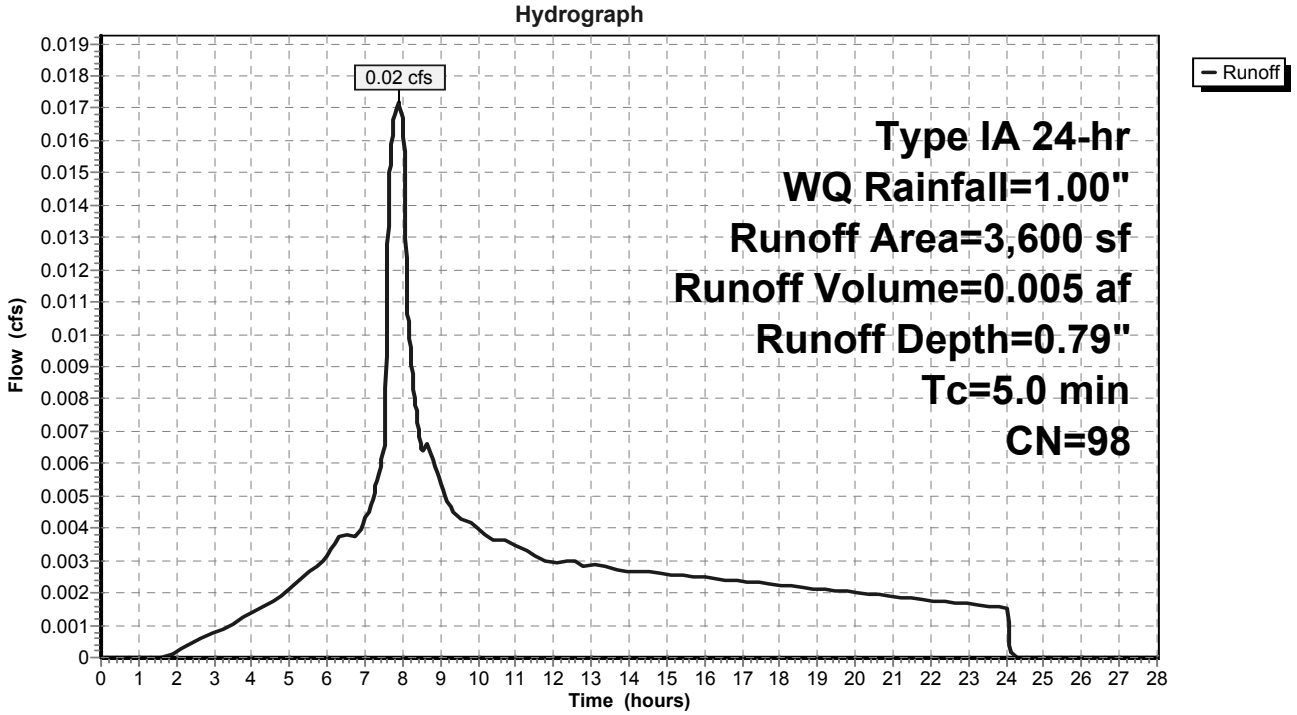
Runoff = 0.02 cfs @ 7.88 hrs, Volume= 0.005 af, Depth= 0.79"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Type IA 24-hr WQ Rainfall=1.00"

Area (sf)	CN	Description
3,600	98	Unconnected roofs, HSG B
3,600		100.00% Impervious Area
3,600		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, MINIMUM TC**

Subcatchment 5S: LOT 4 ROOF



Hydrograph for Subcatchment 5S: LOT 4 ROOF

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	0.00	0.00
0.50	0.01	0.00	0.00
1.00	0.02	0.00	0.00
1.50	0.03	0.00	0.00
2.00	0.05	0.00	0.00
2.50	0.07	0.00	0.00
3.00	0.08	0.01	0.00
3.50	0.10	0.01	0.00
4.00	0.12	0.02	0.00
4.50	0.13	0.03	0.00
5.00	0.16	0.04	0.00
5.50	0.18	0.06	0.00
6.00	0.21	0.07	0.00
6.50	0.24	0.10	0.00
7.00	0.27	0.12	0.00
7.50	0.31	0.15	**0.01**
8.00	0.43	0.25	**0.02**
8.50	0.48	0.30	0.01
9.00	0.52	0.34	0.01
9.50	0.55	0.36	0.00
10.00	0.58	0.39	0.00
10.50	0.60	0.41	0.00
11.00	0.62	0.43	0.00
11.50	0.64	0.45	0.00
12.00	0.66	0.47	0.00
12.50	0.68	0.49	0.00
13.00	0.70	0.50	0.00
13.50	0.72	0.52	0.00
14.00	0.74	0.54	0.00
14.50	0.75	0.55	0.00
15.00	0.77	0.57	0.00
15.50	0.79	0.58	0.00
16.00	0.80	0.60	0.00
16.50	0.82	0.61	0.00
17.00	0.83	0.63	0.00
17.50	0.85	0.64	0.00
18.00	0.86	0.66	0.00
18.50	0.87	0.67	0.00
19.00	0.89	0.68	0.00
19.50	0.90	0.69	0.00
20.00	0.91	0.71	0.00
20.50	0.92	0.72	0.00
21.00	0.94	0.73	0.00
21.50	0.95	0.74	0.00
22.00	0.96	0.75	0.00
22.50	0.97	0.76	0.00
23.00	0.98	0.77	0.00
23.50	0.99	0.78	0.00
24.00	**1.00**	**0.79**	0.00
24.50	1.00	0.79	0.00
25.00	1.00	0.79	0.00
25.50	1.00	0.79	0.00
26.00	1.00	0.79	0.00
26.50	1.00	0.79	0.00
27.00	1.00	0.79	0.00
27.50	1.00	0.79	0.00
28.00	1.00	0.79	0.00

Summary for Subcatchment 7S: LOT 4 LANDSCAPING

[45] Hint: Runoff=Zero

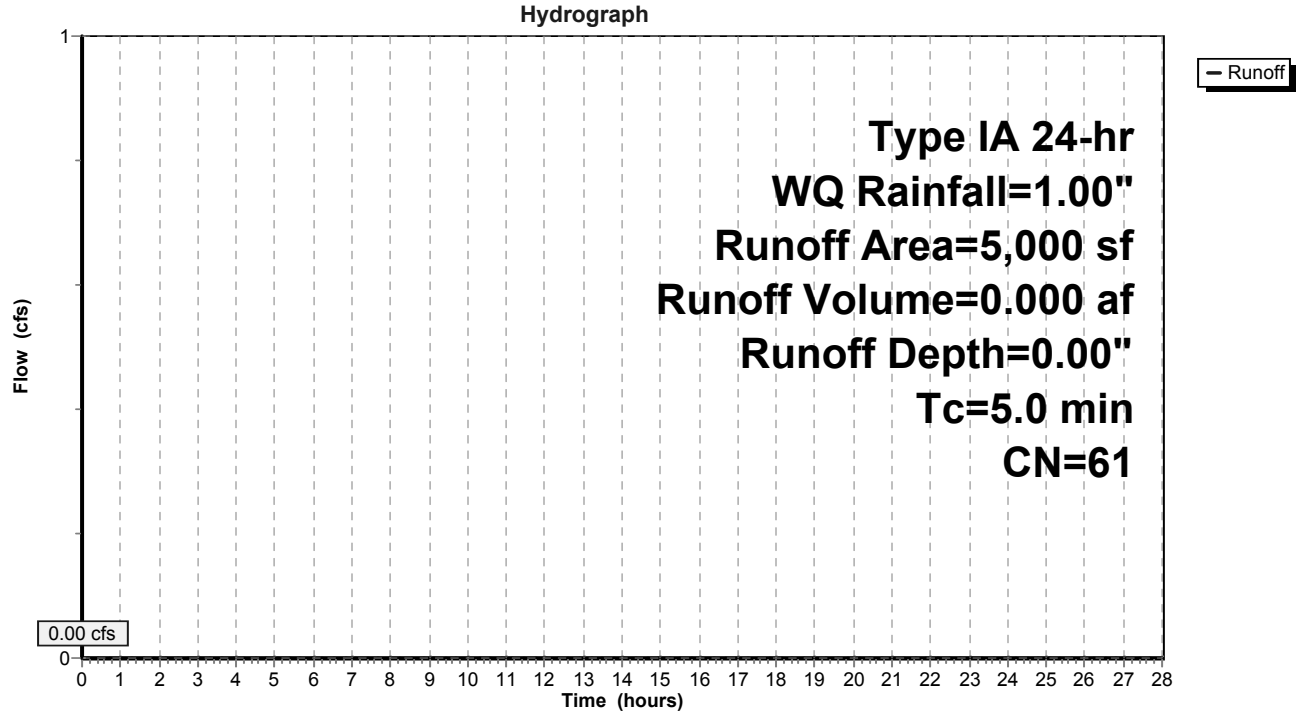
Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Type IA 24-hr WQ Rainfall=1.00"

Area (sf)	CN	Description
5,000	61	>75% Grass cover, Good, HSG B
5,000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry, MINIMUM TC**

Subcatchment 7S: LOT 4 LANDSCAPING



Hydrograph for Subcatchment 7S: LOT 4 LANDSCAPING

Time (hours)	Precip. (inches)	Excess (inches)	Runoff (cfs)
0.00	0.00	**0.00**	**0.00**
0.50	0.01	0.00	0.00
1.00	0.02	0.00	0.00
1.50	0.03	0.00	0.00
2.00	0.05	0.00	0.00
2.50	0.07	0.00	0.00
3.00	0.08	0.00	0.00
3.50	0.10	0.00	0.00
4.00	0.12	0.00	0.00
4.50	0.13	0.00	0.00
5.00	0.16	0.00	0.00
5.50	0.18	0.00	0.00
6.00	0.21	0.00	0.00
6.50	0.24	0.00	0.00
7.00	0.27	0.00	0.00
7.50	0.31	0.00	0.00
8.00	0.43	0.00	0.00
8.50	0.48	0.00	0.00
9.00	0.52	0.00	0.00
9.50	0.55	0.00	0.00
10.00	0.58	0.00	0.00
10.50	0.60	0.00	0.00
11.00	0.62	0.00	0.00
11.50	0.64	0.00	0.00
12.00	0.66	0.00	0.00
12.50	0.68	0.00	0.00
13.00	0.70	0.00	0.00
13.50	0.72	0.00	0.00
14.00	0.74	0.00	0.00
14.50	0.75	0.00	0.00
15.00	0.77	0.00	0.00
15.50	0.79	0.00	0.00
16.00	0.80	0.00	0.00
16.50	0.82	0.00	0.00
17.00	0.83	0.00	0.00
17.50	0.85	0.00	0.00
18.00	0.86	0.00	0.00
18.50	0.87	0.00	0.00
19.00	0.89	0.00	0.00
19.50	0.90	0.00	0.00
20.00	0.91	0.00	0.00
20.50	0.92	0.00	0.00
21.00	0.94	0.00	0.00
21.50	0.95	0.00	0.00
22.00	0.96	0.00	0.00
22.50	0.97	0.00	0.00
23.00	0.98	0.00	0.00
23.50	0.99	0.00	0.00
24.00	**1.00**	0.00	0.00
24.50	1.00	0.00	0.00
25.00	1.00	0.00	0.00
25.50	1.00	0.00	0.00
26.00	1.00	0.00	0.00
26.50	1.00	0.00	0.00
27.00	1.00	0.00	0.00
27.50	1.00	0.00	0.00
28.00	1.00	0.00	0.00

Summary for Pond 2P: NORTH SIDE PLANTER

Inflow Area = 0.076 ac,100.00% Impervious, Inflow Depth = 0.79" for WQ event
Inflow = 0.02 cfs @ 7.88 hrs, Volume= 0.005 af
Outflow = 0.02 cfs @ 7.90 hrs, Volume= 0.005 af, Atten= 0%, Lag= 0.8 min
Discarded = 0.02 cfs @ 7.90 hrs, Volume= 0.005 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Peak Elev= 0.01' @ 7.90 hrs Surf.Area= 85 sf Storage= 0 cf

Plug-Flow detention time= 0.3 min calculated for 0.005 af (100% of inflow)
Center-of-Mass det. time= 0.3 min (712.2 - 712.0)

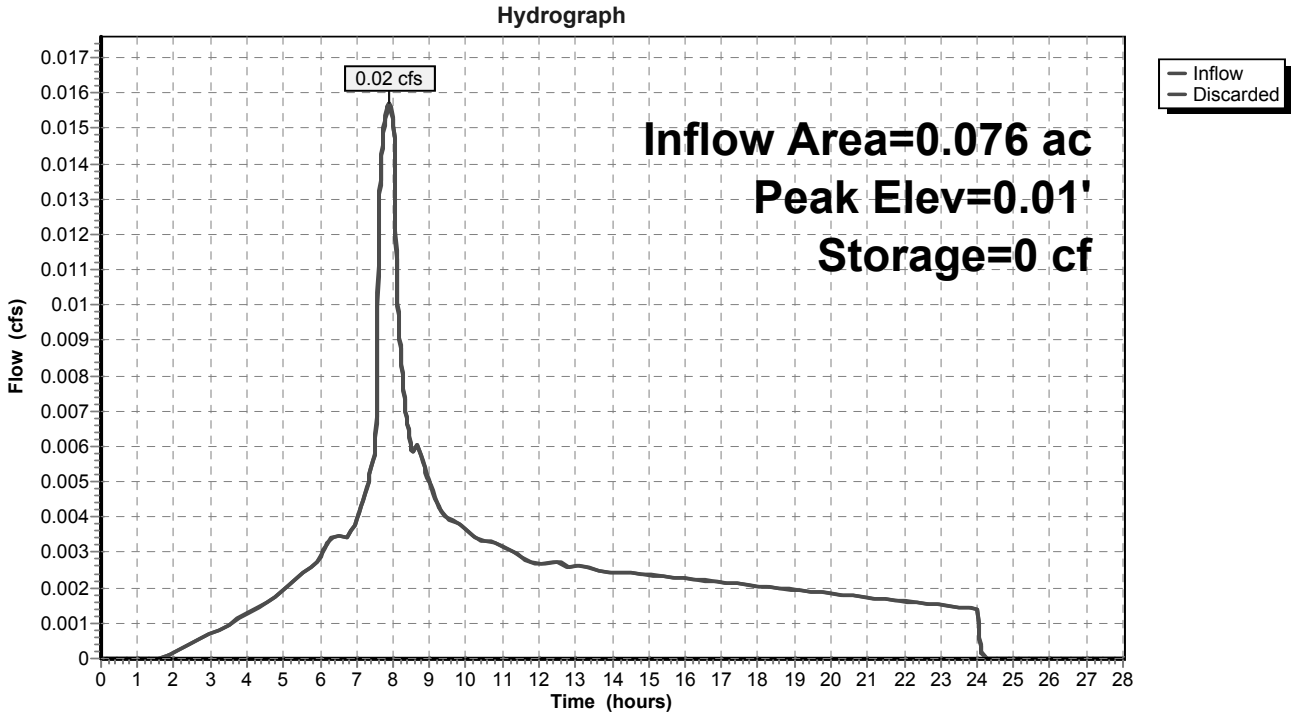
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	151 cf	**PLANTER FREEBOARD (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	1	0	0
0.02	279	3	3
0.55	279	148	151

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**8.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = -20.00'

Discarded OutFlow Max=0.02 cfs @ 7.90 hrs HW=0.01' (Free Discharge)
↑**1=Exfiltration** (Controls 0.02 cfs)

Pond 2P: NORTH SIDE PLANTER



Hydrograph for Pond 2P: NORTH SIDE PLANTER

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Discarded (cfs)
0.00	0.00	0	0.00	0.00
1.00	0.00	0	0.00	0.00
2.00	0.00	0	0.00	0.00
3.00	0.00	0	0.00	0.00
4.00	0.00	0	0.00	0.00
5.00	0.00	0	0.00	0.00
6.00	0.00	0	0.00	0.00
7.00	**0.00**	**0**	**0.00**	**0.00**
8.00	**0.02**	**0**	**0.01**	**0.02**
9.00	0.00	0	0.00	0.00
10.00	0.00	0	0.00	0.00
11.00	0.00	0	0.00	0.00
12.00	0.00	0	0.00	0.00
13.00	0.00	0	0.00	0.00
14.00	0.00	0	0.00	0.00
15.00	0.00	0	0.00	0.00
16.00	0.00	0	0.00	0.00
17.00	0.00	0	0.00	0.00
18.00	0.00	0	0.00	0.00
19.00	0.00	0	0.00	0.00
20.00	0.00	0	0.00	0.00
21.00	0.00	0	0.00	0.00
22.00	0.00	0	0.00	0.00
23.00	0.00	0	0.00	0.00
24.00	0.00	0	0.00	0.00
25.00	0.00	0	0.00	0.00
26.00	0.00	0	0.00	0.00
27.00	0.00	0	0.00	0.00
28.00	0.00	0	0.00	0.00

Summary for Pond 4P: SOUTH SIDE PLANTER

Inflow Area = 0.082 ac,100.00% Impervious, Inflow Depth = 0.79" for WQ event
Inflow = 0.02 cfs @ 7.88 hrs, Volume= 0.005 af
Outflow = 0.02 cfs @ 7.90 hrs, Volume= 0.005 af, Atten= 0%, Lag= 0.9 min
Discarded = 0.02 cfs @ 7.90 hrs, Volume= 0.005 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Peak Elev= 0.01' @ 7.90 hrs Surf.Area= 92 sf Storage= 0 cf

Plug-Flow detention time= 0.3 min calculated for 0.005 af (100% of inflow)
Center-of-Mass det. time= 0.3 min (712.3 - 712.0)

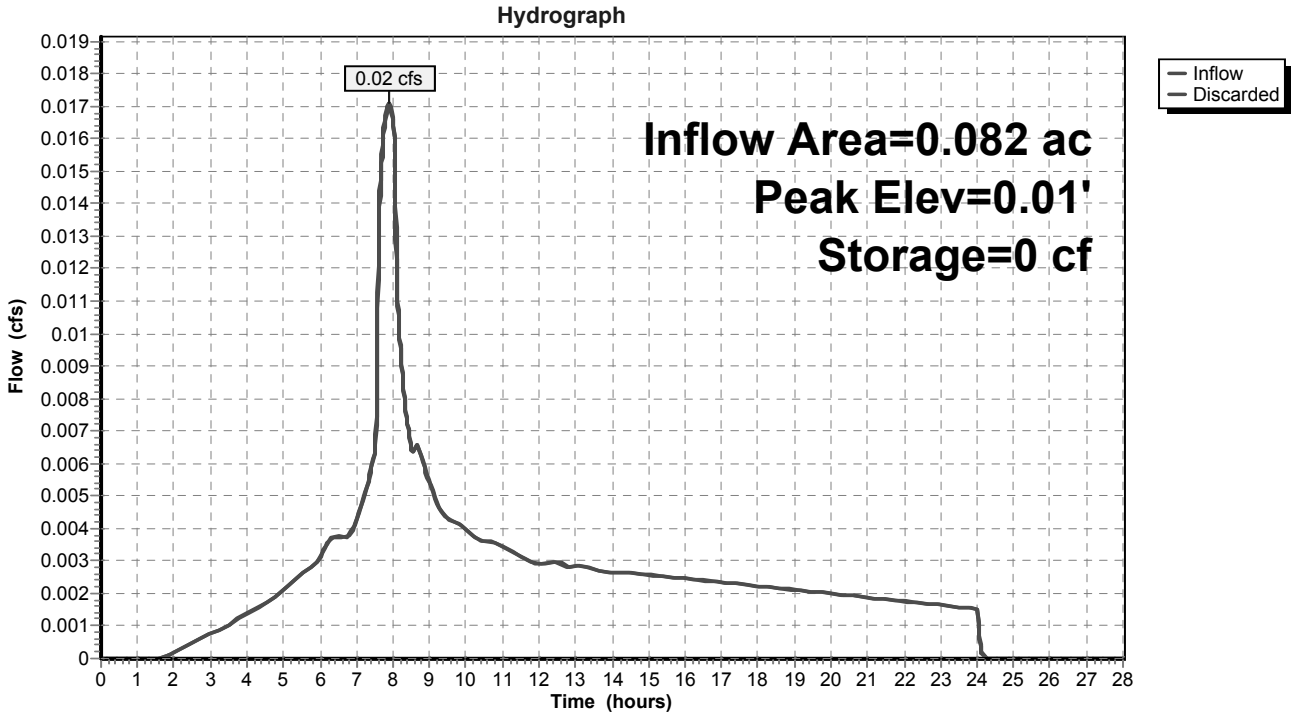
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	134 cf	**PLANTER FREEBOARD (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	1	0	0
0.02	203	2	2
0.67	203	132	134

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**8.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = -20.00'

Discarded OutFlow Max=0.02 cfs @ 7.90 hrs HW=0.01' (Free Discharge)
↑**1=Exfiltration** (Controls 0.02 cfs)

Pond 4P: SOUTH SIDE PLANTER



Hydrograph for Pond 4P: SOUTH SIDE PLANTER

Time (hours)	Inflow (cfs)	Storage (cubic-feet)	Elevation (feet)	Discarded (cfs)
0.00	0.00	0	0.00	0.00
1.00	0.00	0	0.00	0.00
2.00	0.00	0	0.00	0.00
3.00	0.00	0	0.00	0.00
4.00	0.00	0	0.00	0.00
5.00	0.00	0	0.00	0.00
6.00	0.00	0	0.00	0.00
7.00	**0.00**	**0**	**0.00**	**0.00**
8.00	**0.02**	**0**	**0.01**	**0.02**
9.00	0.01	0	0.00	0.01
10.00	0.00	0	0.00	0.00
11.00	0.00	0	0.00	0.00
12.00	0.00	0	0.00	0.00
13.00	0.00	0	0.00	0.00
14.00	0.00	0	0.00	0.00
15.00	0.00	0	0.00	0.00
16.00	0.00	0	0.00	0.00
17.00	0.00	0	0.00	0.00
18.00	0.00	0	0.00	0.00
19.00	0.00	0	0.00	0.00
20.00	0.00	0	0.00	0.00
21.00	0.00	0	0.00	0.00
22.00	0.00	0	0.00	0.00
23.00	0.00	0	0.00	0.00
24.00	0.00	0	0.00	0.00
25.00	0.00	0	0.00	0.00
26.00	0.00	0	0.00	0.00
27.00	0.00	0	0.00	0.00
28.00	0.00	0	0.00	0.00

Summary for Pond 6P: RESIDENTIAL DRYWELL

Inflow Area = 0.197 ac, 41.86% Impervious, Inflow Depth = 0.33" for WQ event
Inflow = 0.02 cfs @ 7.88 hrs, Volume= 0.005 af
Outflow = 0.02 cfs @ 8.03 hrs, Volume= 0.005 af, Atten= 6%, Lag= 8.7 min
Discarded = 0.02 cfs @ 8.03 hrs, Volume= 0.005 af

Routing by Stor-Ind method, Time Span= 0.00-28.00 hrs, dt= 0.01 hrs
Peak Elev= 0.12' @ 8.03 hrs Surf.Area= 0.002 ac Storage= 0.000 af

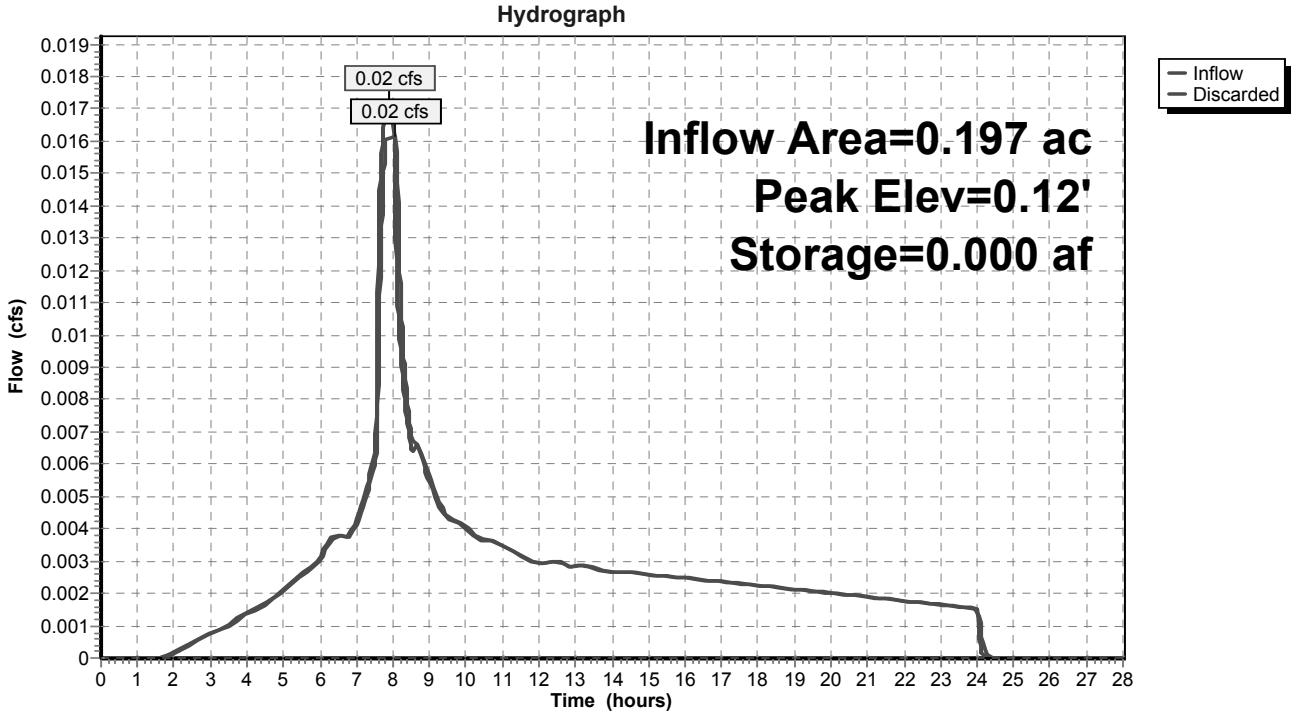
Plug-Flow detention time= 3.9 min calculated for 0.005 af (100% of inflow)
Center-of-Mass det. time= 3.9 min (715.9 - 712.0)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	0.006 af	**10.50'D x 10.50'H ROCK SECTION** 0.021 af Overall - 0.004 af Embedded = 0.017 af x 33.0% Voids
#2	0.00'	0.003 af	**4.00'D x 10.00'H DRYWELL** Inside #1 0.004 af Overall - 4.0" Wall Thickness = 0.003 af
		0.008 af	Total Available Storage

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	**8.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = -20.00'

Discarded OutFlow Max=0.02 cfs @ 8.03 hrs HW=0.12' (Free Discharge)
1=Exfiltration (Controls 0.02 cfs)

Pond 6P: RESIDENTIAL DRYWELL



Hydrograph for Pond 6P: RESIDENTIAL DRYWELL

Time (hours)	Inflow (cfs)	Storage (acre-feet)	Elevation (feet)	Discarded (cfs)
0.00	0.00	0.000	0.00	0.00
1.00	0.00	0.000	0.00	0.00
2.00	0.00	0.000	0.00	0.00
3.00	0.00	0.000	0.00	0.00
4.00	0.00	0.000	0.01	0.00
5.00	0.00	0.000	0.01	0.00
6.00	0.00	0.000	0.02	0.00
7.00	**0.00**	0.000	0.03	0.00
8.00	**0.02**	**0.000**	**0.12**	**0.02**
9.00	0.01	**0.000**	**0.04**	**0.01**
10.00	0.00	0.000	0.03	0.00
11.00	0.00	0.000	0.02	0.00
12.00	0.00	0.000	0.02	0.00
13.00	0.00	0.000	0.02	0.00
14.00	0.00	0.000	0.02	0.00
15.00	0.00	0.000	0.02	0.00
16.00	0.00	0.000	0.02	0.00
17.00	0.00	0.000	0.02	0.00
18.00	0.00	0.000	0.01	0.00
19.00	0.00	0.000	0.01	0.00
20.00	0.00	0.000	0.01	0.00
21.00	0.00	0.000	0.01	0.00
22.00	0.00	0.000	0.01	0.00
23.00	0.00	0.000	0.01	0.00
24.00	0.00	0.000	0.01	0.00
25.00	0.00	0.000	0.00	0.00
26.00	0.00	0.000	0.00	0.00
27.00	0.00	0.000	0.00	0.00
28.00	0.00	0.000	0.00	0.00

PAC Report

Project Name Logus Road	Permit No.	Created 5/28/17 12:19 PM
Project Address 4543 Logus Rd. Milwaukie, OR 97222	Designer BP	Last Modified 5/28/17 1:23 PM
	Company BMP Design LLC	Report Generated 5/28/17 1:23 PM

Project Summary

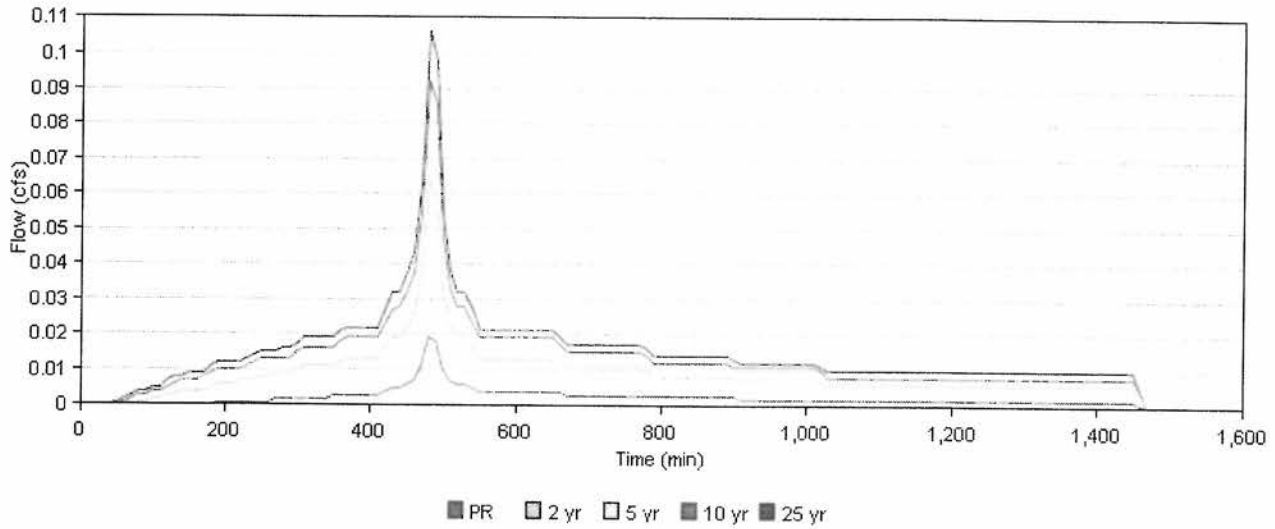
4 lots partition

Catchment Name	Impervious Area (sq ft)	Native Soil Design Infiltration Rate	Hierarchy Category	Facility Type	Facility Config	Facility Size (sq ft)	Facility Sizing Ratio	PR Results	Flow Control Results
North Side Melody	4507	16.00	1	Planter (Flat)	A	460	10.2%	Pass	Not Used
South Side Melody	3600	16.00	1	Basin	A	150	19%	Pass	Not Used

Catchment North Side Melody

Site Soils & Infiltration Testing Data	Infiltration Testing Procedure	**Open Pit Falling Head**
	Native Soil Infiltration Rate (I_{test})	**16.00**
Correction Factor	CF_{test}	**2**
Design Infiltration Rates	Native Soil (I_{dsgn})	**8.00 in/hr**
	Imported Growing Medium	**2.00 in/hr**
Catchment Information	Hierarchy Category	**1**
	Hierarchy Description	**On-site infiltration with a surface infiltration facility**
	Pollution Reduction Requirement	**Pass**
	10-year Storm Requirement	**Pass**
	Flow Control Requirement	**Pass**
	Impervious Area	**4507 sq ft** **0.103 acre**
	Time of Concentration (Tc)	**5**
	Post-Development Curve Number (CN_{post})	**98**

SBUH Results

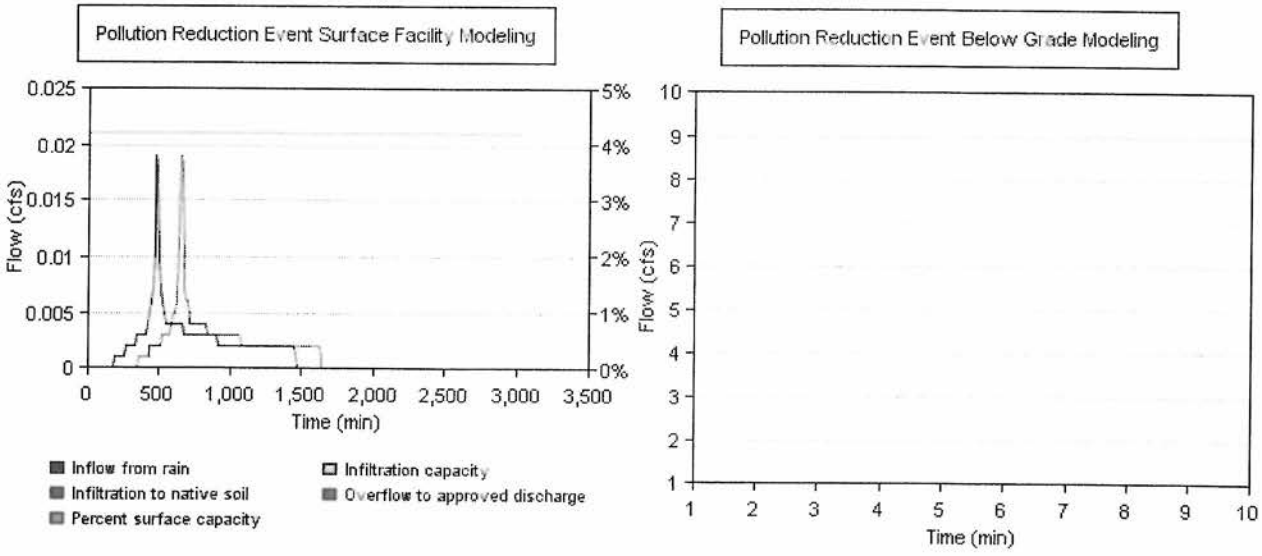


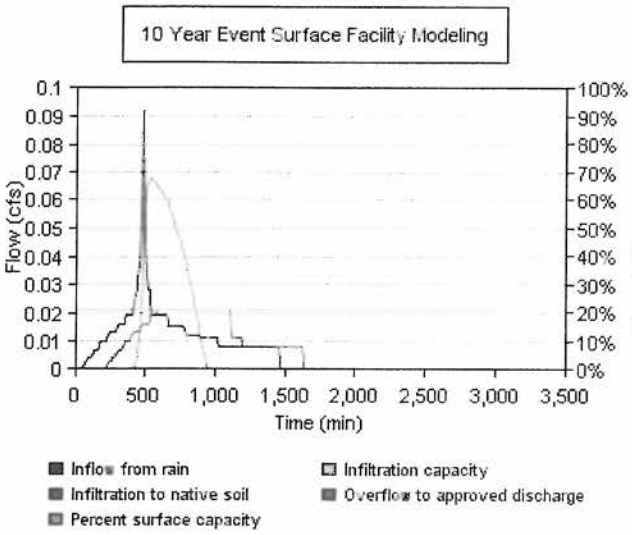
	Peak Rate (cfs)	Volume (cf)
PR	0.019	235.503
2 yr	0.064	815.523
5 yr	0.078	1002.319
10 yr	0.092	1189.394

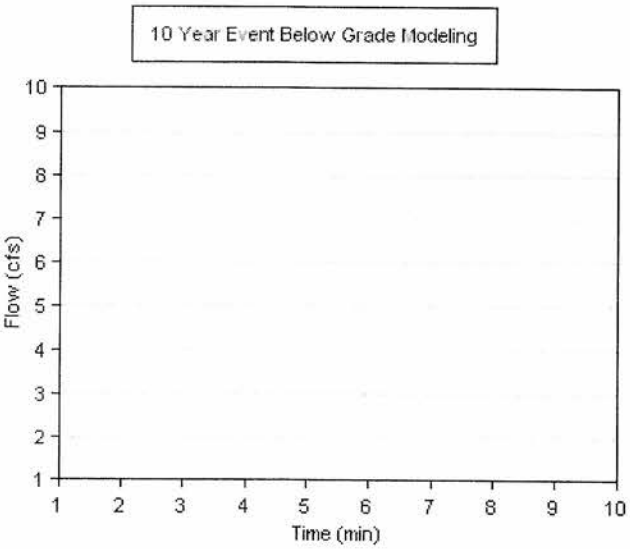
25 yr	0.106	1376.645

Facility North Side Melody

Facility Details	Facility Type	**Planter (Flat)**
	Facility Configuration	**A: Infiltration (Infl.)**
	Facility Shape	**Planter**
	Above Grade Storage Data	
	Bottom Area	**460 sq ft**
	Bottom Width	**5.00 ft**
	Storage Depth 1	**6.0 in**
	Growing Medium Depth	**18 in**
	Surface Capacity at Depth 1	**230.0 cu ft**
	Design Infiltration Rate for Native Soil	**0.085 in/hr**
	Infiltration Capacity	**0.021 cfs**
Facility Facts	Total Facility Area Including Freeboard	**460.00 sq ft**
	Sizing Ratio	**10.2%**
Pollution Reduction Results	Pollution Reduction Score	**Pass**
	Overflow Volume	**0.000 cf**
	Surface Capacity Used	**0%**
10 Year Results	10 Year Score	**Pass**
	Overflow Volume	**0.000 cf**
	Surface Capacity Used	**0%**



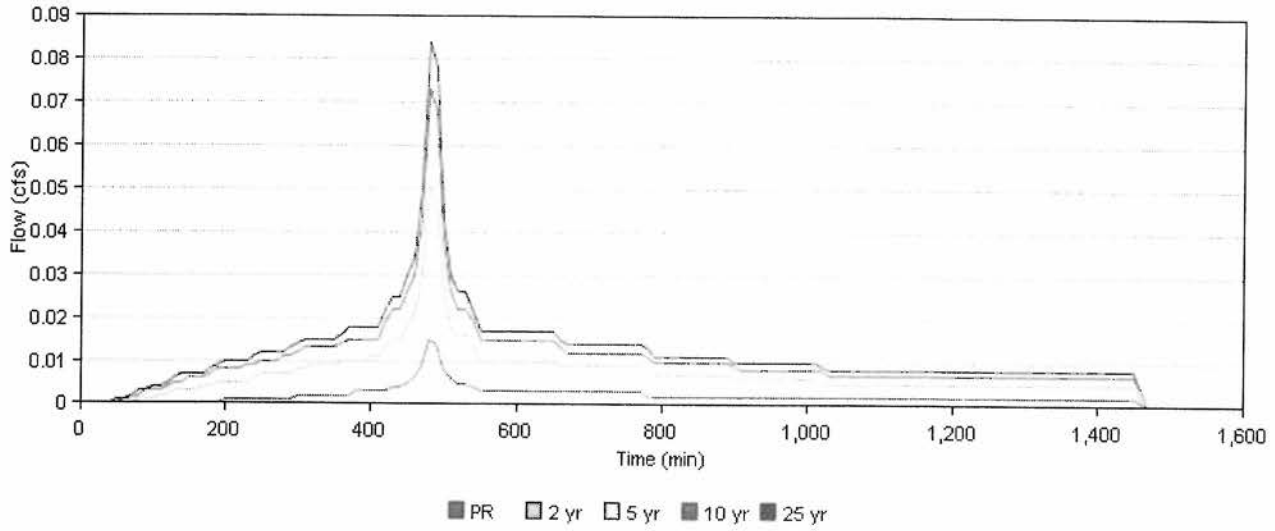

10 Year Event Surface Facility Modeling
Flow (cfs)
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
0
500
1,000
1,500
2,000
2,500
3,000
3,500
Time (min)
Inflow from rain
Infiltration capacity
Infiltration to native soil
Overflow to approved discharge
Percent surface capacity


10 Year Event Below Grade Modeling
Flow (cfs)
10
9
8
7
6
5
4
3
2
1
1
2
3
4
5
6
7
8
9
10
Time (min)

Catchment South Side Melody

Site Soils & Infiltration Testing Data	Infiltration Testing Procedure	**Open Pit Falling Head**
	Native Soil Infiltration Rate (I_{test})	**16.00**
Correction Factor	CF_{test}	**2**
Design Infiltration Rates	Native Soil (I_{design})	**8.00 in/hr**
	Imported Growing Medium	**2.00 in/hr**
Catchment Information	Hierarchy Category	**1**
	Hierarchy Description	**On-site infiltration with a surface infiltration facility**
	Pollution Reduction Requirement	**Pass**
	10-year Storm Requirement	**Pass**
	Flow Control Requirement	**Pass**
	Impervious Area	**3600 sq ft** **0.083 acre**
	Time of Concentration (Tc)	**5**
	Post-Development Curve Number (CN_{post})	**98**

SBUH Results



	Peak Rate (cfs)	Volume (cf)
PR	0.015	188.11
2 yr	0.051	651.405
5 yr	0.062	800.61
10 yr	0.073	950.037

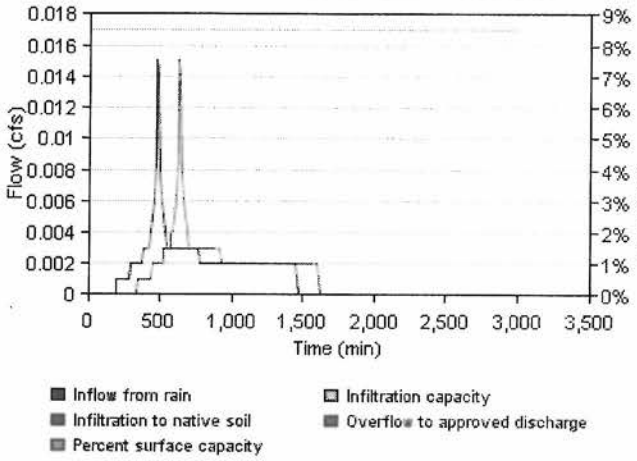
25 yr	0.084	1099.606

Facility South Side Melody

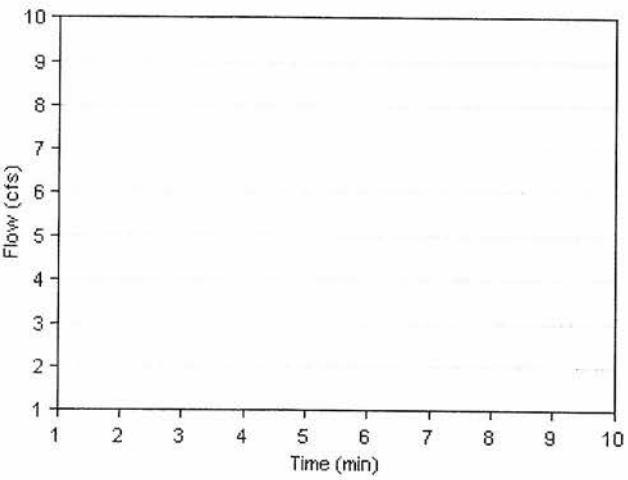
Facility Details	Facility Type	**Basin**
	Facility Configuration	**A: Infiltration (Infl.)**
	Facility Shape	**Rectangle**
	Above Grade Storage Data	
	Bottom Area	**150 sq ft**
	Bottom Width	**2.00 ft**
	Side Slope	**3.0:1**
	Storage Depth 1	**7.0 in**
	Growing Medium Depth	**16 in** ⚠
	Freeboard Depth	**6.00 in**
	Surface Capacity at Depth 1	**168.0 cu ft**
	Design Infiltration Rate for Native Soil	**0.066 in/hr**
	Infiltration Capacity	**0.017 cfs**
Facility Facts	Total Facility Area Including Freeboard	**683.68 sq ft**
	Sizing Ratio	**19%**
Pollution Reduction Results	Pollution Reduction Score	**Pass**
	Overflow Volume	**0.000 cf**
	Surface Capacity Used	**0%**
10 Year Results	10 Year Score	**Pass**
	Overflow Volume	**0.000 cf**
	Surface Capacity Used	**0%**

⚠ Indicates value is outside of recommended range

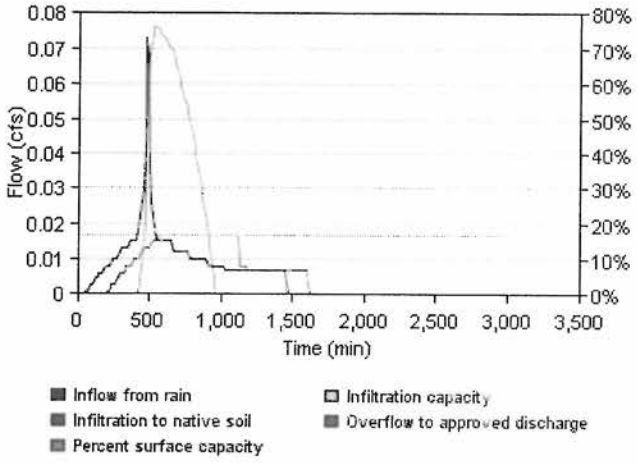
Pollution Reduction Event Surface Facility Modeling



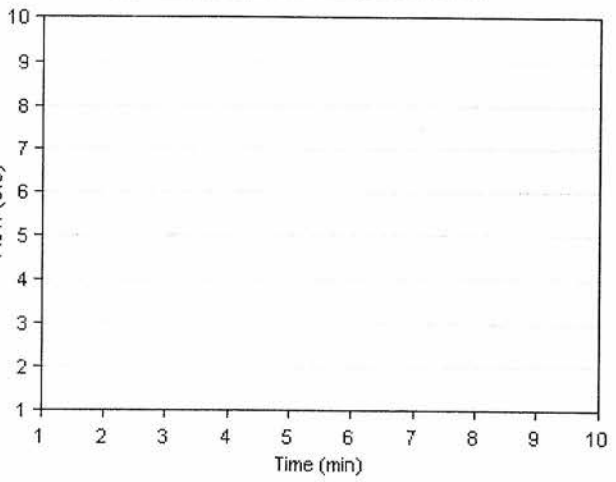
Pollution Reduction Event Below Grade Modeling



10 Year Event Surface Facility Modeling



10 Year Event Below Grade Modeling



REDMOND GEOTECHNICAL SERVICES

April 19, 2016

Mr. Julian Illingworth
4543 SE Locus Road
Milwaukie, Oregon 97222

Dear Mr. Illingworth:

Re: Geotechnical Consultation and Field Infiltration Testing Services, 4543 SE Locus Road, Milwaukie (Clackamas County), Oregon

In accordance with the request of Mr. Bogdan Popescu of BMP Design, LLC, we have completed our evaluation of the soil infiltration rate at the above subject existing and/or proposed residential development property (see Site Vicinity Map, Figure No. 1).

Specifically, we understand that present plans are to partition the subject property into four (4) separate and/or three (3) new residential building lots. In this regard, disposal of on-site storm water from all hard and/or impervious surface areas is to be collected and disposed of within a suitable storm water system based on the City of Milwaukie and/pr Clackamas County standards.

On April 8, 2016, we were present at the site and performed two (2) field infiltration tests within the northerly portion of the subject property (see attached Site Exploration Plan). The testing consisted of a falling head open pit infiltration test in accordance with current EPA and/or the City of Milwaukie/Clackamas County standards. Specifically, two (2) relatively shallow infiltration tests were performed at a depth of approximately three (3) and five (5) feet below existing surface grades. The subgrade soils encountered within the open pit test holes excavated at the site consisted of medium brown, very moist, slightly clayey, fine sandy silt to the maximum depth explored of approximately five (5) feet beneath existing surface grades.

The subgrade soils in the open pit infiltration test hole were then presoaked and allowed to saturate over time. Following the saturation period, the test holes were again filled with approximately 12 inches of water and the rate at which the water level dropped was monitored and recorded. The test was repeated three (3) times until consistent infiltration test results were obtained.

The results of the field infiltration testing at the site revealed that the ultimate soil infiltration rate of the underlying slightly clayey, fine sandy silt subgrade soil is on the order of 16 inches per hour (in/hr). Based on the EPA and/or City of Milwaukie/Clackamas County requirements for open pit infiltration testing, a factor of safety of 2.0 is to be applied to the results of the field infiltration rate used in the design of a storm water collection and/or disposal system. In this regard, we recommend an allowable infiltration rate of approximately 8.0 inches per hour (in/hr) be used for design of the storm water infiltration system.

We appreciate this opportunity to be of service to you at this time and trust that the above information is suitable to your present needs. Should you have any questions regarding the above information or if you require any additional information and/or assistance with this project, please do not hesitate to call.

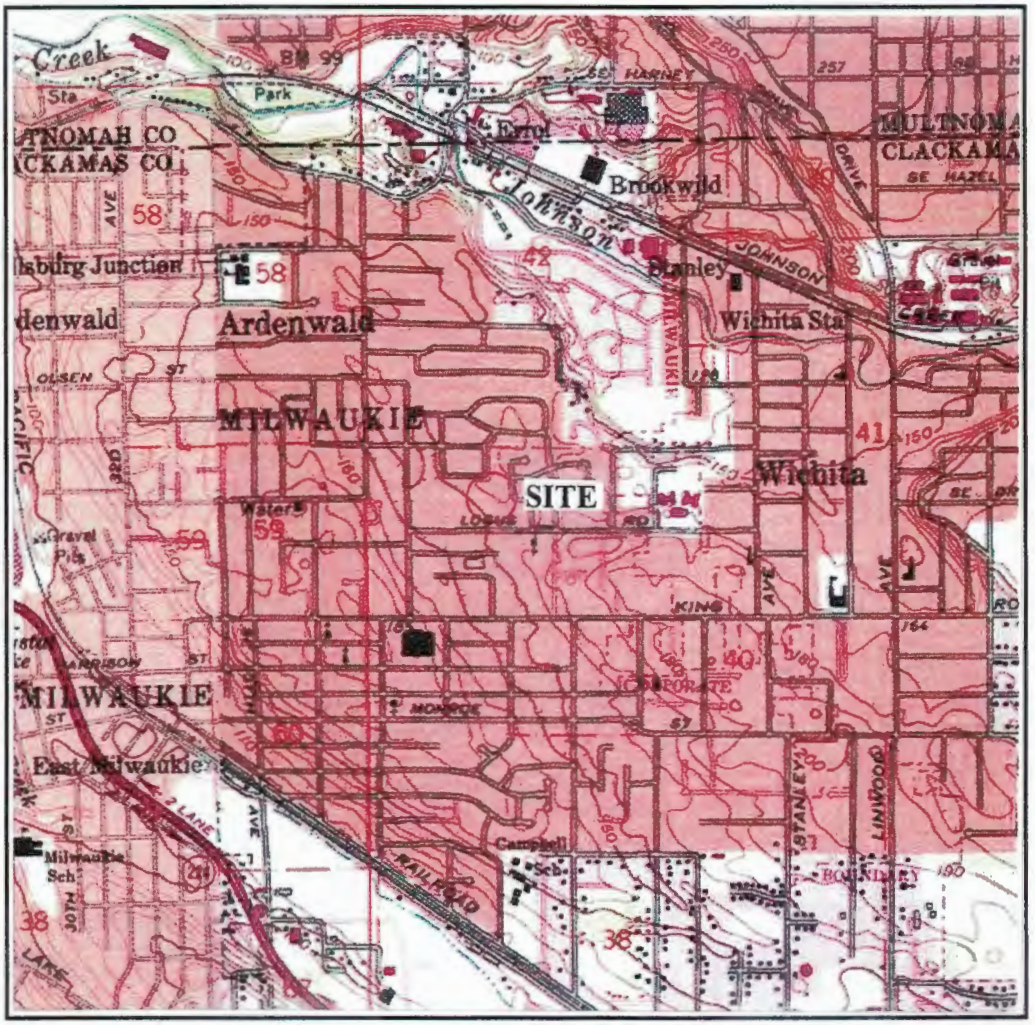
Sincerely,

Daniel M. Redmond, P.E., G.E.
President/Principal Engineer

Cc: Mr. Bogdan Popescu, PE, PLS
BMP Design, LLC

Attachments:

Figure No. 1 - Site Vicinity Map
Figure No. 2 - Site Exploration Plan



GLADSTONE QUADRANGLE
OREGON
7.5 MINUTE SERIES (TOPOGRAPHIC)

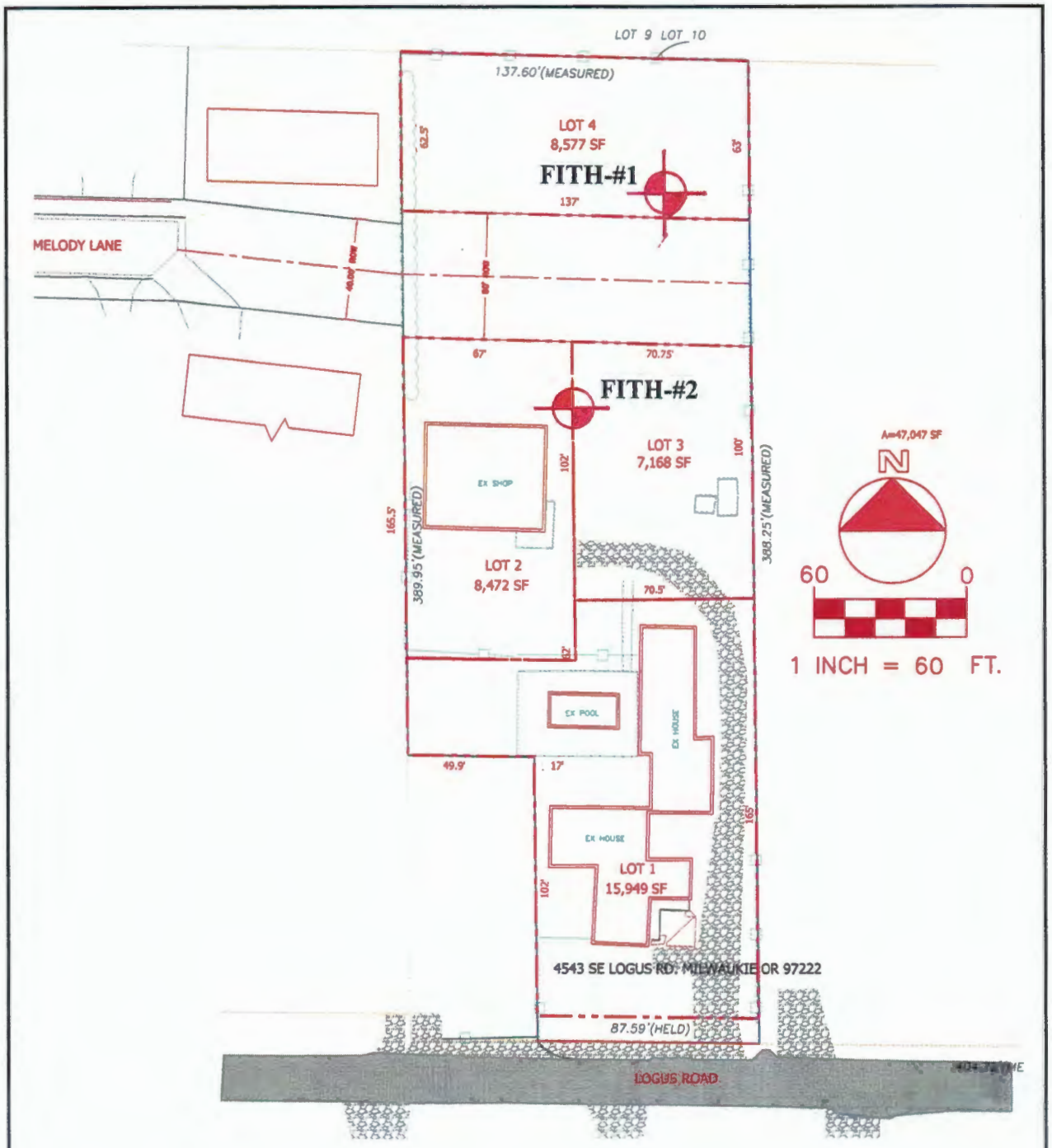
SCALE 1:24 000

1 0 1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 .5 0 1 KILOMETER

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929
DEPTH CURVES AND SOUNDINGS IN FEET—COLUMBIA RIVER DATUM

SITE VICINITY MAP

Project No. 1523.001.G	4543 SE LOGUS ROAD	Figure No. 1



LEGEND

FITH-#1 Indicates approximate location of field infiltration test hole

SITE EXPLORATION PLAN

Project No. 1523.001.G	**4543 SE LOGUS ROAD**	Figure No. 2