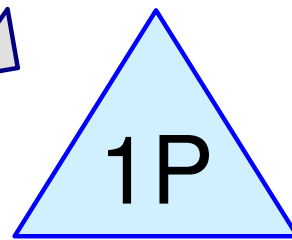
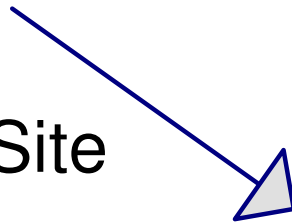
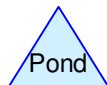
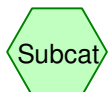


Majority of Site



INFILTRATION POND



Drainage Diagram for ST MICHAELS - E

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ST MICHAELS - E

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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.184	39	>75% Grass cover, Good, HSG A (1S)
0.138	98	Paved parking & roofs (1S)
0.321		TOTAL AREA

ST MICHAELS - E

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Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.184	HSG A	1S
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.138	Other	1S
0.321		TOTAL AREA

ST MICHAELS - E

Type III 24-hr 50 Year Rainfall=5.70"

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Time span=0.00-72.00 hrs, dt=0.01 hrs, 7201 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: Majority of Site

Runoff Area=14,000 sf 42.86% Impervious Runoff Depth=2.05"
Flow Length=210' Tc=13.1 min CN=64 Runoff=0.59 cfs 0.055 af

Pond 1P: INFILTRATION POND

Peak Elev=100.82' Storage=455 cf Inflow=0.59 cfs 0.055 af
Outflow=0.33 cfs 0.055 af

Total Runoff Area = 0.321 ac Runoff Volume = 0.055 af Average Runoff Depth = 2.05"
57.14% Pervious = 0.184 ac 42.86% Impervious = 0.138 ac

ST MICHAELS - E

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Type III 24-hr 50 Year Rainfall=5.70"

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Summary for Subcatchment 1S: Majority of Site

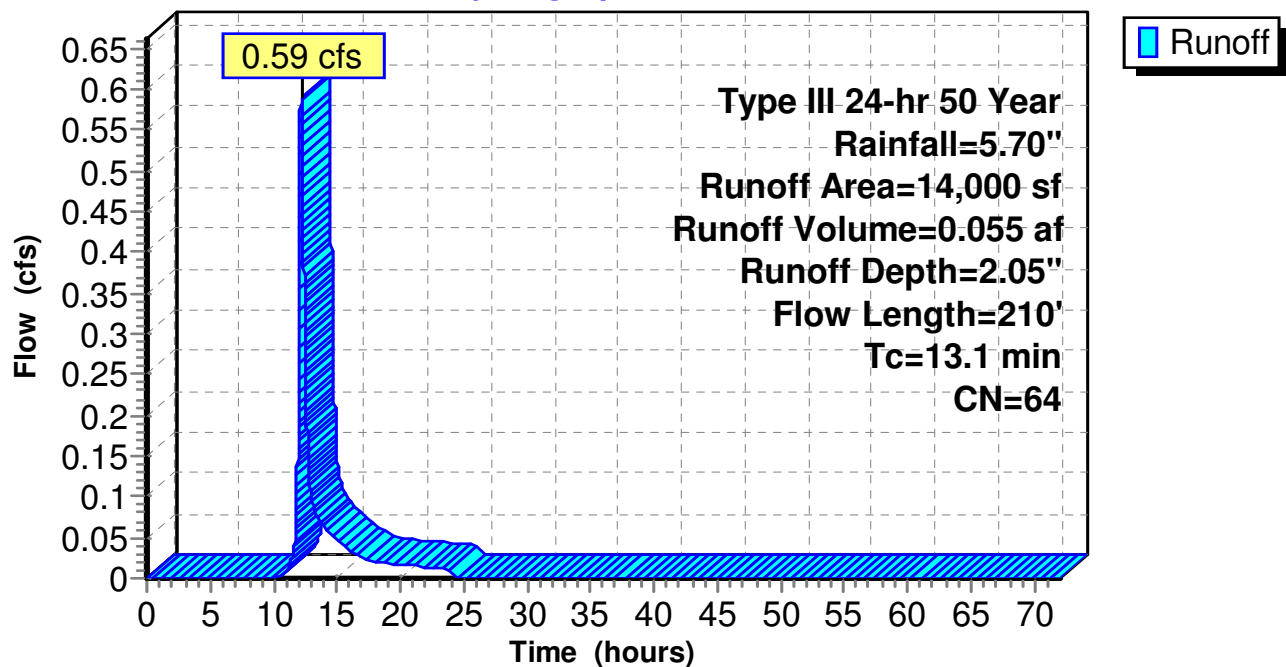
Runoff = 0.59 cfs @ 12.19 hrs, Volume= 0.055 af, Depth= 2.05"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

Type III 24-hr 50 Year Rainfall=5.70"

Area (sf)	CN	Description
6,000	98	Paved parking & roofs
8,000	39	>75% Grass cover, Good, HSG A
14,000	64	Weighted Average
8,000		Pervious Area
6,000		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	50	0.0100	0.11		Sheet Flow, 1
					Grass: Short n= 0.150 P2= 3.00"
5.4	160	0.0050	0.49		Shallow Concentrated Flow, 2
					Short Grass Pasture Kv= 7.0 fps
13.1	210	Total			

Subcatchment 1S: Majority of Site**Hydrograph**

ST MICHAELS - E

Type III 24-hr 50 Year Rainfall=5.70"

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Summary for Pond 1P: INFILTRATION POND

Inflow Area = 0.321 ac, 42.86% Impervious, Inflow Depth = 2.05" for 50 Year event
 Inflow = 0.59 cfs @ 12.19 hrs, Volume= 0.055 af
 Outflow = 0.33 cfs @ 12.47 hrs, Volume= 0.055 af, Atten= 45%, Lag= 16.6 min
 Discarded = 0.33 cfs @ 12.47 hrs, Volume= 0.055 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs
 Peak Elev= 100.82' @ 12.47 hrs Surf.Area= 702 sf Storage= 455 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 33.6 min (895.7 - 862.2)

Volume	Invert	Avail.Storage	Storage Description
#1	96.00'	68 cf	8.00'W x 8.00'L x 4.00'H Prismatic 256 cf Overall - 85 cf Embedded = 171 cf x 40.0% Voids
#2	97.00'	85 cf	6.00'D x 3.00'H Vertical Cone/Cylinder Inside #1
#3	100.00'	430 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
		583 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
100.00	100	0	0
101.00	759	430	430

Device	Routing	Invert	Outlet Devices
#1	Discarded	96.00'	20.000 in/hr Exfiltration over Horizontal area

Discarded OutFlow Max=0.33 cfs @ 12.47 hrs HW=100.82' (Free Discharge)

↑ **1=Exfiltration** (Exfiltration Controls 0.33 cfs)

Pond 1P: INFILTRATION POND**Hydrograph**